



COMMUNICATION ECONOMICS ORGANIZATION

7-8 December 2024 - Rajasthan, India

10th PROCEEDINGS BOOK

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EDITORS

Prof. Dr. Sumer Singh YADAV

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International CEO

(**C**ommunication, **E**conomics, **O**rganization)

Social Sciences Congress

PROCEEDINGS E-BOOK

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CEOSSC 2024 - Rajasthan, India

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International CEO (Communication, Economics, Organization) Social Sciences Congress

Presentation

We are delighted to introduce **Career Point University (Host University for 10th CEO Congress), Esil University, Polytechnic Institute of Portalegre, Acacia University, IPMI International Business School, Mohanlal Sukhadia University, Samarkand Branch of Tashkent University of Economics, International Vision University, Alfred Nobel University, Nişantaşı University, University of Prizren, Cyprus West University, Ciputra University, Knowledge Laboratory, ACMIT, Insec, NCM Publishing, CEO Tekmer, Jakarta Global University, Universitas Bhayangkara, Ostim Technical University and Mardin Artuklu University** served as the vehicle of dissemination for a showpiece of articles at the **International CEO (Communication, Economics, Organization) Social Sciences Congress (CEO SSC 2024, Rajasthan, India)** that was held online and offline on **7-8 December 2024**. CEO Congress aims to provide a platform for discussing the issues, challenges, opportunities and findings of **Communication, Economics, Organization and Social Science** research. The organizing committee with feedback from the division chairs and the members of the **scientific committee** foresaw an opportunity and research gap in the conference theme, that pitches for pressing issues in the business world. Presentations are in Turkish & English.

2024 Int. CEO Congress takes place with the participation and contributions of **401 academics from 33 countries: Afghanistan, Argentina, Australia, Azerbaijan, Belarus, Canada, China, Cuba, Ethiopia, India, Indonesia, Iran, Iraq, Japan, Kazakhstan, Kosovo, Malaysia, Nctr, New Zeland, Nigeria, North Macedonia, Pakistan, Poland, Portugal, Singapore, Slovakia, South Korea, Spain, Thailand, Ukraine, United Kingdom, Uzbekistan, Vietnam.**

It is a great privilege for us to present the Abstract Book of **CEO SSC 2024** to the authors and delegates of the conference.

Several manuscripts from prestigious institutions could not be accepted due to the reviewing outcomes and our capacity constraints. Participation from **115 different institutions or universities**. The 2 days long conference gathered close to **401 national and international attendees** to enliven a constellation of contributions. **205** papers of the **234** papers approved to present at the congress are outside of Türkiye. **76% of the papers presented at the congress are from outside Türkiye**. Best paper awards were issued to distinguished papers.

On the day of completion of this journey, we are delighted with a **high level of satisfaction and aspiration**. It is important to offer our sincere thanks and gratitude to a range of organizations and individuals, without whom this year's conference would not take place. This conference would have not materialized without the efforts of the contributing **authors for sharing the fruit of their research and the reviewers for scrutinizing**, despite their busy schedules. We also thank **our members and colleagues who accepted the duty to participate in the Scientific Committee** and for their valuable help in the screening, selecting, and recommending best contributions.

All presentations made during the congress were published on the social media accounts of the CEO Congress.

Uluslararası CEO (İletişim, Ekonomi, Organizasyon) Sosyal Bilimler Kongresi

Sunuş

7-8 Aralık 2024 tarihlerinde "**10. Uluslararası CEO İletişim, Ekonomi ve Organizasyon Sosyal Bilimler Kongresi**" Career Point University ev sahipliğinde Rajasthan, Hindistan'da Esil Üniversitesi, Polytechnic Institute of Portalegre, Acacia University, IPMI International Business School, Mohanlal Sukhadia University, Samarkand Branch of Tashkent University of Economics, International Vision University, Alfred Nobel University, Nişantaşı Üniversitesi, University of Prizren, Cyprus West University, Ciputra University, Knowledge Laboratory, ACMIT, Insec, NCM Publishing, CEO Tekmer, Universitas Bhayangkara, Jakarta Global University, Ostim Teknik Üniversitesi ve Mardin Artuklu Üniversitesi iş birliği ile **online ve fiziki katılımlar ile** düzenlenmiştir.

Kongremizde *Afghanistan, Argentina, Australia, Azerbaijan, Belarus, Canada, China, Cuba, Ethiopia, India, Indonesia, Iran, Iraq, Japan, Kazakhstan, Kosovo, Malaysia, Nctr, New Zeland, Nigeria, North Macedonia, Pakistan, Poland, Portugal, Singapore, Slovakia, South Korea, Spain, Thailand, Ukraine, United Kingdom, Uzbekistan, Vietnam* gibi **33 ülkeden ve 115 kurum/üniversiteden 401 akademisyen** tarafından hazırlanan **205 bildiri** sunulmuştur.

Kongremize **276** bildiri özeti gönderilmiş, editör ve hakem süreçlerinden sonra bunlardan **221** tanesi sözlü sunuma kabul edilmiş, ancak **34 oturumda 205 bildirinin sunumu** gerçekleşmiştir. Sunulan bildiriler, **978-625-98075-2-1** ISBN'li bu e kitapta yayımlanmaktadır.

Kongrede sunulan **205 bildirinin 40'ı Türkiye ve 165'i yurt dışındandır**. Yayımlanan **bildirilerin %80'i Türkiye dışındandır. Önceki Uluslararası CEO Kongre'lerde olduğu gibi 10. Uluslararası CEO Kongre'de de hem bildiri özet kitabında hem de tam metin kitabında yabancı oranı %50'den fazladır. Okumakta olduğunuz tam metin kitabında yayımlanan tam metinlerin ise %50'den fazlası Türkiye dışındandır (36 yabancı (Türkiye dışından), 26 Türkiye'den).**

Onaylı ve yayımlanan **205 bildiriden biri Türkiye'den ve biri yurt dışından olmak üzere ikisine en iyi bildiri ödülü duyurulmuştur.**

Kongre esnasında gerçekleşen tüm sunumlar kongrenin sosyal medya hesaplarında yayımlanmıştır. Tekrar yararlanmak istendiği durumlarda **CEO Congress** sosyal medya hesaplarından izlenebilir.

Kongrenin bilim insanlarına, kamu ve özel sektör ile STK'ların yönetiminin etkinliğine katkı bulunmasını temenni eder, bildirileriyle katkıda bulunan akademisyenler ile düzenleme kurulu, danışma kurulu, bilim ve hakem kurulundaki meslektaşlarımıza ziyadesiyle teşekkür ederiz.

A Special Thanks To...

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Papers Received Best Paper Awards

From Türkiye

1. Kentte Engelli Olmak: Engelli Bireylerin Kent Deneyimlerinin Olgubilim Yaklaşımıyla Keşfedilmesi - **Assoc. Prof. Dr. Mutlu UYGUN, Res. Asst. Dr. Ebru GÜNER VURGANER**

International

1. The Role of Nordic Walking in Supporting the Quality of Life: Evidence from Indonesia Nordic Walking Community - **Endah NURAINI, Liena PRAJOGI, Wiwiek Mardawiyah DARYANTO, Dian Utami WULANINGSIH**

Keynote Speeches

Asst. Prof. Dr. **Ir. Amelia Naim Indrajaya**, MBA – Head of CSMSR, IPMI International Business School, Jakarta, **Indonesia**

Prof. Dr. **Siham EL-KAFAFI**, Director of Arrows Research Consultancy, **New Zealand**

Prof. Dr. **Hernán E. Gil FORLEO**, University of Buenos Aires, **Argentina**

Dr. **Dewi Puspaningtyas Faeni**, MBA, MHT, Dean Faculty of Economics and Business, Universitas Bhayangkara Jakarta Raya, **Indonesia**

Prof. Dr. Luís Miguel Cardoso, Polytechnic Institute of Portalegre, **Portugal**

Carles Agustí i Hernández, International Governance Consultant & SDG Manager
(Barcelona/Spain)

Prof. Dr. **Himmet Karadal**, Bolu Abant İzzet Baysal University, **Türkiye**

Moderator of the Session: Assoc. Prof. Dr. **Ashish Jorasia**, **India**

Guest Speeches

Dr. Ir. **Firdaus Basbeth**, MM. PPM Manajemen, **Indonesia**

Assoc. Prof. **Murteza HASANOĞLU**, Azerbaijan State Administration Academy,
Azerbaijan

Assoc. Prof. Dr. Bobur Sobirov, Samarkand branch of Tashkent State University of Economics, **Uzbekistan**

Dr. Anurag Agnihotri, Delhi University, **India**

Moderator of the Session: Assoc. Prof. Dr. **Analjyoti BASU**, **India**

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Knowledge Mobilization in Argentine Universities. Towards a Platform

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ABSTRACT

In the 21st century, the aims and purposes of the university in contemporary societies have evolved to adapt to global changes and challenges. Universities generate and promote knowledge. New findings produced through scientific, technological, humanistic and artistic research make universities paradigmatic organizations. This knowledge emerges through teaching, publications and is deployed to communities through extension. One of the most relevant tasks of the university is the promotion of research and development of new technologies and the search for solutions to social, economic and environmental problems. Through technology transfer, universities facilitate innovation through collaboration with industries, governments and other institutions. Undoubtedly, these organizations contribute to the economic and social development of communities and can participate in them as a prominent actor in issues of public health, education, environmental sustainability and community development. However, knowledge mobilization is a relevant function in universities, but there are few experiences in universities. It is necessary to develop strategies for social mobilization of knowledge to improve the quality of life of societies and to solve social problems. To develop a platform for knowledge mobilization in an Argentine university, it would be essential to integrate several elements that facilitate the creation, exchange, and application of knowledge within and outside the academic community. A plan agenda to build a science mobilization scheme is a platform, that is, an open access portal with a digital repository, presence of multimedia files and open licenses. A database of researchers and projects with detailed information, research areas, project and publication catalogs, collaboration and networking platform, knowledge and resource management, linkage with the productive sector and society.

Keywords: Knowledge Mobilization, Universities, Platforms, Society

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Introduction

The Research and Humanities Research Council of Canada (SSHRC) defines the mobilization of knowledge as “a general term that covers a wide range of activities related to the production and use of research results, including synthesis, diffusion, transfer, transfer, exchange and co-creation or co-production of knowledge by researchers and knowledge users. Effective knowledge mobilization includes plans to publish data, when appropriate”(SSHRC, 2017).

The concept of knowledge mobilization refers to the various ways in which more solid connections between research, policies and practice can be established (Levin, 2008). The mobilization of knowledge results in a catalyst in the knowledge intermediation system, among multiple actors to transform the findings and products of a researcher into the practice of a user. The objective is to use an understandable and clear language and an accessible format to present scientific-technical information, that “... help academic research be accessible to non-academic audiences and support collaborations between academic and non-academic partners, such as community organizations” (PHIPPS 2016, USMANI and ALAMGIR, 2020).

This field of study is of growing interest not only in education, but also in all areas of social policy. Governments, universities, school systems and other actors globally must find new ways to share, understand and apply knowledge derived from research. In recent years, the understanding of the mobilization of knowledge has evolved, considering different theoretical and conceptual perspectives. The main issues and challenges when conducting empirical research in the field, include methodologies and approaches to study the effectiveness of knowledge mobilization (Levin, 2008). The mobilization of knowledge focuses mainly on knowledge derived from formal research, which uses systematic and accepted processes to generate data and conclusions. However, it is recognized that this is not the only type of knowledge that influences politics and educational practice.

The mobilization of knowledge is addressed from different perspectives in the literature: from its application as a basis for decision making in public policies, to the translation of research results in concrete actions. This process also includes efforts to share these results with possible users or implement actions that prepare knowledge for their effective use, facilitated through intermediaries.

One of the central issues in this area is: Who is the investigation for? This question is essential to define the investigation agendas, the evaluation criteria and the relevance of the results. The investigation does not occur in isolation; It involves external actors and is oriented towards the solution of specific social and educational problems.

There are several ways to understand the mobilization of knowledge:

- A form is in the use of evidence in public policies, where research can offer data and analysis that support political decisions (Nutley et al., 2007).
- The translation of results in action, beyond the theoretical field, the results of the research can become practical tools (Bennet et al., 2007).
- The dissemination of results, a approach that prioritizes the dissemination of the findings towards actors that can use them, as teachers, administrators or responsible for educational policies (Levin, 2011).
- The preparation of knowledge for practical use, since it could be distributed among actors capable of intervening directly in the problems identified (Levesque, 2009).

The concept of knowledge mobilization does not have a single definition, but different perspectives and definitions (Najdorf and Alonso, 2014), as the use of the evidence and the result of research for decision making in public policies (Nutley, 2003) , a method or tool that facilitates the translation of research results to action (Bennet, 2007), efforts to share research



10th International CEO Communication, Economics, Organization & Social Sciences Congress results with other users (Levin, 2011) and actions that allow to leave knowledge ready for action and his intervention through interlocutors (Najdor and Alonso, 2014).

Present challenges

The challenges of the mobilization of science are exposed in the lack of knowledge and understanding of the higher education institutions of the main concepts that make up the mobilization of knowledge. It is a new awareness of the construction of the investigation, a way that has the recipients as active actors.

Given ignorance, it is difficult to find institutional strategies in universities where there are not even institutional public communication strategies. Scientific communicators and researchers in affordable language can communicate their achievements and advances in research processes, however, that would be an additional task of teachers-researchers of Argentine universities who already have a work overload.

Universities face several difficulties by designing public communication strategies of science. First, the lack of financial and human resources, expressed in the absence of professionals specialized in science communication, such as scientific communicators, specialized journalists and educators who limit the ability to design and execute effective strategies. In the Argentine context, universities are not perceived as organizations that build science by citizenship, according to the Public Perception Survey of Science 2021. In addition, there is the ignorance of the audiences to which the university is directed with its communications, since the audiences can be very varied, from students and academics to the general public and the media and the access and understanding of scientific messages given the complexity of research issues. Make the scientific issues relevant and contextual for the general public requires a deep understanding of both scientific content and the concerns and interests of the public.

Researchers often prioritize the publication in specialized magazines with a particular jargon for a specialized audience and the communication of science established institutionally, it is not an idea that precisely falls in love with university managers. The social communication of science is not always valued or recognized within the academy, which discourages researchers to participate in dissemination activities, in addition to not possibly having communication training and may not feel comfortable or trained to find out with the public not specialized. Scientific communication is often not integrated from the beginning in research projects, which can lead to less effective and planned dissemination. Promoting collaboration between scientists and communicators is not always easy, and there could be cultural and disciplinary barriers.

Deciding between using traditional media (such as written press and television) and digital media (social networks, blogs, podcasts) is a complex task for specialists. The management of social networks and other digital platforms requires specific knowledge and a coherent strategy to be effective. Establishing clear indicators and methods to measure the impact of scientific communication strategies is essential, but often difficult to implement. Obtaining and using public feedback to improve communication strategies can be a complex and continuous process. On the other hand, the lack of institutional support and clear policies that promote public communication of science is a clear limiting to initiatives in this area.

Argentine universities face a series of difficulties and challenges when trying to develop and maintain effective knowledge mobilization strategies. These challenges can be categorized in several key areas. Argentine universities often operate with tight budgets, which makes investment in specific knowledge mobilization programs difficult and have large dependence on public funds that can be insufficient or unstable affects the ability to plan and execute long-term strategies. There is a shortage of professionals specialized in technology transfer,



10th International CEO Communication, Economics, Organization & Social Sciences Congress scientific communication and knowledge management and the training of academic and administrative staff in knowledge mobilization practices is limited.

Academic production is often measured in terms of scientific publications and obtaining research funds, leaving in the background the mobilization of knowledge and knowledge transfer and mobilization activities are not always recognized or valued within the academic system, which can discourage researchers. On the other hand, cultural and disciplinary differences can hinder collaboration between researchers from different fields and Between scientists and communicators and traditional hierarchical structures can prevent fluid and collaborative communication between departments and faculties.

The lack of adequate technological infrastructure can hinder the implementation of platforms and tools for the transfer of knowledge and inequality in access to technological resources between different universities and regions is also a problem. The absence of integrated platforms for the management and dissemination of knowledge limits the ability to share information efficiently. Many universities have a limited link with the industry, which reduces opportunities for the transfer of practical and applicable knowledge and the lack of incentives for both researchers and companies difficult to create strategic alliances and effective collaborations. Aligning academic research with social and community needs and demands is a constant challenge that would allow the community to involve the research and transfer process is a complex process due to differences in challenges, expectations and objectives.

The absence of clear and coherent policies at the institutional level on knowledge mobilization can generate ambiguities and lack of direction where bureaucracy and administrative processes slow down and complicate knowledge transfer initiatives. Differences in language and terminology used by academics and other actors (industry, community, government) can hinder effective communication and lack of access to mass communication platforms limits the capacity to disseminate knowledge to a broader audience. The lack of an integrated and strategic approach to the communication-movement of knowledge reduces the potential impact of mobilization initiatives.

To overcome these challenges, it is essential that Argentine universities must invest in specialized resources and training, promote an institutional culture that assess knowledge mobilization. Develop adequate technological infrastructure. Strengthen the link with the productive sector and the community, establish clear and coherent policies and regulations.

In addition, of adequate financing and resources problems in Argentine universities, a fact that makes it difficult to implement any initial project. Also, the fact that the actors involved often lack the necessary skills to mobilize knowledge effectively and the disconnection between mission and practice since there is an incoherence between the mission statements of the research organizations on the mobilization of knowledge and their real practices. To meet needs, it is essential to develop capacities through training and continuous support to individuals and organizations and initiatives adapted to specific contexts are required, especially in developing countries, to address their challenges.

The Universidad Nacional de San Luis was created in 1973 and has a rich historical legacy, whose emergency point dates back to 1939 with the foundation of the Universidad Nacional de Cuyo.. In the Argentine University System, the UNSL is a medium university located in the center of the country, in the capital of the province of San Luis. During the democratic stage in Argentina initiated in December 1983 to date the National University of San Luis (UNSL) begins to travel different stages of growth, development and projection in different areas of knowledge, the development of research and extension to the social environment local, regional and Latin American.

On the way to a strategy



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To build a university strategy for the mobilization of knowledge in the field of social sciences, it is essential proper and socially used. The creation of a knowledge mobilization strategy must offer a conceptual framework that connects knowledge production with its social application, which is essential to design effective strategies.

As for the knowledge circuits we can establish two types of circuits: that of acts of use (where knowledge is used in society) and that of usable research acts (which may or may not be applied immediately). These circuits illustrate how knowledge can be potentially useful to being effectively applied in social contexts, for which it is essential to design mobilization strategies that facilitate this transit.

The non -academic actor

The figure of the extra -academic agent, which is not only a passive recipient of knowledge, but an active interlocutor in the mobilization of knowledge. This figure forces to think about new dynamics and resources to legitimize and authorize knowledge, creating a framework for the development of mobilization strategies that must consider these actors as partners in the process of implementation of knowledge. This means, at least in the Latin American context, in a new way of conceiving social research and the way it occurs.

The social utility of knowledge is established in relation to the validation by non -academic agents, which suggests that a mobilization strategy should seek this validation and work closely with those interested to ensure that knowledge is relevant and applicable in their contexts

Although we recognize traditional modes of production, we must now talk about plurality of the modes of knowledge production. Social scientists and their organizations have the need for a more inclusive and flexible approach, which combines both traditional and social -utility oriented. This "amphibian" approach, as Maristella Svampa, the Argentine writer calls it, is crucial for a mobilization strategy that is not limited to a single paradigm, but can operate in multiple spaces (academic and non -academic).

The inclusion of non -academic agents implies a transformation in the dynamics of knowledge production, where new trans -epistemic resources are required. This implies that knowledge mobilization strategies must be flexible and adapt to these new interactions, facilitating the creation of collaborative networks between academics and social actors.

Knowledge production organizations and social scientists must advance in a deeper understanding of the processes and actors involved in the mobilization of knowledge, highlighting the need for collaboration with non -academic agents, external validation of knowledge, and the ability to operate in multiple Knowledge production systems.

Key objectives and actors

In this context, the transfer of knowledge is not limited to the traditional idea of technological transfer, but must be adapted to cover social transfer, a concept that implies the collaboration and exchange between social scientists and the actors of society (extraction agents) that will participate in the use of the results. Meanwhile, knowledge mobilization refers to strategies that allow generated knowledge to be used effectively. This includes active interaction between knowledge producers (universities, researchers) and users (Government, NGOs, community), thus facilitating a dynamic dialogue that leads to the co-construction of problems and solutions.

Elements of knowledge mobilization

In order for mobilization to be effective, the university must implement a series of practical actions, such as the creation of collaboration networks with users of knowledge, such as local governments, NGOs and companies, the promotion of problems construction, allowing social actors participate from the beginning in the definition of the problems to be investigated, the



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translation of knowledge generated by the social sciences in an accessible and usable format by those who need to apply that knowledge (for example, in public policies or social programs) and the recognition of interlocutors Key, that is to say, such as the Knowledge Brokers or Knowledge Intermediaries, who are responsible for facilitating the adaptation and application of knowledge to practical contexts, are crucial in this process.

Production modes with knowledge

There are two types of knowledge production in social sciences: accumulation is oriented to the production of theoretical and fundamental knowledge, based on academic curiosity, meanwhile, transformation is a process that implies adapting the knowledge generated to respond to specific needs of defined users, as social actors, and is essentially new knowledge production by translating and applying the results to specific contexts. It is vital to include these agents in the investigation process to ensure that the results are applicable and useful in real contexts in a context of challenges and tensions. There is a tension between producing knowledge of high academic quality and making it socially relevant and the challenges are recurring in academic evaluation, which often prioritizes scientific excellence over social relevance. To address this, indicators and metrics must be developed that recognize and value the link between researchers and their social environment, allowing to measure the social impact of social science research.

Ideas for the implementation of the strategy

The operation of a knowledge mobilization office within the university that works as an intermediary between researchers and knowledge users, promoting constant interaction and monitoring of joint projects is useful. In line with this idea, training could be offered both researchers and intermediaries in communication, cooking and knowledge adaptation, in addition to encouraging projects that actively seek to generate knowledge that can be transferred and applied in the resolution of social problems. A university strategy for the mobilization of knowledge in social sciences must focus on the creation of collaborative networks, problem co-construction, translation and transformation of knowledge, and mediation between researchers and social actors. The university, through the creation of formal structures and the promotion of research-oriented research, can promote greater link between academic knowledge and social needs.

Towards the mobilization of knowledge in Argentine universities as a strategy

In the 21st century, university's purposes and purposes in contemporary societies have evolved to adapt to global changes and challenges. Universities generate and promote beneficial knowledge for society. The new findings that occur through scientific, technological, humanistic and artistic research make special and paradigmatic organizations. That knowledge that emerges through teaching, the production of national science, and the connection with its local communities through extension are characteristics that make these organizations unique. Through the scientific publications and the role of researchers in them, scientific production is deployed to academic communities. In addition, universities prepare professionals for the labor market and encourage the development of critical, ethical and social competences. One of the most relevant tasks of the University is the promotion of research understood as the constant search for solutions for social, economic and environmental problems. A synergy between universities and government is essential for social development. Through the concept of technological transfer, today in crisis, universities facilitate innovation, new products and knowledge through collaboration with industries, governments and other institutions. These organizations contribute to the economic and social development of



10th International CEO Communication, Economics, Organization & Social Sciences Congress communities and can (must) participate in them as an outstanding actor in a multiplicity of issues such as public health, education, economy, environmental sustainability and community development, for example.

However, the ideas that understand the mobilization of knowledge gives new practices within the research groups, understanding research, not only as an individual, but group activity.

The mobilization of knowledge is called to constitute a relevant function in universities, although experiences in universities are scarce. It is necessary to develop social mobilization strategies, where users intervene as ultimate actor, for the improvement of the quality of life of societies and the solution of social problems. This cannot be done by appealing to the goodwill of the researchers. Substantive organizational strategies and hierarchies are required in the breasts of the faculties of social and human sciences.

Universities are committed to the promotion of critical thinking, reflection and Debate on contemporary issues and the defense of academic freedom as a fundamental principle for the advancement of knowledge and society.

In response to the winds of globalization, universities have generally adopted with different emphasis and efforts to internationalization of higher education. Without a doubt, they must promote networks and associations to promote internationalization and global collaboration. International academic exchange and the search for diverse teaching and student experiences are essential, in the preparation of graduates who are global citizens, with conscience in intercultural understanding, the development of soft skills such as communication, teamwork and resolution of problems and the preparation of students to adapt to a constant and highly technological work environment.

In recent years, universities have expanded access to higher education for underrepresented and disadvantaged groups and have implemented policies and programs that promote inclusion and equity.

In addition, they can be active in the knowledge economy through the creation of Spin-Offs, Startups and the transfer of technology and increase in the local context, their collaboration with the business sector for the development of innovative products and services. Universities in the 21st century have a multifaceted role that goes beyond the mere transmission of knowledge. They are called to be agents of social, economic and cultural change, actively contributing to the welfare and progress of society.

Knowledge mobilization platform for a university.

Given the lack of strategies regarding the mobilization of knowledge in the social and human sciences we offer some simple ideas that could form a work agenda in the construction of KM processes.

Among them, is the idea of having a platform. Without a doubt, to develop a knowledge mobilization platform in an Argentine university, it would be essential to integrate several elements that facilitate the creation, exchange, and application of knowledge inside and outside the academic community.

A possible plan to build can start from the idea of a scheme that raises an open access portal with a digital repository, presence of multimedia files and open licenses. In addition, it would be productive to have a database of researchers and projects with detailed information, research areas, projects of projects and publications, collaboration and networks, knowledge and resources management, and link with the productive sector and society.

Open access portal

An open access portal is a digital repository where academic publications, thesis, magazine articles, and other research works produced by the university is stored and accessed. It also has



10th International CEO Communication, Economics, Organization & Social Sciences Congress multimedia files, conferences videos, seminars, and workshops for visualization and open licenses such as Creative Commons to facilitate the reuse and distribution of content.

Researcher and Project Database

A database with researchers' profiles is very useful where there is detailed information about researchers, their specialization areas, publications and projects ongoing and that has a catalog of projects and their description with details about objectives, methodology, financing, financing and expected results.

A collaboration and networks

A platform formed with forums and discussion groups. It is about having virtual spaces for thematic discussion and collaboration between researchers, students and external experts. In addition, having collaboration networks that facilitate the training of associations between researchers from different institutions and sectors.

Knowledge and resources management

It is necessary to have project management tools such as different software for planning, monitoring and management of research projects and training materials, manuals and guides on good practices in research and knowledge mobilization.

Interface of linking with the productive sector and society

The linking interface can materialize in a linking portal, understood as a space to connect the university with companies, non -governmental organizations and government entities and catalog of services and knowledge available for technological transfer and advice.

Training and Professional Development

Permanent professional development must be given with online training programs on topics related to research and knowledge transfer and certification programs for researchers and professionals interested in knowledge mobilization.

form of communication

Integrated by newsletters and Newsletters with periodic updates on research, events and relevant news and integration with social networks for the dissemination and promotion of university achievements and activities. This means that communication is at the service of an institutional strategy and not in the mere individual effort of a researcher as proposed with the "Transmedia Approach" Anderson and McLachlan (2016). In addition, the regular publication of articles and podcasts on topics of interest and advances in research is necessary.

Evaluation and feedback

It is necessary to have evaluation systems, that is, those tools to evaluate the impact and effectiveness of the projects and activities of knowledge mobilization with spaces to receive comments and suggestions from the university community and external partners.

Multilingual interface

Access in several languages facilitates access to information and resources in multiple languages to expand scope and inclusion.

Integration with external platforms



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It is the connection with international databases. Integration with repositories and databases of other institutions and research agencies, promoting international collaboration and facilitating participation in international research networks and projects.

These hypothetical elements would form a new and robust strategy of mobilization of knowledge, which not only encourages the creation and exchange of knowledge within the university, but also facilitates its practical application for the benefit of society and the economy.

The contribution of citizenship

Citizens can contribute significantly on a university platform for the mobilization of knowledge in several ways, including collaboration in research projects with participation in surveys and studies, and sharing personal data and experiences that may be useful for research, volunteering and mentoring with the promotion of volunteers for community or research projects, and mentors for students, providing guidance and support in areas of experience. Participation in workshops, seminars and conferences organized by the University and the proposition of topics and content for future events. Participation in the writing of blogs on topics of interest, relevant to the university community and participation in discussion forums and working groups. Innovation and constant entrepreneurship with the presentation of ideas and projects that can be developed in collaboration between the university and the participation in business incubators and innovation centers. Access to financial support and resources with the donation of funds or material resources for specific projects and access to facilities and equipment necessary for research. These and other actions that can generate in the same direction, not only help the university to fulfill their mission of generation and dissemination of knowledge, but also strengthen the relationship between the institution and the community, promoting a mutual learning environment and benefit shared.

References

- Anderson, C. R., & Mclaclan, S. M. (2016). Transformative Research as Knowledge Mobilization: Transmedia, Bridges, and Layers. *Action Research*, 14 (3), 295-317. Available at <https://doi.org/10.1177/1476750315616684>
- Badillo, á. and Marenghi, P. (2001). From media democracy to electronic democracy. *CIC. Information and Communication Notebooks*, No. 6, 39-61.
- Bennet, A., Bennet, D. Fafard, K., Fonda, M., Lomond, T., Messier, L., Vaugeois, N., (2007). *Knowledge Mobilization in the Social Sciences and Humanities*. Frost, WV: MQI Press.
- Bennet, Alex, David Bennet, Katherine Fafard, Marc Fonda, Ted Lomond, Laurent Messier, and Vaugeois, Nicole (2007). *Knowledge Mobilization in the Social Sciences and Humanities*. Frost, WV: MQI Press.
- Briceño-Romero, Y. & Bravo Bautista, L. (2022). Social mobilization in digital environments: a review of scientific production in Spanish in the 21st century. *Political reflection* 24 (49), pp. 6-20. DOI: <https://doi.org/10.29375/01240781.4374>
- Briceño-Romero, Ysabel (2014). Know and media: towards an emerging mode of the communication of science. *Bitácora-e Latin American Electronic Journal of Social, Historical and Cultural Studies of Science and Technology*, No. 1, 3 34. SNN2244-700. Available in <http://www.saber.ula.ve/handle/123456789/38746>
- Callon, Michel (ed.) (1998). *The laws of markets. "" (The Laws of the Markets) "*. London: Blackwell Publishers.
- Davies, H., and S. Nutley (2008). *Learning More About How Research-Based Knowledge Gets USED: Guidance in the Development of New Empirical Research*. New York: William T. Grant Foundation. Education, No. 9, Vol. 1, pp. 15-26. "For Undertaking the Evidence-Practice Agenda", in *Evaluation*, 9 (2), 125-148.
- Freeman, C. (2008). *Systems of Innovation: Selected Essays in Evolutionary Economics*, Edward Elgar Publishing Ltd.
- Golhasany, H., Harvey, B. Capacity Development for Knowledge Mobilization: A Scoping Review of the Concepts and Practices. *Humanit Soc Sci Commun* 10, 235 (2023). <https://doi.org/10.1057/s41599-023-01733-8>
- Janasoff, S. (2004). *State of Knowledge: The Co-Production of Science and Social Order*. Taylor & Francis.
- Jenkins, H. (2009). *The Revenge of the Origami Unicorn: seven principles of transmedia narration*. Available in http://henryjenkins.org/blog/2009/12/the_revenge_of_the_origami_uni.html



10th International CEO Communication, Economics, Organization & Social Sciences Congress

- Jenkins, H., for D, S. & Green, J. (2015). *Transmedia culture: the creation of content and value in a network culture*. Barcelona: Gedisa.
- Krugman, P. (2000). *The globalization of the economy and financial crises*. Editorial Fundación Pedro Barrié de la Maza.
- Latour, B. (1992). *Science in Action: How to follow scientists and engineers through society*, Editorial Labor, Barcelona.
- Mild, Pierre. (2009). *Knowledge Mobilization Works*. www.knowledgemobilization.net
- Levin, B. (2008). *Knowledge for Action in Education Research and Policy: What We Know, What We Don't Know and What We Need To Do*. In *Wissen Fur Handeln - Forschungsstrategien Fur eine Evidenzbasierte Bildungspolitik*, 35–44. Bonn: Bundesministerium for Forschung
- Levin, B. (2011). *Mobilizing Research Knowledge in Education*. *London Review of Education*, No. 9, Vol. 1, pp. 15-26.
- Lundvall, Bengt-Ma. (2002). *Innovation Growth and Social Cohesion*, Edward Elgar, London.
- McLuhan, M. (1962). *The Gutenberg Galaxy: The Making of Typographic Man*. Toronto: University of Toronto Press.
- Naidorf, J., & Alonso, M. (2018). *The mobilization of knowledge in three times*. *Lusophone Magazine of Educação*, (39), 81-95. Available in <https://doi.org/10.24140/issn.1645-7250.rle39.06>.
- Nelson RR, Winter SG (1982) *An Evolutionary Theory of Economic Change*. Mass: Belknap Press of Harvard University Press, Cambridge
- Nowotny, Helga; Scott, Peter; Gibbons, Michael (2001). *Re-Thinking Science: Knowledge and the public in an age of uncertainty*. Cambridge, UK: Polity.
- Nutley, S., Walter, I., & Davies, H. T. (2003) "From Knowing To Doing A Framework
- Pérez Lindo, A. (2016). *Mode 3 of knowledge production, universities and intelligent development of South America*. *Integration and knowledge*, 5 (2). <https://doi.org/10.61203/2347-0658.v5.n2.15727>
- Phipps, D., Cumings, J., Peller, D., Craigh, W., & Cardinal, S. (2016). *The co-produced Pathway to impact describes Knowledge Mobilization Process*. *Journal of Community Engagement and Scholarship*, 09 (01), 31–40.
- Quiroga, S. (2020). *Public Awareness of Knowledge*. *International Journal of Global Science Research (Online)* Vol. 7, ISSUE. 2, October, pp. 1321-1332 DOI: 10.26540/IJGSR.V7.I2.2020.154. Available in <http://www.ijgsr.com>
- Quiroga, S. (2022). *Science, communication and action*. *Synergies Spanish Academic Editorial*. P. 1-113.
- Robertson R. (1992). *Globalization: Social Theory and Global Culture*. London: Sage.
- Scolari, C. (2012). *Transmedia narratives, audiovisual convergence and new communication strategies*. *CAC quaderns*. http://www.cac.cat/pfw_#les/cma/recerca/quaderns_cac/q38_scolari_et_al_es.pdf
- Scolari, C. (2013). *Transmedia narratives. When all media tell*. Barcelona: Deusto.
- Scolari, C. (2014). *Don Quixote of La Mancha: Transmedia Storytelling in the Gray Zone*. *International Journal of Communication*, 8, 2382-2405.
- Social Sciences and Humanities Research Council. Canada Government. *Knowledge Mobilization*. Available at <https://www.sshrc-crsh.gc.ca/home-accueil-eg.aspx>
- Usmani, S. & Alamgir, A.K.M. (2020). *Knowledge Translation, Knowledge Mobilization, or Knowledge Transfer-Are They Synonymous in Canadian Context?* [Blog]. Access Alliance: Toronto. Available at <https://acortar.link/65kpfk>
- Van Dijk, J. (2000). *Models of Democracy and Concepts of Communication*. In: Hacker, K.L.; Van Dijk, J. (2000). *Digital Democracy*. London: Sage.
- Wallerstein, I. (2004). *Systems analysis: an introduction*. Mexico: 21st century. In Spanish, 2005.
- Wenger, Etienne (1987). *Artificial Intelligence and Tutoring Systems: Computational and Cognitive Approaches to the Communication of Knowledge*. Morgan Kaufmann Press.
- Ziman, J. (1994). *Prometheus Bound. Science in A Dynamic Steady State*, Cambridge, UK, Cambridge University Press.



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**An Appraisal of the Role of International Law in Protecting Land Rights of
Indigenous People Vis-A-Vis the Right of Foreigners to Own Land
Ownership Under the Nigerian Land Law**

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ABSTRACT

This paper explores the role of international law in safeguarding the land rights of indigenous peoples (IPs) in Africa, particularly Nigeria. It uses the case study of Abuja, Nigeria, and the findings of the United Nations Human Rights Committee, the African Commission on Human and Peoples' Rights, and the African Court on Human and Peoples' Rights to illustrate the importance of international human rights treaties and the African Charter on Human and Peoples' Rights in protecting IPs' land rights. The paper also examines the Nigerian Land Use Act and its impact on foreigners' land ownership rights. The Act does not explicitly prohibit foreigners from accessing land for industrial, commercial, or residential purposes. However, the National Council of States has not yet exercised this power, leaving a gap in the law's position. The Nigerian Supreme Court has established a precedent that foreigners cannot own land in Nigeria. The Land Tenure Law of Northern Nigeria only allows access to land by "non-natives" subject to Ministerial approval. The acquisition of land by Aliens Law in Lagos State and other states came close to a blanket prohibition. The provisions of the Land Use Act are imprecise in affecting foreigners' land ownership rights. Using the doctrinal, case-based research method, the paper aims to highlight the role of citizens to their land rights, while resolving the conflict between sub-national laws and the Land Use Act, an Act of the National Assembly entrenched in the Constitution. Recommendations are made for improving the law on this subject matter.

Keywords: Indigenous People, International Economic Law, Land Ownership, Land Use Act, Non-Natives

INTRODUCTION

Globally indigenous peoples (IPs) face numerous injustices due to their low numbers, political marginalization, and economic power. The international community has made IPs direct subjects of international human rights law, but this law is not easily enforceable within the domestic jurisdictions of some states, making it difficult for IPs to enforce their rights. This raises academic issues about enhancing the relationship between international law and national law. The most controversial human rights issue for IPs is the dispossession of their ancestral lands, which they depend on for survival. The need to protect IPs' land rights may often conflict with the interests of the State, as seen in Nigeria.

Meanwhile, the Land Use Act, enacted in 1978, established the principles of state control and ownership of land in Nigerian Land Law jurisprudence. This law was a precursor to the Land Tenure Law of Northern Nigeria, which was the first to clearly and legislatively entrench state regulation and control of land tenure in Nigeria. The Land Tenure Law declared all native lands and rights under the same to be under the control of the Minister and subject to their disposition. The Land Tenure Law did not vest the radical title in land on the Minister or Governor, but it empowered the Minister to allocate occupied or unoccupied land for use by natives and non-native residents as needed. The Act also provided provisions for granting rights of occupancy to natives and non-natives, allowing the radical title to remain with the original land owners but potentially interrupted by the Minister while making a grant to a native or non-native resident. The Land Use Act expressly vested the radical title to all lands in the territory of any state of the federation on the Governor of that state. This vesting provision sets it apart from the Land Tenure Law of Northern Nigeria, as many legal scholars argue that the Act merely nationalized the Land Tenure Law. One controversial issue that has arisen from this provision is the right of foreigners to own land by virtue of statutory or customary rights of occupancy provided for under the Act. The Land Tenure law defines a "native" as a person whose father was a member of any tribe indigenous to Northern Nigeria, while the Land Use Act does not use or define terms like "foreigner," "alien," "native," or "non-native."

This paper aims to explain the significance of international law and African regional human rights law in protecting land rights of IPs in Africa. It uses the case study of Abuja, Nigeria, focusing on human rights treaties, decisions of the African Commission on Human and Peoples' Rights, and the African Court on Human and Peoples' Rights. The paper also seeks to resolve the conflict between sub-national laws and the Land Use Act, with a view to striking the much-desired balance, towards achieving sustainable economic development.

1. AN INTRODUCTION TO NIGERIA AND ABUJA

Nigeria, a West African country with a population of around 100 and 70 million people, is a multi-ethnic and multi-religious nation. Before British colonial rule, Nigeria had many pre-colonial African States in both northern and southern parts of the country. The pre-dominant mode of law was customary law. However, with the advent of colonial rule by Britain, most of these indigenous States were brought together to form Nigeria in 1914 through the amalgamation of the Northern and Southern Protectorates of Nigeria. During colonial rule, statutory English law co-existed with customary law and Islamic law depending on the specific area of Nigeria¹.

As regards Abuja, it is the administrative capital of the Federal Republic of Nigeria, and home to various ethnic groups. Abuja has been a subject of land rights issues since 1976. The Land

¹ King L.D. 'State and Ethnicity in Precolonial Northern Nigeria'. (2001) (36) *Journal of Asian and African Studies*, 339; Afigbo AE. 'The Consolidation of British Imperial Administration in Nigeria: 1900-1918'. (1971) (21) *Civilisations*, 436; Elias T.O. *The Impact of English Law on Nigerian Customary Law* (Nigeria: Nigerian Ministry of Information; 1958) pp. 7-8; Elias T.O., Akinjide R. *Africa and the Development of International Law* (Netherlands: Martinus Nijhoff Publishers, 1988) p. 22

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Use Act 1978 (LUA) is the principal legislation on land in Nigeria, but it is not applicable in Abuja due to its symbolic representation of the unity of Nigeria. The FCT Act vests all of Abuja lands exclusively in the Federal Government of Nigeria, implying that customary land rights do not exist in the city. The compulsory termination of customary land rights in Abuja is backed by Section 279 (2) of the Constitution of the Federal Republic of Nigeria 1999. The LUA provides for two types of occupancy rights: 'statutory right of occupancy' and 'customary right of occupancy'. For customary rights of occupancy, Local Governments may grant customary rights to land in any non-urban area for agricultural, residential, and other purposes.

However, aspects of customary land tenure law have been accommodated within the LUA, such as Section 24 which preserves customary law rules governing devolution of property and Section 29 which allows the holder or occupier entitled to compensation in respect of customary land rights to be a community. This accommodation benefits indigenous Nigerians in the 36 States of Nigeria, but not Abuja peoples whose customary land rights are terminated by domestic laws and the Constitution of Nigeria. The Nigerian Court of Appeal confirmed this position in *Ona v Atenda*¹, which held that no person can be entitled to compensation for the compulsory acquisition of customary land rights, except those rights are enshrined in a statute. As the FCT Act predates the LUA, the preservation of customary land rights under the LUA cannot inure in favor of Abuja peoples, violating international human rights laws.

2. INTERNATIONAL LEGAL PROTECTION OF LAND OWNERSHIP BY INDIGENOUS NIGERIANS

The role of international law in protecting the land rights of indigenous peoples in Nigeria is considered here with reference to international legal frameworks, particularly relevant United Nations conventions. The International Convention on the Rights of Persons with Disabilities (ICERD)² defines racial discrimination as any distinction that excludes, restricts, or offers preferential treatment based on grounds such as race, color, descent, or national or ethnic origin. States are obligated to ensure equal protection and enjoyment of human rights for racial groups or individuals, just as other members of society.

The Convention on the Elimination of Racial Discrimination in Lands (CERD) was established to monitor States' compliance with their commitments under ICERD. Nigeria has signed and ratified the ICERD, maintaining that its provisions are relevant in protecting the rights of Indigenous Peoples (IPs) in general. The CERD has maintained that a "hands-off" or "neutral" policy is not enough, and its recommendations have led to several States reviewing and amending their laws and policies that negatively affect land rights of IPs.

Similarly, The International Covenant on Civil and Political Rights (ICCPR) is a treaty that protects the rights of peoples, particularly Indigenous Peoples (IPs), to their land and resources. It provides that all peoples have the right to dispose of their wealth and natural resources, and that no person may be deprived of its means of subsistence. Article 26 of the ICCPR also prohibits discrimination on grounds of race, color, sex, language, national or social origin, property, birth, or other status. The Human Rights Commission (HRC) is responsible for monitoring compliance with States' obligations under the ICCPR.

¹ [2000] 5 NWLR 244

² International Convention on the Elimination of All Forms of Racial Discrimination (ICERD) 1965, adopted and opened for signature and ratification by GA Resolution 2106 (XX) of 21 December 1965, entered into force on 4 January 1969, in accordance with its Article 19; Committee on the Elimination of Racial Discrimination (CERD), *Diop v France* (2/1989) Communication of 10 May 1991, CERD/C/39/D/2/1989; CERD, Report of the Committee on the Elimination of Racial Discrimination, adopted by the GA fifty second session, 26 September 1997, Annex V, A/52/18 SUPP

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On the other hand, the International Convention on the Rights of Indigenous Peoples (ICESCR) is a treaty that provides for the protection of customary land rights of indigenous peoples (IPs) in Africa. It states that all 'peoples' shall enjoy economic, cultural development, social rights, and the right to cultural freedoms. The CESCR is responsible for monitoring States' compliance with their obligations under the ICESCR, which has been deemed intertwined with other human rights. In the context of IPs, the CESCR acknowledges that IPs have the right to enjoy all the rights under the UN Charter and UDHR as collectives and as individuals. Article 15 (1) of the ICESCR implies that culture encompasses modes of production of food, and any limitation on cultural rights must be through the adoption of the least restrictive measures while considering various types of restrictions. In the case study of Abuja, the termination of customary land rights in that territory is anchored on the need for a capital for the State, which is in reality a legitimate State interest. However, the complete termination of customary land rights in Abuja, in such a place that have IPs who are predominantly farmers, is the most restrictive measure, as it is a contravention of Articles 1 (2) and 15 (1) of the ICESCR. The CESCR also prohibits discrimination in the enjoyment of human rights in a similar way as the ICERD and the ICCPR. To eliminate discrimination, States should ensure that their laws do not enhance discrimination on the prohibited grounds. The CESCR encourages States to give special attention to groups of individuals who have historically been victims of discrimination through removing the conditions that encourage such discrimination. In the context of Abuja, terminating land rights of Abuja peoples through the domestic laws of Nigeria cannot justify the violation of Nigeria's treaty obligations. The CESCR has used Article 27 of the Vienna Convention on the Law of Treaties 1969 to maintain that States should amend their laws in such circumstances to avoid violating their treaty obligations¹.

On its part, the African Charter, an international human rights instrument, has been celebrated as a key tool for protecting land rights of Indigenous Peoples (IPs) in Africa. The African Union (AU) aims to promote international cooperation among African States by respecting UN international human rights norms and the African Charter. The African Charter is seen as a unique instrument that balances collective rights with individual rights, introducing an African dimension of human rights into the international regime on human rights. The African Commission, like its counterparts globally, has expressed its views on the human rights implications of protecting or violating IPs' land rights in Africa. It acknowledged the importance of rights to land and natural resources for IPs' existence and survival, and maintained that these rights are protected under Articles 20 (right to existence), 21 (right to freely dispose of their wealth and natural resources), and 22 (right to economic, social, and cultural development). Article 14 of the African Charter protects the right of every individual to property, which is exercisable by individual members of IPs and collectives in Africa. In an Advisory Opinion on the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), the African Commission concluded that States do not safeguard IPs against discrimination, violating Articles 2 and 3 of the African Charter. Article 17 (2) of the African Charter recognizes the right to cultural life in community, which benefits IPs in Africa in terms of their land rights. The African Commission is mandated to obtain guidance from the general body of international human rights law in reaching its decisions and conclusions. In the case of Social and Economic Rights Action Centre (SERAC) and Centre for Economic and Social Rights (CESR) v Nigeria (Ogoni case), the Commission found that the failure to involve the Ogoni people in decision processes was in violation of their right to freely dispose of their natural resources and wealth as provided under the African Charter. The African Commission stressed

¹ HRC, *Aerela and Nakkalajarvi v Finland*, (779/1997), Communication of 24 October 2001, CCPR/73/D/779/1997; *Mahuika A et al. v New Zealand*, Case 547/1993, view of October 2000; HRC, *Sandra Lovelace v Canada*, (24/1977), Communication on Canada 30th July 1981, CCPR/C/13/D/24/1977; HRC, *Lubicon Lake Band v Canada* (167/1984), A/45/40, Vol II



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the need for the general body of international human rights law to consider the peculiar circumstances of Africa, as economic, social, and cultural rights, as well as collective rights, were essential issues in the African context¹.

3. COMPARATIVE ANALYSIS OF LEGAL RESTRAINTS OF FOREIGNERS TO LAND OWNERSHIP BETWEEN NIGERIA AND SOME JURISDICTIONS

Land is a crucial aspect of a nation state's sovereignty, as it is the territorial aspect of its sovereignty. Investments in housing, agriculture, natural resource utilization, and national security are all based on the availability of land and access to it by citizens and residents. However, the classification of non-citizens as "foreigners" or "aliens" has led to restrictions on the right of foreigners to own and use land in their territories².

Restrictions on the right of foreigners to own land are widespread in most states worldwide, primarily due to state and national security, protection against exploitation, and economic competition from other countries' nationals. Customary International Law does not place any restrictions on states' right to restrict foreign ownership of land within their territories, as it recognizes the sovereignty of states over their natural resources. States can also prevent or allow foreigners entry on terms that they may not own or use land, or restrict and regulate their use³.

Some countries, such as Germany, France, the United Kingdom, Portugal, the Netherlands, Belgium, and Luxembourg, do not have any restrictions on the right of foreigners to own land in their territories. These countries recognize the fundamental human right to property as a fundamental human right for both Belgians and non-Belgians. In addition to express provisions restricting the right of foreigners to own land, limits to foreign investments, discriminatory tax regimes, and foreign exchange restrictions can indirectly impact the right of foreigners to own land in a nation state⁴.

With regards to Nigeria, the Land Use Act in Nigeria does not explicitly restrict foreigners' right to own land, but it is argued that it restricts the grant of occupancy rights to only Nigerian citizens. The Act states that land should be held in trust and administered for the common benefit of all Nigerians, which has been interpreted by courts to exclude foreigners. The court further argued that the Land Use Act does not abrogate earlier legislations restricting foreigners' right to own land in Nigeria, such as the Land Tenure Law of Northern Nigeria, the Acquisition of Land by Aliens Act of the Federal Capital Territory, and the Acquisition of Land by Aliens Laws of various states⁵. This paper emphasizes that state land laws in Nigeria are only applicable if they do not conflict with the Land Use Act. The Land Use Act states that existing laws related to land registration, interest, or transfer must be adapted to conform with the Act or its general intent. Therefore, state land laws restricting foreigners' land ownership rights in Nigeria can only apply if they do not conflict with the Land Use Act's provisions. The text then discusses the implications of these state laws on the rights of foreigners to own land in Nigeria⁶.

Similarly, the Land Tenure Law of Northern Nigeria introduced state regulation of land in Nigeria by modifying communal ownership rules. The law prohibits the transfer of land to non-natives without the Minister's approval. It states that any customary right of occupancy or part

¹ Social and Economic Rights Action Centre (SERAC) and Centre for Economic and Social Rights (CESR) v Nigeria. Application No. 155/96; African Commission on Human and Peoples' Rights v The Republic of Kenya. Application No. 006/2012. This case emanated from the African Commission but was referred to the African Court

² Stephen Hodgson et al. *Land Ownership and Foreigners: A Comparative Analysis of Regulatory Approaches to Acquisition and Use of Title by Foreigners* (New York: Food and Agricultural Organization, 1999) p. 2

³ *Ibid*

⁴ *Ibid*

⁵ *Heubner v. A. I. I.* (2017) 14 NWLR (pt. 1586) 397

⁶ Land Use Act Cap L5 Laws of Federation of Nigeria, Section 48.

10th International CEO Communication, Economics, Organization & Social Sciences Congress of it held by a native cannot be alienated by sale, assignment, mortgage, transfer of possession, sublease, bequest, or otherwise. The law does not ban or prohibit foreign nationals owning land in Nigeria, but only makes acquisitions subject to the Minister's consent. A similar provision was made in Section 5 for the grant of right of occupancy to non-natives and foreign nationals. Under this law, other Nigerians not members of indigenous tribes are considered non-natives and therefore in the same category as foreign nationals. The law ensures that land acquisitions are subject to the Minister's consent¹.

Again, the Acquisition of Land by Aliens Law of Lagos State is a law that prohibits aliens from acquiring any interest or right in or over land from a citizen of Nigeria unless the transaction has been approved in writing by the Governor. This law is more extensive in its restriction on the right of foreign nationals to own land than the Land Tenure Law of Northern Nigeria. The law limits the right of occupancy granted to an alien or foreign national to a maximum of 25 years, and any agreement or instrument that an alien purports to acquire any interest or right in or over any land will be void and of no effect. If an alien has lawfully acquired an interest or right of ownership in or over any land from a citizen of Nigeria and such interest or right becomes liable to be sold under any process of law, such sale will be ordered to the State Government in the first instance, and if the Government declines, then to a citizen of Nigeria. The law also makes it a crime punishable by a fine of N180,000.00 or imprisonment for twelve months for any alien or a person claiming through such an alien to unlawfully occupy any land belonging to a citizen of Nigeria². This is beyond a civil infraction remediable by declaration and order for damages. Aliens are only exempt from punishment when such occupation was as a result of a transaction that had received the prior consent of the Governor in accordance with Section 1 of the law, was acquired in accordance with any regulation or order made in pursuance of the law, was acquired by the evidence of an instrument approved by the Governor under any statute, was acquired before the commencement of the law, or that such acquisition was authorized by any other enactment. The law confers on the Governor a wide discretion to exempt any alien or body corporate from the application of the restrictive provisions of the law and to determine by order the terms and conditions to be included in any agreement submitted to him for his approval. One interesting feature of the law is that it not only defines an "alien" as any person other than a citizen of Nigeria but also extends the meaning of the term "alien" to other Nigerians who are not from Lagos State. The law also extends the context of the term "alien" to include corporate bodies which all the shareholders or a majority of them are not Nigerians³.

On its part, the Land Use Act in Nigeria does not explicitly restrict foreigners or aliens from owning land, except for the common benefit of all Nigerians. Sections 5 and 6 of the Act allow the Governor to grant statutory rights of occupancy to any person for all purposes, while Section 46 states that the National Council of States must make provisions for the transfer of any rights of occupancy, whether statutory or customary, to non-Nigerians. This provision reveals that the highest form of title under the Land Use Act could be granted or made transferable to non-Nigerians. Unlike the partially restrictive provisions of the Land Tenure Law of Northern Nigeria and the expressly prohibitive provisions of the Acquisition of Land by Aliens Law of Lagos State, the Act laid the foundation for transferability of the right of occupancy to non-Nigerians in this section. The National Council of States (NCS) must provide the necessary legal framework for actuating such transfers⁴.

¹ Section 27, Land Tenure Law, Cap59, Laws of Northern Nigeria, 1963

² See Mary Imelda Obianuju Nwogu (2023) "Ownership And Possession Of Land Under The Nigerian Customary Land Tenure System: A Legal Appraisal UNIZIK, Law Journal 19(2), 2

³ Section 1(1) – 1(2), Acquisition of land by Aliens Law, Cap AI Laws of Lagos State, 1974; Regulation 4(9), Acquisition of Land by Aliens Regulations.

⁴ See Aderonke Adegbite and Abiade Abiola (2021) "Land as the Life of a People: Nigerian Government, Laws and Indigenous Land Matters" MUNFOLLJ 4, 86-96

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In this connection, it is important to appraise some decisions of domestic courts on the rights of foreigners to own land in the Country. In *Chief S. O. Ogunola & Ors v. Hoda Eiyekole & Ors*¹, the Supreme Court unanimously held that the words "any person" in Section 36(1) of the Land Use Act refer exclusively to "any Nigerian." The court ruled that a foreigner cannot apply for a statutory or customary right of occupancy because the construction of the words simply means "any Nigerian" and excludes persons who are not Nigerians. This decision was reinforced in *Heubner v A. I. E. & P Company Ltd*², where a German National occupied a large area of land on Kajuru Hills in Kaduna State with the assistance of the Emi of Zaria. He later sought the right of occupancy over the land but was informed it was not possible under the extant laws since he was a foreign national. He paid the purchase price of the land but obtained the necessary right of occupancy in the name of the respondent company, who was also the defendant at the High Court. Upon his resignation from the defendant company, he demanded the property should be reconveyed to him. The company declined insisting that title was in the company. The appellant sued the defendant company, but the Supreme Court held that foreigners cannot own land in Nigeria under the Land Use Act.

Section 315(6) of the 1999 Nigerian Constitution has adopted the Land Use Act as an existing enactment of the National Assembly, which has corrected a defect that would render the Land Use Act unconstitutional. The defect arises from the fact that the subject matter of acquisition and tenure of land is typically legislated by the National Assembly. However, Section 315(6) elevates the subject matter of "Acquisition and Tenure of Land" from a supplemental item within the legislative competence of states to the Concurrent List, which falls within the legislative jurisdiction of both the National Assembly and the State Houses of Assembly. The Land Tenure Law of Northern Nigeria and the Acquisition of Land by Aliens Law of Lagos State can only restrict the right of foreigners to access land in Nigeria to the extent that the Land Use Act does not make other provisions in that regard. This is the position under the doctrine of covering the field. Section 46 of the Land Use Act empowers the National Council of States (NCS) to make regulations for carrying the Act into effect with respect to the transfer by assignment or otherwise of any rights of occupancy, whether statutory or customary, including the procedure applicable to the transfer of such rights to persons who are not Nigerians. It is submitted that the term "any person" as used in sections 5 and 36 of the Land Use Act may not actually preclude persons that are not Nigerians. A combined reading of sections 1 and 5 or 1 and 36 of the Land Use Act could include purposes that are beneficial to all Nigerians, such as economic, scientific, and technological purposes. A liberal approach to the interpretation of the term "any person" in the context of "common benefit of all Nigerians" may include foreigners who are granted land in a way that will benefit all Nigerians³.

The current judicial stance in Nigeria is that foreigners cannot be granted a statutory or customary right of occupancy under the Land Use Act. This position is based on the opinion that the Land Use Act did not abolish pre-existing restrictive enactments that limited the right of foreigners to own land in Nigeria.

CONCLUSION

This paper explores the role and relevance of international human rights treaties and the African Charter in protecting land rights of Indigenous Peoples (IPs) in Africa, focusing on Nigeria, with specific reference to Abuja. The recent decision of the African Court in the Ogiek case highlights the importance of IPs' land rights in the African context and the African Charter. This

¹ (1990) 4 NWLR (pt 146) 632 @ 642

² (2017) 14 NWLR (pt. 1586) 397

³ See I O Smith Practical Approach to Real Property In Nigeria (Lagos: Ecowatch Publications, 2013) p.473

10th International CEO Communication, Economics, Organization & Social Sciences Congress is the first legally binding judicial decision by an international court on IPs' rights in Africa, laying the groundwork for the establishment of an emergent principle of international law in the context of the African Charter. State Parties to the African Charter are bound by the decision and must implement appropriate legislative and policy measures to ensure IPs' land rights are effectively protected and recognized by states. Credit must be given to Minority Right Group International for pursuing and prosecuting the Ogiek case to obtain a favorable judgment, which could encourage African States to take the rights of minorities and IPs within their jurisdiction more seriously. The success of law or constitutional reforms in one country does not necessarily mean that such reforms can be automatically transplanted with success in another country. Different social, political, and economic circumstances in all countries influence the development and evolution of the law, making it challenging to transplant law reforms from one country to another. However, there is no known social, economic, political, or legal factor that should prevent Nigeria from making similar constitutional reforms, adopting a more positive approach that allows all international treaties signed and ratified by Nigeria to have the force of law within Nigeria.

As regards the ownership of land by foreigners in Nigeria, The current judicial stance in Nigeria is that foreigners cannot be granted a statutory or customary right of occupancy under the Land Use Act. This position is based on the opinion that the Land Use Act did not abolish pre-existing restrictive enactments that limited the right of foreigners to own land in Nigeria. However, the Land Use Act did not make any explicit provision restricting the right of foreigners to own land in Nigeria. It only postponed the actualization of such rights until the National Council of States would have made regulations in respect of it. Section 44(1) of the 1999 Nigerian Constitution clearly provides that no moveable property or any interest in an immovable property shall be taken possession of compulsorily and no right over or interest in any such property shall be acquired compulsorily in any part of Nigeria except in the manner and for the purposes prescribed by a law. The benefit of this constitutional provision appears not to extend to persons that are not Nigerian citizens, unlike the Belgian Constitution which provides that right to property is a fundamental right for both Belgians and non-Belgians alike. It is unclear whether the Land Use Act has consequentially modified the restrictive provisions on the right of foreigners to own land contained in existing state land laws as opined by the Court in Ogunola's case. The Land Use Act is therefore a relevant enactment to consider in order to determine the rights of foreign nationals to own land in Nigeria. Reducing restrictions on the right of foreigners who are bringing in investments into the country could be a way of encouraging the much needed Foreign Direct Investment (FDI) into the Nigerian Economy. Conversely, fostering restrictions through restrictive judicial interpretations of the Land Use Act could have the effect of bolstering unnecessary land agency and touting by Nigerians, which will in the long run be a clog to the flow of FDI¹.

RECOMMENDATIONS

In view of the issues raised in this paper, the following suggestions have been recommended as way forward:

1. The case study of Abuja highlights the conflict between Nigeria's Constitution and FCT Act, with international human rights treaties and the African Charter, concerning the violation of Abuja peoples' land rights. To fulfill international human rights obligations, Nigeria must amend its Constitution and FCT Act.

¹ Thaddeus Chukwuka Eze, 'Re- Appraising The Right Of Foreign Nationals Under The Nigerian Land Use Act' (2020) (11) (2) *NAUJILJ* pp.1-11



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2. Nigeria could address legal challenges from Abuja by implementing constitutional reforms similar to Kenya's, such as amending Section 12 (1) of the Nigerian Constitution to include all international treaties signed and ratified by Nigeria. This would align Nigeria's domestic laws with international human rights treaties.
3. The National Council of States should swiftly implement regulations regulating foreigners' land ownership in Nigeria, following the Supreme Court's ruling in Heubner's case. Currently, neither individual nor corporate foreign nationals can own land for more than a 25-year lease. The Supreme Court should reverse this decision to remove the blanket prohibition on foreigners' land ownership.
4. The National Assembly should clarify the terms "for the benefit of all Nigerians" and "any person" in the Land Use Act to prevent confusion about the prohibition of foreigners owning land in Nigeria. This will enable foreigners to contribute to the economy through large-scale mechanized agriculture, as the Act permits foreign nationals to acquire land in rural areas for agricultural purposes, despite the dissenting judgement in Ogunola's case allowing foreigners to acquire land before the Act's commencement.
5. The Land Use Act is crucial in determining foreign nationals' land ownership rights in Nigeria. Reducing restrictions on foreign investments could boost Foreign Direct Investment (FDI) in the country. Conversely, restrictive judicial interpretations of the Act could bolster unnecessary land agency and touting by Nigerians, clogging the flow of FDI. Therefore, balancing these two factors is essential for a successful Nigerian economy.

REFERENCES

- Aderonke Adegbite and Abiade Abiola (2021) "Land as the Life of a People: Nigerian Government, Laws and Indigenous Land Matters" *MUNFOLLJ* 4, 86-96
- Afigbo A.E. (1971) "The Consolidation of British Imperial Administration in Nigeria: 1900-1918" *Civilisations*, 21, 436
- Elias T.O. (1958) *The Impact of English Law on Nigerian Customary Law*. Nigeria: Nigerian Ministry of Information, 7-8
- Elias T.O., Akinjide R. (1988) *Africa and the Development of International Law*. Netherlands: Martinus Nijhoff Publishers 22
- I O Smith (2013) *Practical Approach to Real Property In Nigeria*. Lagos: Ecowatch Publications 473
- King L.D. (2001) "State and Ethnicity in Precolonial Northern Nigeria" *Journal of Asian and African Studies*. 36, 339
- Mary Imelda Obianuju Nwogu (2023) "Ownership And Possession Of Land Under The Nigerian Customary Land Tenure System: A Legal Appraisal" *UNIZIK, Law Journal* 19(2), 2
- Okafor OC (2000) "After Martyrdom: International Law, Sub-state Groups, and the Construction of Legitimate Statehood in Africa" *Harvard International Law Journal*, 41, 503
- Smith R. (1973) "Peace and Palaver: International Relations in Pre-colonial West Africa" *The Journal of African History* 14, 599-600



10th International CEO Communication, Economics, Organization & Social Sciences Congress

Stephen Hodgson et al (1999) *Land Ownership and Foreigners: A Comparative Analysis of Regulatory Approaches to Acquisition and Use of Title by Foreigners*. New York: Food and Agricultural Organization, 2

Thaddeus Chukwuka Eze (2020) “Re- Appraising The Right Of Foreign Nationals Under The Nigerian Land Use Act” *NAUJILJ* 11(2), 1-11

Van Genugten and Perez-Bustillo (2004) “The Emerging International Architecture of Indigenous Rights: The Interaction Between Global, Regional, and National Dimensions” *International Journal on Minority and Group Rights* 379 at 390

Xanthaki A. (2009) “Indigenous Rights in International Law Over the Last 10 Years and Future Developments” *Melbourne Journal of International Law*, 10 (27), 28

Xiaojing Qin (2020) “Foreigners’ Right to Acquire Land under International Human Rights Instruments” *Journal of Studies in Social Sciences* 19 (11)



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Student's Perception and Measure of Bloom's Taxonomy Cognitive Levels:
an Integrated Analysis Based on HEC's Speaking Curriculum to Access in
Career

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ABSTRACT

Learning a language involves various mental processes, including cognitive elements that help determine the student's language proficiency level (Delbio & Ilankumaran, 2018). This study revealed the levels of the cognitive domains utilized in functional English course offered by the HEC at the undergraduate level in Pakistani universities to teach and acquire speaking skills necessary for the workplace. One crucial aspect of educational instruction is customizing curricula to match a learner's cognitive abilities (Ahmed et al., (2023). The research was exploratory, case-based, and qualitative, with its foundation in Richards and Rodgers' language teaching paradigm (2001). The data was collected from both public universities in Islamabad. The HEC functional English selected curriculum, teacher and student interviews, and classroom observations provided the data for this study. The results of the study indicate that to improve students' speaking abilities, which are necessary for the job once they graduate, the HEC's speaking curriculum should place more focus on all levels of cognitive domain given in Bloom's taxonomy. The current curriculum needs to properly educate students on the skills required for employment. It mainly focuses on high cognitive processing levels without considering students' diversity. Since neither public nor private universities focus on fieldwork, it reduces the perception of students to acquire language properly. To facilitate student connection with job industries and improve speaking abilities, the curriculum needs to be adjusted to include beneficial comprehension exercises focusing on students from various backgrounds with all cognitive domains.

Keywords: Cognitive skill, Cognitive levels, Teaching skill, Speaking skill, Job skill, Learning skill.

The curriculum, as the backbone of the education system, is not just a static entity but a dynamic force that can transform institutions and their outcomes. It imparts crucial knowledge and skills to learners, thereby developing the necessary human capital. Importantly, any changes in objectives also lead to adjustments in the curriculum, making it a catalyst for positive change and growth (Hamid & Rehman, 2023).

In today's global workplace, proficiency in English is essential. As a widely used language across various industries and countries, English proficiency is not merely a skill but a fundamental requirement for effective communication, collaboration, and career advancement. Learning a language involves various cognitive processes that impact the learner's skill level. The mental approach consists of three primary processes. Initially, learners gather and retain linguistic input in short-term memory. Subsequently, in the second phase, this information is reviewed and consolidated into long-term memory. Finally, in the last step, the acquired knowledge is used as output, enabling students to express the language coherently, accurately, and fluently. The cognitive process of developing a second language can be divided into macro- and micro-processes. Micro-processes include working memory, attention, and rearrangement, while macro-processes differentiate between explicit and implicit learning and deliberate and inadvertent learning (Delbio & Iankumaran, 2018).

The escalating trend of unemployment among graduates in Pakistan has emerged as a formidable obstacle for the Higher Education Commission and the country's overall economic progress. Despite the diligent efforts the Higher Education Commission put forth to enhance the quality of education, the rapid surge in unemployment rates has created substantial hurdles in achieving critical developmental targets. This situation necessitates a comprehensive and multifaceted approach to address the complex issues and foster sustainable solutions to benefit the nation's future. The existing curriculum is failing to adequately promote the intellectual development of students or sufficiently equip them to meet the demands of the workforce, as highlighted by Ayub and Khaleel in their study from 2024.

However, many graduates have recognized their inadequate English-speaking abilities and are eager to improve them. Even after completing functional English courses focused on communication and presentation skills, individuals still need help improving their speaking proficiency. Improving students' speaking proficiency may be possible by having university instructors emphasize speaking exercises and build students' confidence in speaking English (Ayub & Khaleel, 2024). Bloom's taxonomy, a framework for categorizing students' cognitive abilities, is particularly relevant here as it can guide the design of HEC's functional English course for graduate students. It is essential to consider how high and low cognitive levels are incorporated into the curriculum to ensure that educators effectively teach the speaking skills required for the job.

Additionally, research examined how educators integrate advanced cognitive levels into their teaching methods to ensure that all students can comprehend the material regardless of their backgrounds. Assessing how educators use psychological techniques to help students from diverse backgrounds is crucial. The research goals include identifying which cognitive levels of Bloom's taxonomy are emphasized in teaching speaking skills at the graduate level and understanding how students from different backgrounds perceive advanced cognitive levels of speaking skills, such as critical thinking, problem-solving, and effective communication.

MATERIALS AND METHODS

Bloom's Taxonomy of Cognitive Development is an essential instrument for educators and learners, offering a systematic and coherent framework for instruction and assessment. Data was gathered from students to comprehend the intricacies of Bloom's taxonomy. The research employs an exploratory qualitative methodology and case studies, with data gathered from public universities. The data was collected from the following sources:

- Interviews were conducted with six university educators from a government institution in Islamabad, Pakistan.
- Interviews were conducted with ten students to assess the difficulty levels associated with Bloom's taxonomy.
- The data was derived from the chosen curriculum and presented as a PowerPoint by four university educators.

The data was analyzed by creating two thematic codes representing high and low levels to understand how Bloom's taxonomy levels can be practically applied. Moreover, there are six subcodes from Bloom's taxonomy cognitive levels: knowledge, comprehension, application, analysis, evaluation, and creation. Further data from student interviews and classroom observations were analyzed by creating two codes: "apprehensible" and "understandable."

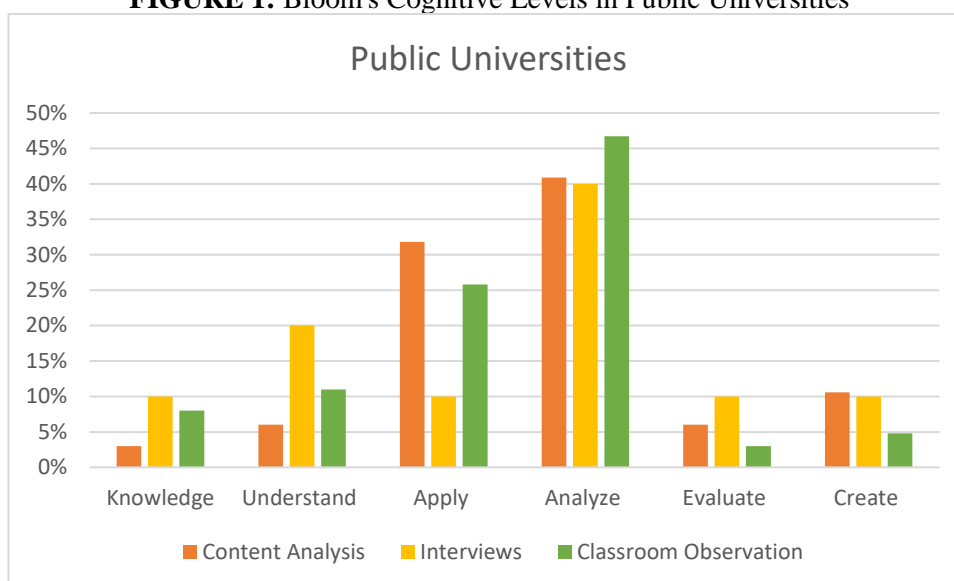
RESULTS AND DISCUSSION

TABLE 1: Bloom's Cognitive Levels in Public Universities

Public Universities	Low Level			High Level		
	Knowledge	Understand	Apply	Analyze	Evaluate	Create
Content Analysis	3%	6%	31.8%	40.9%	6%	10.6%
Interviews (teachers)	10 %	20 %	10%	40%	10%	10%
Classroom Observations	8%	11%	25.8%	46.7%	3%	4.8%
Overall	5.7%	9.4%	27.5%	43.4%	5%	7.9%

The analysis of speaking tasks in public universities revealed the following emphasis on different cognitive skills: 3% on knowledge, 6% on understanding, 31.8% on application, 40.9% on analysis, 6% on evaluation, and 10.6% on creation. Instructors stated that speaking activities in the functional English curriculum require significant cognitive effort, with the following distribution: 10% on knowledge, 20% on understanding, 10% on application, 40% on analysis, 10% on evaluation, and 10% on creation. During a classroom observation, the emphasis on cognitive skills was as follows: 5.7% on knowledge, 9.4% on understanding, 27.5% on application, 43.4% on analysis, 5% on evaluation, and 7.9% on creation. The most prominent high-level cognitive skill demonstrated was "analyzing," accounting for 43.4% of all high-level skills.

FIGURE 1: Bloom's Cognitive Levels in Public Universities



The data in Figure 4.1 demonstrate that content analysis, interviews, and classroom analysis all emphasize speaking tasks requiring varying cognitive demand levels. This includes tasks that require high cognitive demands and those that require low cognitive demands.

TABLE 2: Students' Perception of Cognitive Levels in Public Universities

Student's Apprehension Level	PUBLIC UNIVERSITIES	
	Apprehensible	Comprehensible
Interview (Students)	67%	33%
Classroom Observations	74%	26%

Table 2 shows the percentage of students from different backgrounds who view advanced cognitive levels as necessary for developing speaking skills. The table provides a detailed analysis of how students from diverse backgrounds perceive speaking skills. According to the table, 67% of students at public universities reported feeling pressure during activities like role-playing, conversations, oral explanations, and presentations. Only 33% of students felt comfortable with these learning activities. Classroom observations also revealed that 74% of students were hesitant during presentations, oral explanations, and conversations. It was noted that 26% of students felt comfortable during question-and-answer sessions, while others needed more support to participate in these activities in the public university setting.

CONCLUSION

The teaching methods used in most public universities to teach English speaking skills necessary for the workplace generally align with the application and analytical levels of Bloom's taxonomy. Educators at these institutions mainly focus on the higher cognitive domain. Advanced speaking skills needed in the workplace at the graduate level are highly valued in today's context of English. Teachers must ensure that all instructional activities are accessible to students from diverse backgrounds. Many students struggle to grasp advanced cognitive concepts, especially those from Urdu-medium backgrounds in public universities. All students confirmed that educators use a higher level of Bloom's taxonomy. Additionally, based on the student's classroom background, the teacher did not adequately instruct at a higher level of



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Bloom's taxonomy. Since English is the foundation of Pakistan's educational framework, educators must acknowledge their students' psychological needs, especially their socio-cultural contexts (Ayub & Lodhi, 2016).

REFERENCES

- Ayub, S., & Khaleel, B. (2024). The needs of graduates required by the employment industries: analysis of English language speaking course outlines at Pakistani universities. *Journal of Language and Pragmatics Studies*, 3(1), 9–21. <https://doi.org/10.58881/jlps.v3i1.44>
- Ahmed, I., Lashari, A. A., & Golo, M. A. (2023). Evaluating primary-level English textbooks of single national curriculum through the lens of Bloom's taxonomy. *Pakistan Languages and Humanities Review*, 7(3), 352–361. [https://doi.org/10.47205/plhr.2023\(7-III\)31](https://doi.org/10.47205/plhr.2023(7-III)31)
- Delbio, A. & Iankumaran, M. (2018). Theories, techniques, methods, and approaches of second language acquisition: a psychological perspective. *International Journal of Engineering and Technology (UAE)*. 7. 192-197. 10.14419/ijet.v7i3.6.14968.
- Ayub, S., & Lodhi, M. A. (2016). Identification of the teacher's debilitating attitude involved in acquiring oral competency of ESL students at the graduate level. *English Literature and Language Review, Academic Research Publishing Group*, 2(4), pages 43-48, 04-2016. [URL:http://arpgweb.com/?ic=journal&journal=9&info=aims](http://arpgweb.com/?ic=journal&journal=9&info=aims)
- Hamid, M., & Rehman, A. U. (2023). Undergraduate Education Policy 2023: A Paradigm Shift Leading towards Practical Training. *The Lighthouse Journal of Social Sciences*, 2(1), 53–64. Retrieved from <https://kpheart.edu.pk/ojs/index.php/ljss/article/view/97>



10th International CEO Communication, Economics, Organization & Social Sciences Congress
Empirical Analysis of Indian- African Trade Relationship

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ABSTRACT

This paper tries to investigate India's trade relationship with Sub-Saharan Africa (SSA) countries and its impact on Indian for the period 1988-2018. The econometric methodology employed is the Cointegration and Granger Causality test. The Augmented Dickey Fuller test (ADF) and Phillips-Perron (PP) tests are used to check the order of integration of the variables and at this level all the variables were non-stationary, which means that null hypothesis cannot be rejected. The stationarity found at their first difference of the series is significant. We apply Johansen co-integration method found 1 cointegrating vector, that there exists a long run relationship between export to Africa and growth in India. Our Granger causality results show that causality follows from GDP to Export and support trade-led hypothesis with SSA countries. Results also support the idea that India should focus more on African countries rather on developed or western countries. The positive increasing growths with SSA trade relationship have fruitful impacts on Indian growth. Put another way, the paper asks whether India's increasing economic imprint in Sub Saharan Africa is aiding development efforts of the countries in the continent. Africa is an emerging investment and trade destination due to a large consumer market, high potential of economic growth, improving the business environment and investment regulations, and high rates of return on investment. This relationship gives a new trade market. The depth of relation of India and Africa has been reflected in the patterns of trade and investment, as well as people-to-people interactions, cultural exchanges, and cooperation at the continental and at the regional and bilateral levels. India should encourage the private sector by providing incentives for production and export, the total production of the economy will be increased which will promote international trade and which can take more active role in the development of the economy.

Keywords: Trade liberalization, Export, GDP, Co-integration, Granger.

JEL Classification: G21, E44, O16.

Trade openness is measured in terms of exports incremented by imports as a share of Gross Domestic product of a country and distinctly refers to the inward and outward orientation of the Economy of a Nation. Numerous findings have established a broad-spectrum and positive association between trade openness and growth on average, but several of them are flawed by operational inadequacies and significant inexplicable dissimilarity in the results. The Indian Economy has experienced downturn and economic dynamics through due course of time. After Trade Liberalization policy implementations in India the scenario of Indian Trade and Economy changed significantly. The future forecast of Trade Liberalization represents a positive depiction in the Indian Economy altogether.

Trade (both imports and exports) plays a vital role for any successful modern economy and is crucial for the competitiveness of the Indian economy in the long run also. Referring to large body of evidences, exposed firms can exercise significant competition and comparative advantages when they have international competition. The structure of Indian economy has undergone significant changes since 1991 with globalization policies which majorly includes changes in international trade. After the structural reforms in India, the exports and imports have considerably increased which has positively impacted the Gross Domestic Product in order to focus on \$5 Trillion economy. India is one of the G20 Nations and her GCI rank has been estimated to be 71 among the rest of the world (G20 India Secretariat, 2015). In terms of Economic literature, the word 'Openness' has been under common usage since 1980s. Most of the times openness itself signifies Trade Openness is an indicator, which will be influenced by trade policies adopted by India and also the result of multilateral trade negotiations, and by the wider macroeconomic state of the world economy. Restrictive trade policy will inhibit other countries from sending exports and accepting imports from the country, which practices it. In distinguishing budding impact of trade openness in the Indian Economy, it had been crucial to focus on altering trade policy regimes. After liberalization of Indian Trade services have provided new opportunities since 2003-2004 after advent of new avenues (trades of software and IT related services). The portion of exports of goods and services to Gross Domestic Product has increased from 6% in 1971 to 8.5% in 1991, whereas after liberalization in 1991 the share has considerably increased to 13.2% in 2001 and 19.74% in 2018 (World Bank database, 2019). The share of imports of goods and services to GDP has decreased from 8.7% in 1981 to 8.5% in 1991, whereas after liberalization in 1991 the share considerably increased to 13.6% in 2001 and 23.64% in 2018 (World Bank database, 2019).

INDIAN FOREIGN TRADE OVERVIEW

Foreign trade in India began in the period of the latter half of the 19th century. The period 1900-1914 saw development in India's foreign trade. The augment in the production of crops as oilseeds, cotton, jute and tea was mainly due to a thriving export trade. In the First World War, India's foreign trade decelerated. In the period of 1950 to 1951, main products dominated the Indian export sector. These included cashew kernels, black pepper, tea, coal, mica, manganese ore, raw and tanned hides and skins, vegetable oils, raw cotton, and raw wool. These products comprised of 34 per cent of the total exports. In the period of 1950s, there were



10th International CEO Communication, Economics, Organization & Social Sciences Congress balance of payments crunch. The export proceeds were not enough to fulfil the emerging import demand. The turn down in agriculture production and growing pace of development activity added pressure. In 1950 India 's share in the total world trade was 1.78% which reduced to 0.6% in 1995. In 1993, India rank 33rd in top exporting countries and 32nd in top importing countries. During 2003-04 India 's share in the global trade was 0.8%, in 2005 it was 1.0%. The PC Alexander Committee (1978) was the first committee to review and recommend on Import –Export Policies and Procedures. This committee recommended the simplification of the Import Licensing procedure and provided a framework involving a shift in the emphasis from —control to development. The Foreign Trade Policy, 2015-2020 (FTP) was finally announced by the Honourable Minister of Commerce and Industry, Smt. Nirmala Sitharaman on April 1, 2015. The FTP has been announced in the backdrop of several measures initiated by the Government of India such as “Make in India”, “Digital India” and “Skills India” among others.

BRIEF SURVEY OF LITERATURE

Indian studies

Mentioning earlier theories of trade, a special reference of Haberler (1936), Viner (1937), Mundell (1960), Bhagwati (1963), and Schumpeter (1954) is crucial to determine the survey-based study on international trade carried out by the Neo-classical Economists. The classical Economists have very distinctly provided theories on Trade and Adam Smith (1776), J.S Mills (1917) have stipulated literatures on the basis of which the international trade theories have evolved. Eventually the Neo-classical Economists have rested their observations and findings on opportunity costs and indifference curve, A.P Lerner (1953), Meade (1955) and Haberler (1955), whereas the modern concepts rests upon factor endowment concepts reviewed and surveyed by Heckscher (1919) and Ohlin (1933). Hammouda, Jallab (2011) according to his conclusions forthcoming opinion should turn towards exploration for optimal amalgamations between liberalization and control in order to stimulate growth and intensify the competitiveness of developing economies. Marelli et al. (2011) shows the positive impact of trade openness on economic growth. In contrast few theoretical and empirical studies are stated that trade openness impedes economic growth. Chuhdhary et al (2010) studied the relationship between trade liberalization leading to trade openness and economic growth in India by Granger causality test.

INDIAN- AFRICAN STUDIES

Elizabeth Sidiropoulos (2011) observes that development cooperation between the two in Africa is not a priority for either but using the private sector in this field is an important potential mode. Rakesh Mohan Joshi, Biswajit Nag, Ashish Gupta (2012) analyses the overall trade dynamics between India and Africa in the select sectors, where the two-dimensional scatter diagrams are used to identify the countries which are poised for economic growth in the selected sectors. Folashade Soule-Kohndou (2013) observes tariff barriers on South African products especially in agriculture, different legislation between the two countries,



10th International CEO Communication, Economics, Organization & Social Sciences Congress and a lack of good infrastructure in transport, communications and energy. Anirudh Menon (2013) argues the African Union, overall, during the last two decades, the emerging economies of Africa have developed important bilateral partnerships with India and other emerging economic powers especially Brazil and China. Harsh.V.Pant (2016) observes that the country has also offered duty-free market access to Africa's LDCs. But he views that India's trade with Africa which is currently US\$ 71 billion remains far below the potential.

PHASES IN INDIA-AFRICA RELATIONS

Relations before 1991

India was having very limited trade relation with Africa, broadly we were connecting with in regards with population, freedom etc. Based on the shared colonial experiences of India and Africa, the Indian government worked closely with African states in the newly created international institutions. From the outset, India saw itself as the representative and spokesman of these developing countries and promoted closer South-South cooperation. It was supported by many African states in forums such as the G77 in the UN and in the Non-Aligned Movement. From the beginning, India also cooperated closely with the Organisation of African Unity (OAU), founded in 1963. Since the Indian Union pursued an economic policy of import substitution until 1991, economic issues initially played a very minor role in bilateral relations. An important foreign policy instrument, however, was South-South cooperation through the Indian Technical and Economic Cooperation (ITEC) programme, which began in 1964 and included many representatives of African states.

New Africa policy since 1991

In some areas, however, India's interests in Africa remained constant. Its involvement there has under-pinned its claim to international leadership as an advocate of the Global South, a claim it has repeatedly made since the 1970s. India is committed to reforming the United Nations and is seeking a permanent seat on the Security Council. To facilitate such a reform, the weight of African states' votes is key. In security matters, the fight against terrorism and piracy has also taken precedence in relations with Africa, in addition to the UN's blue helmet missions.

India- Africa recent developments

Bilateral trade between India and Africa has grown steadily over the years, characterized by the rise of both India and Africa's corresponding trading activities. Bilateral trade volumes have increased from just US\$7.2 billion in 2001 to peak at US\$78 billion in 2014, before falling to US\$59.9 billion in 2017. Despite these developments, bilateral trade has recorded an average compound annual growth rate (CAGR) of 14.2 percent over the period, with India-Africa trade accounting for 8 percent of India's total trade and 6.4 percent of Africa's in 2017, against 7.6 percent and 2.7 percent, respectively, in 2001. The strong growth in bilateral trade has been

10th International CEO Communication, Economics, Organization & Social Sciences Congress driven by growth in exports and imports. India's exports to Africa grew by a CAGR of 14.3 percent after 2001 to reach US\$23.8 billion in 2017, up from US\$ 2.8 billion in 2001. Exports to Africa now account for 8.0 percent of India's total exports, and 4.6 percent of Africa's imports. During the same period, Africa's exports to India grew at a CAGR of 14.1 percent, increasing to US\$36.0 billion in 2017, up from US\$4.4 billion in 2001, with Africa now accounting for 8.0 percent of India's global imports and India now accounting for 8.7 percent of Africa's global exports. Over this period, Africa has enjoyed a trade surplus with India, peaking at US\$18.6 billion in 2011 before narrowing to US\$12.2 billion in 2017, largely as a result of the decline in global oil prices. In 2018, Africa accounted for 11% of India's exports and 9% of its imports where mineral products were the major trade commodity. Since 2010, India's exports to and imports from Africa increased by 93% and 28%, respectively. In the meantime, Africa's share from India's total exports has increased from 8.1% to 10.9%.

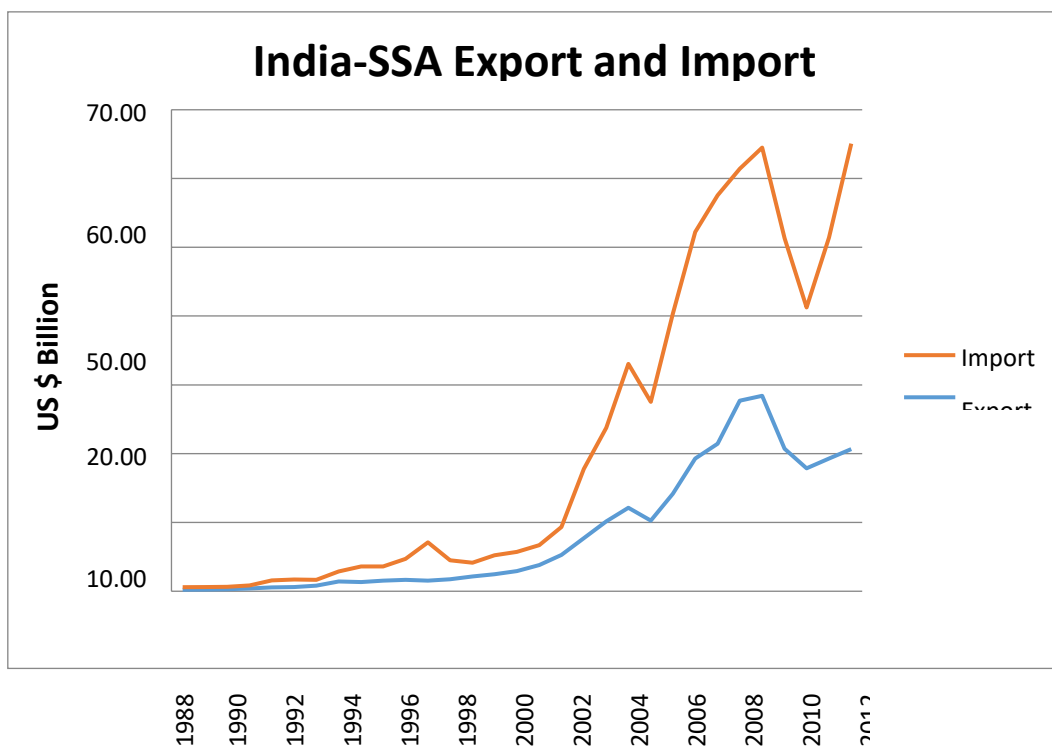


Figure 1- India-SSA Export and Import

When we see the export and import data it's clear that India's import is far more than export and it deals to deficit trade balance.

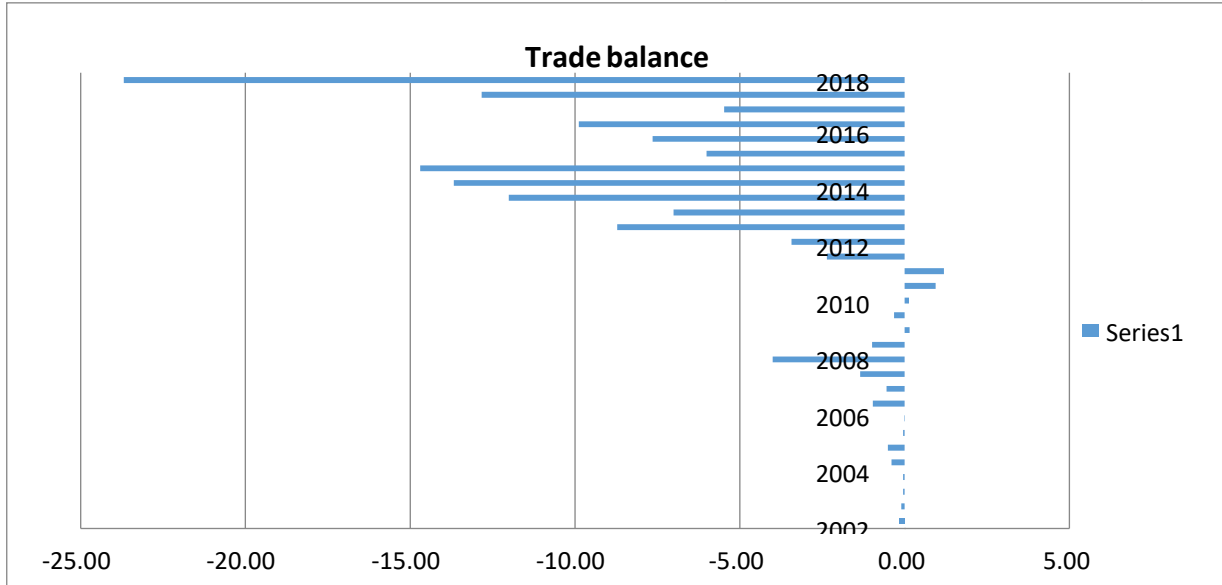


Figure 2- Trade Balance

In the above figure trade balances is hardly 3 to 4 times positive for India and rest its negative for huge amount. It shows our dependency on Africa is more for meeting demand in the form of more imports.

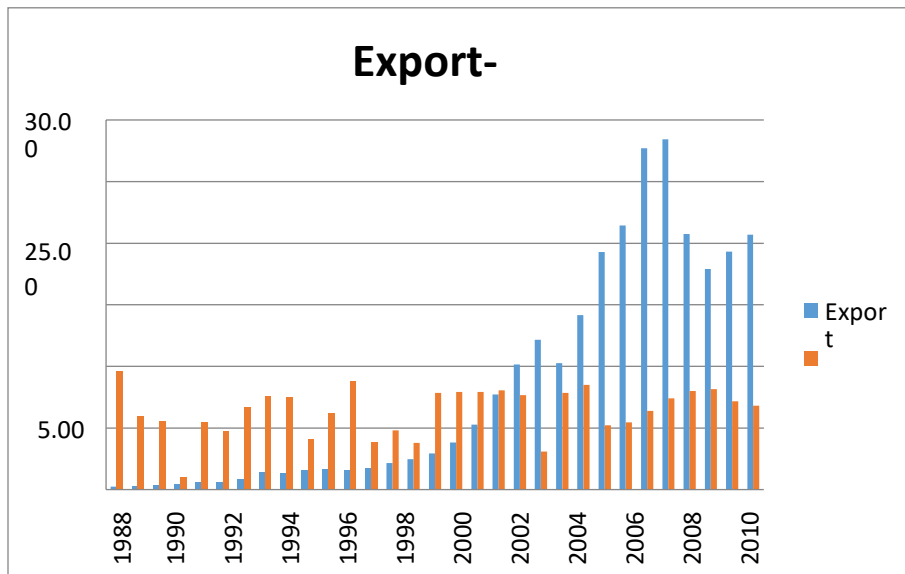


Figure 3- Export/GDP

From the above diagram we can draw a conclusion that export and GDP are moving in the same direction, as and when export increase its impact on GDP is also positive. It is clearly seen that export led to more GDP.



10th International CEO Communication, Economics, Organization & Social Sciences Congress Overview of the variables (data) used

Export the Growth rate of real per capita GDP is used as the indicator of economic growth (hereafter GR) for the period 1988-2018. Published data are available from various RBI publications (Currency and Finance), Economic Survey, World Development Indicators (World Bank), IFS (IMF); Handbook of Statistics, EXIM bank and African Export and Import Bank, OECD data base different issues, Government of India.

Model specification

In our empirical study log-linear specifications of the variables are used and to the following estimation equation as:

$$\ln GR = \beta_0 + \beta_1 \ln EX + \varepsilon_t$$

Where:

GR and EX represent economic growth and export respectively, β_1 contribute for the elasticity of the explanatory variables.

RESEARCH METHODOLOGY

TEST FOR ORDER OF INTEGRATION

(a) Stationarity Tests:

Before the testing for a causal relationship between the time series, the first step is to check the stationarity of the variables used in the model to be estimated. The aim is to verify whether a series stationary or non-stationary and to identify the order of integration of the variables used in the model. The importance of stationarity feature of the series is that the impact of shocks to a stationary time series dissipates in the long run. The identification of the order of interestedness of a series helps to avoid estimation of spurious regressions.

(b) Unit Root Test

Augmented Dickey-Fuller (ADF) test is based on independently and identically distributed (iid) errors. In the following discussions, we have briefly touched upon the specification of a unit root process based on Enders (2004) and Brooks (2008). The basic objective of the test is to examine the null hypothesis that the series Y_t contains a unit root, i.e., $\phi=1$. Secondly, we used the Phillips-Perron (PP) unit root test for empirical analysis.

(c) Johansen's Co-integration Test

To analyse the long-run link between two variables such as trade openness and economic growth and confirm they are stationary at first difference, the results in the Table 1 and 2 indicates that according to the ADF and PP procedures variables have the same order of integration I (1). The next step is to investigate the long-run co-integration equilibrium

10th International CEO Communication, Economics, Organization & Social Sciences Congress relationship between variables. We have used Johansen, 1988 model to test the co-integration.

(a) Granger Causality Test

In third step, after determining existence of co-integration relationship (Katircioglu et al.,2007)then causality must exist either unidirectionally or bi-directionally. Further step is to investigate the time series data test for the direction of causation purpose we have used granger causality method as proposed by granger (1988). Furthermore, as emphasized in granger (1988) both the relationship between co-integration and granger causality is estimated.

EMPIRICAL ANALYSIS

Table 1- Unit root test results for Log Gross Domestic Product

Values	ADF Test	Conclusion	PP Test	Conclusion
t-statistic	-4.98213	I (1)	-4.98289	I (1)
Test Critical Values				
1% level	-3.67017		-3.67017	
5% level	-2.96397		-2.96397	
10% level	-2.62100		-2.62100	
Durbin-Watson statistic	1.988633		1.988633	

Source: Calculated with the help of EViews 7

*MacKinnon’s (MacKinnon, 1991) tabulated value has been used to test the level of significance. I (1): Integrated of order one

Table 2- unit root test results for log export

Values	ADF Test	Conclusion	PP Test	Conclusion
t-statistic	-4.35747	I (1)	-4.04951	I (1)
Test Critical Values				
1% level	-4.30982		-3.67932	
5% level	-3.57424		-2.96776	
10% level	-3.22172		-2.62298	
Durbin-Watson statistic	1.95188		1.94703	

Source: Calculated with the help of EViews 7

While testing for ADF and PP we then determine the stationary nature of the variables. Table 1 and 2 present the results for ADF and PP unit root test. Each test indicates that all variables are found non-stationary at their level, null hypothesis is rejected and stationarity found at first difference which confirms that all variables are integrated order of first difference or I (1) level alternative hypothesis is accepted.

UNRESTRICTED CO INTEGRATION RANK TEST (TRACE)

The co-integration results were analysed on 03/03/20 at 21:36. The adjusted sample period was from 1990 to 2018, with 29 observations included after adjustments. The analysis assumed a linear deterministic trend for the series LOGGDP and LOGEXPORT, with lags interval in first differences set from 1 to 1.

Table 3: Co-integration results

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.444768	19.71308	15.49471	0.0109
At most 1 *	0.087340	2.650354	3.841466	0.1035

**Trace test indicates 1 cointegrating equation(s) at the 0.05 level.*

**Denotes rejection of the hypothesis at the 0.05 level.*

***MacKinnon-Haug-Michelis (1999) p-values.*

The co-integration test results suggest the presence of one cointegrating equation at the 0.05 significance level. The eigenvalue of 0.444768 for "None" yielded a trace statistic of 19.71308, which is greater than the critical value of 15.49471, with a p-value of 0.0109, leading to the rejection of the null hypothesis of no cointegration. For "At most 1," the eigenvalue is 0.087340 with a trace statistic of 2.650354, which is less than the critical value of 3.841466, and a p-value of 0.1035, indicating no additional cointegrating equations. These results are based on MacKinnon-Haug-Michelis (1999) p-values.

Table 4: Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.444768	17.06273	14.26460	0.0176
At most 1	0.087340	2.650354	3.841466	0.1035

**Max-eigenvalue test indicates 1 cointegrating equation(s) at the 0.05 level.*

**Denotes rejection of the hypothesis at the 0.05 level.*

***MacKinnon-Haug-Michelis (1999) p-values.*

The unrestricted cointegration rank test using the maximum eigenvalue approach suggests

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 the presence of one cointegrating equation at the 0.05 significance level. For the hypothesis of "None," the eigenvalue is 0.444768, with a max-eigen statistic of 17.06273, which exceeds the critical value of 14.26460, and a p-value of 0.0176. This leads to the rejection of the null hypothesis of no cointegration. For "At most 1," the eigenvalue is 0.087340, with a max-eigen statistic of 2.650354, which is below the critical value of 3.841466, and a p-value of 0.1035, indicating no additional cointegrating equations. These findings are based on MacKinnon-Haug-Michelis (1999) p-values.

Above table reports the long-run relationship from the Johansen cointegration estimation in order to evaluate the long-run association among the variables which are Growth Rate and Export indicators. Furthermore, in our proposed model of economic growth (Y) is a dependent variable while other is explanatory variable which is export indicator. The evidence from Johansen cointegration estimated results shows that the trace statistic values is greater than (19.71308) their (15.49471) critical values at 0.05 level. And the value of Max-Eigen Statistic value (17.06273) is greater than Critical value (14.26460). Results show that there is a long-run equilibrium association between economic growth and export for India.

Here's the table presented in proper order:

Table5: Pair wise Granger Causality Tests

Null Hypothesis				Obs	F-Statistic	Prob.
LOGEXPO RT Cause LOGGDP	does	not	Granger	29	2.58679	0.0961
LOGGDP does not Granger Cause LOGEXPORT				29	0.19816	0.8216

Table 5 provides results of Granger causality test after determining existence of long run link. To ensure that the empirical estimated values are in order as vertical values are independent variables and horizontal values are dependent variables, which is the lagged differenced coefficients of F statistical values which is determined as direction of short run Granger Causality runs from GDP to Export. In our proposed model, the null hypothesis indicates that there is non-causality between variables.

CONCLUSION

At the first glance India and SSA may look like natural partners in development cooperation in Africa. However, on closer examination it becomes clear that each has significant constraints as well as differing interests. Constraints relate to capacity, but also to politics, transport and logistics costs; poor business environment (lack of ease of doing business); corrupt practices; and access to trade finance. South Africa is currently reassessing how it



10th International CEO Communication, Economics, Organization & Social Sciences Congress articulates its national interest in the context of its African agenda. India is an aspiring global power, SSA are still a developing continental. As it is already projected that African economies will pick up its growth in next ten years and will sustain a high growth shown for the next 20 years (Acha Leke, Susan Lund, Charles Roxburgh, and Arend van Wamelen, 2010). India must make itself ready for taking the advantage of the opportunity. The study provides the analysis that the export growth itself pulls up the import demand and India is a beneficiary of that. However, considering competition from China and other developing economies, India must take focused approach in improving competitiveness considering both macro and micro aspects at the one hand and diversify its product basket to meet the import demand of the SSA as India's export are currently concentrated only to limited number goods thereby a large bilateral trade potential between India and Africa has been untapped. Main export destinations for India in Africa include South Africa, Kenya, Egypt, Nigeria, Tanzania, Mauritius, Mozambique, Algeria, Ghana, and Ethiopia. Major African countries that India imports from include Nigeria, South Africa, Angola, Egypt, Morocco, Ghana, Algeria, Tanzania, Libya, and Botswana. India is reportedly Africa's third largest trading partner, accounting for 6.4 percent of the continent's total trade at a value of US\$62.6 billion in 2017-18.

Policy implications

What is also becoming clear is that the view of Africa as a low-income region trading mostly with high-income economies in Europe and North America is obsolete. Africa should now be seen as a mainly middle-income region with ever-stronger economic ties with middle-income economies in Asia and other parts of the world and India must take advantage of its growing purchasing power. Based on empirical analysis the study suggests following points for the economy, first, in India should focus more on export rather than imports and try to push corporates to make substitute products for imported goods at the reasonable prices and do more business in Africa in order to increase its trade exchanges in coming years. Secondly, by seeing increasing demand for energy and crude oil and more than 17% is coming from African continental. Government needs to provide adequate support and help to corporations for meeting these demands effectively. Thirdly, to encourage the private sector by providing incentives for export, the total production of the economy will be increased which will promote international trade and which can take more active role in the development of the economy and increase bilateral trade with African partners. Africa is an emerging investment and trade destination due to a large consumer market, high potential of economic growth, improving the business environment and investment regulations, and high rates of return on investment. The depth of relation of India and Africa has been reflected in the patterns of trade and investment, as well as people-to-people interactions, cultural exchanges, and cooperation at the continental and at the regional and bilateral levels.

Broadly study concludes that Indian export promotion policies have a positive impact on the economy and we should continually focus on the same. For achieving dream mark of \$5 Trillion economy, India has to take several decisions as a process of trade reforms and follow FTP objective of getting 5 per cent share in global trade. Focus should be more on export rather than import and keeping exchange rate around 70 as per dollar.



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REFERENCES

- Arora, Mahesh. C and Chand, Manish (ed.), (2015). *India-Africa Partnership Towards Sustainable Development, Forum for Indian Development Cooperation (FIDC) and Research and Information System for Developing Countries (RIS)*, New Delhi,
- Asian Development Bank, (2017) “\$1.5 trillion Trade Finance Gap Persists Despite Fintech Breakthroughs”, <https://www.adb.org/news/15-trillion-trade-finance-gap-persists-despite-fintech-breakthroughs>.
- Chakrabarty, M (2017). *Indian Investments in Africa: Scale, Trends, and Policy Recommendations. Observer Research Foundation Working Paper*. Available at [https://www.orfonline.org/wp. https://www.india-briefing.com/news/india-africa-trade-council-to-kickstart-bilateral-trade-business-relations](https://www.orfonline.org/wp/https://www.india-briefing.com/news/india-africa-trade-council-to-kickstart-bilateral-trade-business-relations)
- Ministry of Commerce and Industry, Annual Report 2017–18, Government of India, New Delhi.
- Mullen, Rani D and Arora, Kashyap, (2016). *India’s Reinvigorated Relationship with Africa*, Policy Brief, Centre for Policy Research, New Delhi.
- Rajender Singh Godara, IBS Hyderabad, (2020). *The ICFAI Foundation for Higher Education, India’s*
- United Nations Economic Commission for Africa (UNECA) and Confederation of Indian Industry (CII) (2018). *Deepening Africa-India trade and investment partnership*, Addis Ababa, Ethiopia.
- World Trade Organization (WTO) and Confederation of Indian Industry (CII), (2013). *India- Africa: South–South trade and investment for development*.



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**Carbon Emissions from Developed Nations: A Threat to the Existence of
Small Island States**

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ABSTRACT

This research paper investigates the profound impact of carbon emissions from developed nations on small island states, focusing on sea-level rise, increased frequency of extreme weather events, and ecosystem degradation exacerbated by climate change. Despite contributing minimally to global greenhouse gas emissions, these states face disproportionately severe consequences. The paper advocates for robust international legal frameworks and environmental justice to address this disparity. It conducts an impact assessment, outlining vulnerabilities in infrastructure, freshwater resources, agricultural productivity, and socio-economic stability. Case studies from nations like the Maldives, Kiribati, the Bahamas, and Tuvalu illustrate their challenges and resilience efforts. The analysis stresses the necessity of adaptive strategies, regional cooperation, and community-based approaches to enhance resilience. It highlights the pivotal role of international support in providing financial, technical, and capacity-building assistance. Emphasizing the importance of amplifying small island nations' voices in global climate discussions, the paper calls for enhanced climate action guided by principles of fairness and justice. By addressing these unique challenges, the international community can safeguard these countries' futures and promote sustainable development in the face of rapid environmental change.

Keywords: Emissions, Climate, Islands, Sea-level, Justice, Law

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Introduction

Climate change poses an unprecedented threat to our planet's ecological balance, affecting ecosystems, economies, and societies worldwide. (Shivanna, 2022) At the forefront of this crisis are small island states, whose very existence is increasingly imperilled by rising sea levels, extreme weather events, and the broader consequences of global warming. (Vousdoukas et al., 2023) Central to this existential threat is the disproportionate impact of carbon emissions from developed nations, which exacerbate vulnerabilities and undermine sustainable development efforts in these fragile island communities. (Wu & Wan, 2024) The issue of carbon emissions from developed nations transcends mere environmental concern; it is fundamentally a matter of global equity and justice. Small island states, often located in remote corners of the world's oceans, contribute minimally to global greenhouse gas emissions but bear the brunt of their consequences. (Mohd Afjal, 2023) Their limited landmass and geographic isolation intensify their susceptibility to climate-related hazards, ranging from intensified storms to saltwater intrusion into freshwater supplies, threatening agricultural productivity and human health. (Choudhury et al., 2023)

Understanding the interconnectedness of climate change and carbon emissions necessitates a comprehensive exploration of the scientific, legal, and socio-economic dimensions at play. Scientific consensus unequivocally attributes the majority of global carbon emissions to industrialized nations, whose economic development historically relied on fossil fuel consumption. (Abu Rayhan et al., 2023) The resulting greenhouse gases, primarily carbon dioxide, trap heat in the atmosphere, leading to global warming and subsequent climate disruptions that disproportionately impact vulnerable regions like small island states. (Singh, 2024) From a legal standpoint, international environmental law provides a critical framework for understanding the responsibilities and obligations of nations concerning carbon emissions and climate change mitigation. (Giacomini, 2022) Treaties such as the “Paris Agreement” (2015) underscore the collective commitment to limiting global temperature rise and adapting to climate impacts, emphasizing the principle of common but differentiated responsibilities. (Bodle et al., 2016) As significant historical polluters, rich countries are expected to take the lead in efforts to cut emissions and give less developed nations—including tiny island states—financial and technical support to help them become more resilient to the effects of climate change. (Beusch et al., 2022)

Small island states are extremely vulnerable to the effects of climate change in many different ways. These countries, which are frequently distinguished by their distinctive biodiversity and cultural legacy, are facing existential risks due to rising sea levels and an increase in the frequency and intensity of extreme weather events. (Barnett & Waters, 2016) Coastal erosion threatens infrastructure and habitable land, displacing communities and disrupting livelihoods dependent on agriculture, tourism, and fisheries. The loss of coral reefs, essential for marine biodiversity and coastal protection, further undermines local economies and exacerbates food insecurity. (Yasmeen et al., 2024)

Case studies of small island states illustrate the diverse ways in which climate change impacts manifest and the varied responses undertaken by these nations. For instance, the Maldives, an archipelago in the Indian Ocean, faces a direct threat from sea level rise, with much of its land lying just a meter above sea level. In response, the Maldivian government has implemented ambitious adaptation measures, including coral reef restoration and innovative coastal protection initiatives. (Moosa et al., 2020) Similarly, the Pacific island nation of Tuvalu grapples with saltwater intrusion, threatening freshwater supplies critical for agriculture and



10th International CEO Communication, Economics, Organization & Social Sciences Congress drinking water. Despite these localized efforts, the overarching challenge remains the need for global cooperation and collective action to curb carbon emissions and limit global temperature rise to manageable levels. (Lazrus, 2010) The current trajectory of emissions, if unabated, poses catastrophic consequences not only for small island states but for the entire planet. Urgent and ambitious measures are required to mitigate climate change impacts and ensure the survival and sustainable development of vulnerable communities. (Dhanapal et al., 2023)

The purpose of this study is to investigate the complex link between tiny island states' existential dilemma and carbon emissions from developed countries. Through an exploration of the scientific foundations, legal ramifications, and practical applications of this intricate matter, the research aims to enhance comprehension of global environmental justice and the necessity of fair climate action. It emphasizes the critical need for coordinated international actions to combat climate change and promote the resilience of small island governments in a world that is changing quickly through in-depth research and case studies.

Climate Change and Carbon Emissions: Understanding the Nexus

One of the most important issues of our day is climate change, which has a profound effect on human society, economics, and ecosystems everywhere. (Hsieh & Yeh, 2024) Fundamentally, the phenomena is caused by the build-up of greenhouse gases, namely “carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O)”, in the Earth's atmosphere. The "greenhouse effect," which is caused by these gases trapping heat, causes global warming and profound alterations to climatic patterns. (Filonchyk et al., 2024) It is essential to comprehend the connection between carbon emissions and climate change in order to completely appreciate the ramifications of climate change, especially its disproportionate effect on tiny island states. There are several natural and man-made sources of carbon emissions. (Dissanayake et al., 2023) Wildfires, volcanic eruptions, and animal and plant respiration are examples of natural sources. But throughout the past century, greenhouse gas emissions have dramatically increased, primarily due to anthropogenic, or human-induced, sources. (Stewart et al., 2022) Carbon emissions have increased mostly because of industrial activity, deforestation, and the combustion of fossil fuels including coal, oil, and natural gas. Since the Industrial Revolution, these activities have increased in intensity, resulting in a notable change in the composition of the atmosphere and the current climate problem. (Li et al., 2022)

Developed nations, with their historically higher levels of industrialization and economic activity, have contributed disproportionately to global carbon emissions. (Bersalli et al., 2023) The “United States, the European Union, China”, and other industrialized countries have historically relied on fossil fuels to power their economies, resulting in substantial CO₂ emissions. (Zhang et al., 2018) Over time, these emissions have added up, raising the atmospheric concentrations of greenhouse gases and causing the current rise in global temperature. (Jones et al., 2023)

There is a strong and unambiguous scientific agreement about climate change. With hundreds of experts from all around the world, the "Intergovernmental Panel on Climate Change" (IPCC) has repeatedly stated that human activity is the main cause of global warming. (Oreskes, 2018) Sea levels, weather patterns, and biodiversity have all been significantly impacted by the estimated 1.1 degrees Celsius increase in global average temperature over pre-industrial levels, according to IPCC assessments. (Tollefson, 2021) Numerous climate-related effects are associated with this warming trend, such as increased frequency and severity of heatwaves, altered patterns of precipitation, and intensified extreme weather events including hurricanes, cyclones, and typhoons. (Robinson, 2021) Sea level rise is one of the most obvious and alarming

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effects of climate change. Sea levels rise owing to thermal expansion and the melting of glaciers and polar ice caps brought on by rising global temperatures. This process directly threatens coastal and low-lying areas globally by adding to the slow but inevitable increase in sea levels. (Tebaldi et al., 2021) Due to their low height and little land area, small island states are especially susceptible to this occurrence. Coastal erosion, land flooding, and a rise in the salinity of freshwater resources are all consequences of rising sea levels that put agriculture, drinking water supplies, and human habitations at risk. (Vousdoukas et al., 2023) Small island governments are facing changes in weather patterns and a spike in extreme weather occurrences in addition to sea level rise. The strength of hurricanes and tropical storms is increased by ocean surface warming, producing stronger and more destructive cyclones. These storms have the potential to cause extensive destruction, damaging infrastructure, fatalities, and severe economic disruption. Small island governments' limited resources are strained by the increased frequency and intensity of these occurrences, which makes it more difficult for them to recover and adjust to changing climatic circumstances. (Petzold & Magnan, 2019)

Small island states are not only affected economically and environmentally by climate change, but also socially and culturally. Rich cultural histories and distinctive ecosystems are fundamental to the identities and ways of life of many of these islands. (Klöck & Nunn, 2019) These areas' social cohesion and cultural continuity are in jeopardy due to the deterioration of their natural ecosystems, dwindling biodiversity, and community dislocation. Loss of identity and cultural legacy results from the disruption of customs, livelihoods, and community structures. (Kumar et al., 2022) The difficulties posed by climate change necessitate a broad, cooperative strategy that is based on solid international legal frameworks and scientific understanding. Global solutions to climate change are greatly influenced by international environmental law, which emphasizes the requirement of shared responsibility and coordinated action. (Tosun & Peters, 2021) The “United Nations Framework Convention on Climate Change” (UNFCCC), established in 1992, provides a foundational legal framework for international climate action. Although all nations are required to contribute to climate mitigation, industrialized nations have a higher historical responsibility for emissions and should take the lead in lowering them, according to the Convention's concept of shared but differentiated responsibilities. (Mantlana & Jegede, 2022)

A historic international agreement to fortify the worldwide response to climate change was established in 2015 under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC). (Bodle et al., 2016) With attempts to keep the increase to 1.5 degrees Celsius, the Agreement sets a long-term target of keeping the rise in global temperature to well below 2 degrees Celsius above pre-industrial levels. This more aggressive goal recognizes the serious consequences that will result from even a 2-degree increase, especially for vulnerable areas like small island states. (Gao et al., 2017) The "Paris Agreement" emphasizes the value of financial assistance, resilience-building, and adaptation for developing nations to deal with the effects of climate change. The present course of global emissions is still concerning, even with the obligations made under the "Paris Agreement." Due to continued industrialization, high levels of consumption, and reliance on fossil fuels, many industrialized countries continue to generate considerable amounts of greenhouse gases. (Stankovic et al., 2023) Even while it is happening, the switch to low-carbon technology and renewable energy sources has not happened quickly enough or widely enough to cut emissions to the required levels. (Kamali Saraji et al., 2023) This gap between commitments and action highlights the need for more aggressive and sustained efforts to mitigate climate change and support vulnerable regions. (Victor et al., 2022)



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The relationship between carbon emissions from developed nations and the existential threat faced by small island states is a stark illustration of global environmental injustice. (Jin et al., 2022) While developed countries have reaped the economic benefits of industrialization and fossil fuel use, the resulting climate impacts are disproportionately borne by those least responsible for the problem. (Kazmi, 2021) Due to the fact that they contribute very little to global emissions, small island governments are forced to deal with the effects of other people's activities and are thus at the forefront of climate change. (Vousdoukas et al., 2023) To address this injustice, it is imperative to strengthen international cooperation and enhance support mechanisms for small island states. Developed nations must not only accelerate their own emissions reductions but also provide substantial financial and technical assistance to help vulnerable regions adapt to climate impacts. (Abram et al., 2022) This support can take various forms, including funding for infrastructure resilience, capacity-building initiatives, and technology transfer to enable sustainable development in the face of climate challenges. Furthermore, small island states themselves are taking proactive steps to address climate change and build resilience. Many have developed national adaptation plans, integrated climate considerations into development policies, and engaged in regional cooperation to share knowledge and resources. (Madhuri & Kumar, 2021) Initiatives such as coral reef restoration, mangrove reforestation, and sustainable tourism practices are being implemented to enhance ecosystem resilience and support local economies. These efforts, however, require sustained international support and recognition of the unique challenges faced by small island states.

Legal Framework: International Law and Environmental Justice

In order to manage the complex issues raised by climate change, the legal framework is essential, especially for tiny island governments that are disproportionately impacted by the carbon emissions of wealthier countries. (Giacomini, 2022) International environmental law provides the structure for global cooperation and action, emphasizing the principles of equity and justice essential for effective climate governance. Central to this framework are key treaties and agreements that define the responsibilities and obligations of nations in mitigating climate change and supporting vulnerable regions. (Chappe, 2015) The foundation of international climate law can be traced to the “United Nations Framework Convention on Climate Change” (UNFCCC), adopted at the “Earth Summit in Rio de Janeiro” in 1992. (Cadman, 2019) The UNFCCC recognized that climate change is a global issue that affects all people, and as such, it developed the guiding principles for international climate action. It established the concept of "common but differentiated responsibilities" (CBDR), which recognizes that although all nations have a shared duty to combat climate change, industrialized nations historically had a higher burden because of their large contributions to greenhouse gas emissions. (Petri & Biedenkopf, 2020) This principle is fundamental to ensuring that climate action is equitable and just, particularly for small island states that contribute minimally to global emissions yet face severe climate impacts. (Singh et al., 2021)

Rich nations, who are enumerated as Annex I parties to the UNFCCC, agreed to lead the charge in cutting emissions and to assist poor nations—including tiny island states—financially and technically. In accordance with the Convention, the Conference of the Parties (COP) was designated as the highest decision-making authority, charged with overseeing advancements, approving legislative frameworks, and expediting the execution of climate-related obligations. (Cadman, 2019) First legally binding international pact to establish precise emission reduction targets for industrialized nations, the "Kyoto Protocol" was approved in 1997 and came into force in 2005, building on the UNFCCC. (Pahuja, 2023) By imposing legally enforceable responsibilities on Annex I nations to cut their aggregate greenhouse gas emissions by at least 5% below 1990 levels over the first commitment period (2008–2012), the Protocol represented



10th International CEO Communication, Economics, Organization & Social Sciences Congress a significant advancement. (Breidenich et al., 1998) In addition to introducing market-based procedures, the "Kyoto Protocol" also brought in the "Clean Development Mechanism" (CDM), which permitted rich nations to fund emission reduction initiatives in poor nations, promoting technological transfer and sustainable development. (Liu, 2023) But there were a number of obstacles to the "Kyoto Protocol," such as the US being one of the biggest polluters not taking part and the US's weak commitment to reducing emissions. These drawbacks demonstrated the necessity of a more thorough and inclusive international accord to successfully address the global aspect of climate change. (Kim et al., 2020)

Global climate change response has advanced dramatically since the "Paris Agreement" was adopted in 2015, marking a historic accomplishment in international climate legislation. The "Paris Agreement," in contrast to the "Kyoto Protocol," entails pledges from all nations, developed and developing, to reduce the rate of increase in global temperatures and improve adaptive capabilities. (Rajamani, 2019) The Agreement recognizes that limiting the temperature increase to 1.5 degrees Celsius will greatly lessen the dangers and consequences of climate change and attempts to keep the increase in the global average temperature well below 2 degrees Celsius over pre-industrial levels. (Gao et al., 2017) The fundamental tenets of the "Paris Agreement" are equality and CBDR, which reiterate that wealthy nations should continue to spearhead mitigation initiatives and assist developing nations with their climate initiatives. It brought in Nationally Determined Contributions (NDCs), nation-specific commitments detailing intended climate actions, such as adaptation plans and targets for reducing emissions. (Lawrence & Reder, 2019) Every five years, the NDCs must be revised, with each revision representing a higher level of aspiration and advancement. Its focus on resilience-building and adaptation, especially for vulnerable nations like tiny island states, is a crucial component of the "Paris Agreement". (den Elzen et al., 2022) Particularly addressing adaptation, Article 7 of the Agreement asks for increased assistance to be provided to poor nations in order to help them build their resilience, increase their capacity for adaption, and get less vulnerable to climate change. (Lesnikowski et al., 2016) Along with strengthening resilience, lowering susceptibility to climate change, and enhancing adaptive capacity, the Agreement also created the Global Goal on Adaptation, which will support sustainable development and guarantee a sufficient response to adaptation. (Lesnikowski et al., 2016)

The "Green Climate Fund" (GCF) was formed to supply poor nations with financial support for climate adaptation and mitigation initiatives in order to facilitate the implementation of the "Paris Agreement". (Han & Cheng, 2023) With affluent nations pledging to pool their resources and raise \$100 billion annually by 2020, the GCF seeks to raise substantial financial resources to assist climate action in poor nations until 2025. (Qi & Qian, 2023) Small island governments need this financial assistance in order to carry out sustainable development initiatives, construct resilient infrastructure, and carry out the essential adaptation measures. The "Paris Agreement's" tenets and clauses emphasize how crucial global unity and collaboration are in combating climate change. (Lai et al., 2022) Nevertheless, carrying out these promises continues to be difficult. Concerns over the sufficiency of present efforts and the necessity for more aggressive activities are raised by the fact that, notwithstanding the promises made, global emission trajectories show that the world is not on pace to fulfill the 1.5-degree Celsius objective.

Environmental justice and global climate governance are facilitated by a number of international legal frameworks and tools in addition to the "Paris Agreement." In line with the objectives of climate adaptation, the Sendai Framework for Disaster Risk Reduction (2015–2030) places a strong emphasis on the need to lower disaster risk and increase resilience to hazards associated to climate change. (Aitsi-Selmi et al., 2015) 2015 saw the adoption of the



10th International CEO Communication, Economics, Organization & Social Sciences Congress Sustainable Development Goals (SDGs), which place a strong emphasis on climate action. Goal 13 in particular urges immediate action to mitigate the effects of climate change. (Morton et al., 2017) The relationship between climate change and international human rights legislation emphasizes how core human rights—such as the right to life, health, food, water, and a sufficient standard of living—are affected by these changes. Human rights arguments are being used by small island governments more frequently to highlight the moral and ethical implications of climate action. (Mayer, 2021) Human rights-based approaches to climate action are needed to ensure that actions to address climate change respect, safeguard, and uphold human rights. The Human Rights Council has acknowledged the detrimental consequences of climate change on human rights and has advocated for their implementation.

Environmental justice law is fundamental to the conversation about climate change and the obligations of affluent countries. Environmental justice advocates for fair and equitable treatment in environmental decision-making in an effort to reduce the disproportionate environmental burdens carried by disadvantaged and underprivileged populations. Since industrialized nations are the main producers of greenhouse gas emissions, environmental justice requires them to take great action to cut their emissions and support those who are most impacted by climate change. (Loo, 2023) The legal framework pertaining to climate action is grounded on the idea of intergenerational justice, which underscores the obligation to safeguard the environment for both current and future generations. The long-term effects of climate change pose a challenge to community viability and sustainability, making tiny island nations especially vulnerable to the application of this concept. One of the fundamental principles of sustainable development and environmental stewardship is making sure that actions taken today about climate change do not impair the capacity of future generations to satisfy their requirements. (Golub et al., 2013)

Despite the comprehensive legal framework established by international treaties and agreements, the practical implementation and enforcement of climate commitments present ongoing challenges. (Tosun & Peters, 2021) Political, economic, and social factors influence the extent to which countries can and will fulfill their obligations. The disparity in capacities and resources between developed and developing countries necessitates robust mechanisms for financial and technical support, capacity-building, and technology transfer. (Tosun & Peters, 2021) Moreover, the global nature of climate change requires coordinated actions at multiple levels, from international and regional cooperation to national and local implementation. Small island states, with their unique vulnerabilities and limited resources, need tailored support and targeted interventions to enhance their resilience and adaptive capacities. (Ulibarri et al., 2021) Regional programs, like the Alliance of Small Island governments (AOSIS), are essential in supporting cooperative efforts to solve shared concerns and fighting for the interests of small island governments in international climate discussions.

Impact Assessment: Vulnerabilities of Small Island States

The effects of climate change on tiny island nations are severe, varied, and getting worse. Rising sea levels, more intense weather events, and changing climate patterns pose an existential danger to these nations, which are frequently distinguished by their remote location, small land area, and distinctive ecosystems. (Vousdoukas et al., 2023) Small island governments are especially vulnerable to the negative consequences of global warming because of the close connections between their environmental, economic, and social environments. The purpose of this impact assessment is to clarify the particular risks that small island governments confront as well as the wider ramifications of these climate-related issues. (Scandurra et al., 2018) Sea level rise is one of the most obvious and direct effects of climate change on tiny island

10th International CEO Communication, Economics, Organization & Social Sciences Congress governments. Sea levels rise as a result of the melting of glaciers and polar ice caps brought on by an increase in atmospheric greenhouse gas concentrations that raises global temperatures. (Hugonnet et al., 2021) This increase is further aggravated by the seawater's thermal expansion as it heats. Even a slight rise in sea level can have disastrous effects for tiny island governments, many of which have low-lying coastal districts. (Khojasteh et al., 2023) Among the immediate repercussions are the loss of arable and liveable land, coastal erosion, and land flooding. The highways, airports, and ports that are essential for trade and transportation are among the crucial infrastructures that are also under danger, along with human settlements. (Wright et al., 2019)

Increased salinity of freshwater resources due to sea level rise presents another significant challenge for small island states. Many of these islands rely on limited freshwater sources, such as aquifers and rainwater catchments, for their drinking water and agricultural needs. Saltwater intrusion into these freshwater supplies can render them unsuitable for consumption and irrigation, leading to water scarcity and food insecurity. (Kaushal et al., 2021) This problem is compounded by the generally limited capacity of small island states to invest in alternative water sources or advanced desalination technologies. Climate change is causing extreme weather events like hurricanes, cyclones, and typhoons to occur more frequently and with greater intensity. (Crisman & Winters, 2023) These strong storms, which have the potential to wreak havoc when they hit landfall, are formed in part by the warming of ocean surfaces. The effects of these catastrophic weather events are especially dangerous for small island governments because of their small land area and sometimes flimsy infrastructure. (Robinson, 2021) Homes and public infrastructure are being destroyed, along with fatalities and injuries. Longer-term effects include economic disruption as development efforts may be delayed by years or even decades due to the expenditures of reconstruction and recovery, which put a burden on already meagre financial resources.

There are also significant ecological effects of climate change on tiny island states. These islands are frequently home to diverse ecosystems with great biodiversity, such as mangroves, coral reefs, and tropical forests, all of which are extremely vulnerable to changes in the surrounding environment. (Kumar et al., 2020) For example, coral bleaching and the eventual collapse of these ecosystems might result from ocean acidification and warmer seas, which can be especially harmful to coral reefs. In addition to supporting fisheries and protecting coasts from erosion and storm surges, coral reefs offer vital habitat for marine life. Therefore, the destruction of coral reefs may have a domino impact on coastal protection, food security, and biodiversity. (Klein et al., 2024)

Changing precipitation patterns and increasing sea levels pose a threat to mangrove forests, which are vital habitats for marine animals and significant storm surge buffers. (Huxham et al., 2017) The degradation of these ecosystems reduces their capacity to protect shorelines and support local fisheries, further exacerbating the vulnerabilities of small island states. Additionally, the loss of biodiversity and ecosystem services has significant cultural implications, as many island communities have deep connections to their natural environments and rely on them for traditional practices and livelihoods. (Sharma & Birman, 2024)

The environmental setting of tiny island republics has a direct impact on their economic vulnerability. A significant source of income for many tiny island governments, tourism is particularly vulnerable to the effects of climate change. Reduced visitor numbers and income might result from the deterioration of natural attractions including beaches, coral reefs, and tropical forests. (Barnett & Waters, 2016) The industry's sustainability may also be further harmed by the rising frequency of extreme weather events, which can ruin infrastructure and interfere with tourism. Other industries, such as agriculture and fisheries, which are essential for food security and livelihoods, are also affected economically. (Fallah & Rostami, 2024)

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Agriculture in small island states is often constrained by limited arable land, freshwater resources, and vulnerability to climate impacts. Reduced agricultural output and a danger to food security can result from temperature increases, changes in precipitation patterns, and extreme weather events. (Gohar et al., 2019) Small-scale and subsistence agriculture are the main sources of income for many island inhabitants, and they are especially susceptible to fluctuations and extremes in the climate. In a similar vein, increases in water temperature, ocean acidification, and the disappearance of vital ecosystems like coral reefs and mangroves all have an impact on fisheries, which are an important source of revenue and protein for many islands. (Devi et al., 2024)

Social vulnerabilities in small island states are exacerbated by the impacts of climate change. Displacement and migration are increasingly pressing issues as rising sea levels and extreme weather events render certain areas uninhabitable. (Douglas, 2006) The loss of homes, land, and livelihoods can lead to social instability, exacerbate poverty, and strain social services and infrastructure. The displacement of communities also raises legal and human rights concerns, as affected populations may seek refuge within their country or across borders, necessitating international cooperation and support. (Barnett and Waters, 2016) For tiny island republics, the effects of climate change on culture are extensive and varied. Strong links to their natural surroundings characterize the cultural customs and practices of many island populations. Cultural legacy and identity are under risk due to land loss, biodiversity loss, and traditional livelihood disruptions. (Islam et al., 2023) Additionally, the psychological and emotional toll of climate-related displacement and the loss of cultural sites can have significant mental health implications for affected communities. The capacity of small island states to respond to and recover from climate impacts is often limited by their economic constraints, geographic isolation, and limited institutional capacity. (Robinson, 2018) While many small island states have developed national adaptation plans and policies to address climate vulnerabilities, the implementation of these measures is often hampered by financial and technical constraints. (Robinson, 2018) Small island governments must get money and capacity-building from other countries in order to increase their resilience and their ability to successfully adapt to climate change.

Small island governments' attempts to combat climate change are greatly aided by international frameworks and accords like the "Paris Agreement." The "Paris Agreement" highlights the necessity of international collaboration, funding, and capacity-building in order to improve resilience and adaptability in areas that are susceptible. (Ourbak & Magnan, 2018) The goal of creating the Green Climate Fund and other financial instruments is to supply the required funds for poor nations, especially tiny island governments, to undertake adaptation and mitigation measures. However, the success of these institutions hinges on affluent nations meeting their financial obligations and allocating resources fairly to the most vulnerable areas. Together with international assistance, small island governments may become more resilient to climate change through regional collaboration. Coordination of regional climate action, information and resource sharing, and international advocacy on behalf of small island governments are all made possible by regional organizations like the Pacific Islands Forum and the Caribbean Community (CARICOM). (Robinson & Gilfillan, 2017) Joint adaptation programs and regional climate monitoring systems are examples of collaborative activities that can improve small island governments' capacity for adaptation and their ability to respond to the effects of climate change. For tiny island nations to become resilient, community-based adaptation is also essential. Local communities can be crucial to the implementation of successful adaptation strategies because they have significant expertise and experience in handling environmental changes. Community-based adaptation strategies place a strong emphasis on developing local



10th International CEO Communication, Economics, Organization & Social Sciences Congress capacity, integrating traditional knowledge with scientific skills, and involving the community. By making adaptation efforts more efficient and long-lasting, these strategies can guarantee that local communities' unique needs and situations are taken into account.

Case Studies: Examples of Small Island States Affected

Small island nations are severely and widely affected by climate change, and each state has particular difficulties and risks. The severe and complex effects of climate change on these islands are illustrated via case studies from different locations, offering important insights into their challenges and resilience. These instances highlight the critical need for strong adaptation strategies and international collaboration to assist these weaker governments.

The Maldives, a chain of 1,190 coral islands in the Indian Ocean, is a prime example of how climate change poses an existential danger to small island nations. The Maldives is one of the world's lowest-lying nations, with an average elevation of about 1.5 meters above sea level. Its very existence is in serious peril due to sea level rise. (Karthikheyan, 2010) Seawater intrusion into freshwater supplies, increasing frequency and intensity of storm surges, and increased coastline erosion have all occurred in the Maldives in recent decades. As many of the locals rely on tourism and fishing for a living, these effects endanger both the physical infrastructure and their way of life. (The Maldives 2021) In order to lessen these risks, the Maldives' administration has been outspoken in international fora, promoting more robust global climate action. Maldivians are at the forefront of climate change, despite their little contribution to global emissions, underscoring the need for fairness and justice in climate policy. (Government of Maldives, 2021)

The Republic of Kiribati has comparable difficulties in the Pacific. Kiribati, which consists of 33 atolls and reef islands, is very susceptible to severe weather and sea level rise. Because its islands are low-lying, they are vulnerable to erosion and floods, which can uproot settlements and leave land unusable. (Wyett, 2014) Kiribati has also been affected by prolonged droughts and changes in rainfall patterns, which impact freshwater availability and agricultural productivity. The government of Kiribati has adopted innovative approaches to address these challenges, including the purchase of land in Fiji as a potential relocation site for its population. (Temakei, 2023) This proactive measure underscores the gravity of the situation and the lengths to which vulnerable states must go to ensure their survival. Kiribati's plight has become a symbol of the broader challenges faced by small island states, drawing attention to the urgent need for global climate action. (Cauchi et al., 2019)

The Caribbean region, with its numerous small island states, provides further examples of the devastating impacts of climate change. The Bahamas, an archipelago of about 700 islands, has experienced increasingly severe hurricanes in recent years. (NU. CEPAL, 2011) In 2019, Hurricane Dorian, a Category 5 storm, devastated parts of the Bahamas, causing widespread destruction, loss of life, and economic disruption. The unusual ferocity and delayed course of the storm were made worse by rising ocean temperatures, which is a direct result of climate change. Hurricane Dorian's aftermath brought to light the Bahamas' infrastructure's weaknesses as well as the enormous obstacles associated with rehabilitation and reconstruction. The economic impact was substantial, affecting key sectors such as tourism and fisheries, and underscoring the need for robust disaster preparedness and climate resilience measures.

The unusual ferocity and delayed course of the storm were made worse by rising ocean temperatures, which is a direct result of climate change. Hurricane Dorian's aftermath brought to light the Bahamas' infrastructure's weaknesses as well as the enormous obstacles associated with rehabilitation and reconstruction. (Farbotko, 2023) Tuvalu's government has been a vocal advocate for international climate action, emphasizing the moral imperative to protect vulnerable populations. The country's National Adaptation Programme of Action outlines



10th International CEO Communication, Economics, Organization & Social Sciences Congress strategies to enhance resilience, such as building coastal defenses, improving water management, and promoting sustainable livelihoods. However, the limited financial and technical capacity of Tuvalu underscores the need for substantial international support.

The Seychelles, an archipelago in the Indian Ocean, provides another illustrative case. The Seychelles is renowned for its rich biodiversity and pristine marine environments, which are crucial for its tourism industry. (Payet & Agricole, 2006) However, climate change poses significant risks to these natural assets. Coral bleaching, driven by rising sea temperatures, has affected the health of coral reefs, which are vital for marine life and coastal protection. (Khan & Amelie, 2015) Additionally, changing weather patterns have impacted agricultural productivity, leading to food security concerns. The government of the Seychelles has implemented various adaptation measures, including the protection and restoration of mangroves and coral reefs, sustainable fisheries management, and the promotion of climate-resilient agriculture. (Khan & Amelie, 2015) These efforts highlight the importance of integrating conservation and adaptation strategies to protect both natural ecosystems and human livelihoods.

Similar existential concerns confront the Marshall Islands, which are situated in the middle Pacific Ocean. The country is made up of five islands and 29 atolls, all of which are on average around two meters above sea level. Climate change-related sea level rise has accelerated coastal erosion and floods, endangering vital infrastructure, residential areas, and commercial buildings. (van der Geest et al., 2020) The problems the Marshallese people confront are made worse by saltwater intrusion contaminating freshwater supplies. In international climate discussions, the administration has taken a leading role in promoting more robust carbon reduction pledges from wealthy nations. In order to address the negative effects of climate change on health and foster community resilience, the Marshall Islands have created a thorough Climate Change and Health Action Plan. But given the scope of the issues, the country will need significant foreign assistance to survive over the long run. (Krziesni & Brewington, 2022)

The island country of Mauritius, located in the Indian Ocean, is struggling to adapt to the changing climate on its coastal ecosystems and economy. Since beaches and coral reefs are among the natural attractions that Mauritius depends so heavily on, they are susceptible to damage. The tourist industry and the livelihoods it supports are seriously threatened by rising sea levels, coastline erosion, and an increase in the frequency of extreme weather events. (Doorga, 2022) Additionally, changes in precipitation patterns and temperature variations affect agricultural productivity, particularly for key crops such as sugarcane. The government of Mauritius has prioritized climate adaptation and mitigation, implementing measures such as coastal zone management, reforestation, and the promotion of renewable energy. These efforts aim to build resilience and reduce the country's carbon footprint, but sustained international cooperation and financial support are essential for their success.

An further interesting case study is the Pacific island nation of Fiji. Severe tropical cyclones have hit Fiji before; Cyclone Winston in 2016 left extensive damage in its wake. These storms are becoming more frequent and intense due to climate change, which puts infrastructure, communities, and economic sectors at serious danger. (Shiiba et al., 2023) The impacts of climate change also extend to marine ecosystems, with coral bleaching and ocean acidification threatening fisheries and tourism. Fiji has been proactive in addressing climate change, both domestically and internationally. (De Zoysa et al., 2023) The Fijian government has put policies into place to strengthen community resilience, encourage sustainable development, and improve preparedness for disasters. As the host of the 23rd Conference of the Parties (COP23)



10th International CEO Communication, Economics, Organization & Social Sciences Congress to the UNFCCC in 2017, Fiji demonstrated its leadership in the global climate discussions by emphasizing the pressing need for support for vulnerable countries and global climate action.

The South Pacific archipelago of the Solomon Islands faces several difficulties as a result of shifting weather patterns, increasing sea levels, and coastline erosion. Since the sea has flooded many communities' houses and property, they have been forced to evacuate. This displacement poses complex social and economic challenges, including the loss of livelihoods, cultural heritage, and social cohesion. (Lyons & Walters, 2021) The government of the Solomon Islands has developed a National Climate Change Policy, focusing on adaptation measures such as coastal protection, sustainable land management, and disaster risk reduction. However, the implementation of these measures is constrained by limited financial resources and technical capacity, highlighting the need for increased international support and cooperation.

In the Caribbean, the island nation of Dominica has been significantly impacted by climate change. In 2017, Hurricane Maria, a Category 5 storm, devastated Dominica, causing extensive damage to infrastructure, homes, and natural ecosystems. The intensity of the hurricane was influenced by warmer ocean temperatures, a consequence of climate change. The destruction wrought by Hurricane Maria highlighted the vulnerabilities of Dominica's economy, which relies heavily on agriculture and tourism. (Stennett-Brown et al., 2019) In order to increase resilience to future climate impacts, the government has concentrated its recovery and reconstruction efforts on developing climate-resilient infrastructure, encouraging sustainable agriculture, and restoring ecosystems. The example of Dominica highlights the necessity of international financial and technical support as well as the significance of including climate resilience into development planning. (Cavallo et al., 2023)

These case studies from tiny island nations throughout the globe highlight the many and serious effects of climate change on populations that are already at risk. Their physical infrastructure, natural ecosystems, and economic sectors are seriously threatened by rising sea levels, harsh weather, and shifting climatic patterns. These vulnerabilities are made worse by the uprooting of communities, the loss of livelihoods, and the effects on culture. A comprehensive strategy based on strong international legal frameworks, significant financial and technical assistance, regional collaboration, and community-based adaptation is needed to address these issues.

Conclusion

It is impossible to exaggerate the existential risks that climate change poses to small island governments. These islands, which are scattered across the waters of the world, are particularly vulnerable because of their distinct physical, economic, and environmental features. As global temperatures rise and sea levels follow suit, the very existence of these nations is under threat. The culmination of the multifaceted impacts examined in this research paper highlights an urgent and compelling need for robust, inclusive, and equitable climate action on a global scale. Small island states have contributed minimally to the greenhouse gas emissions driving climate change, yet they are among the first and worst affected by its impacts. This stark reality underscores a fundamental injustice that demands redress through both international and domestic policies. Sea level rise, a rise in the frequency of extreme weather events, and the destruction of important ecosystems like coral reefs and mangroves are just a few of the growing issues these countries face. These states' socioeconomic vulnerabilities are further exacerbated by the challenges that follow, which target freshwater resources, agricultural production, and infrastructure.

In order to handle the climatic disaster that tiny island governments are facing, international legislation is essential. Global collaboration and action are based on frameworks like the "Paris Agreement" and the United Nations Framework Convention on Climate Change (UNFCCC).



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These accords, which acknowledge the particular vulnerabilities of developing nations and tiny island states, place a strong emphasis on the concepts of equality, shared but distinct obligations, and separate capacities. The international community's political commitment and determination, especially that of the wealthier nations who have historically contributed the most to global emissions, will, however, ultimately determine how successful these frameworks are. International agreements have established financial institutions, such as the Green Climate Fund, to assist vulnerable nations with their adaptation and mitigation efforts. For small island states, accessing these funds is crucial to implement necessary adaptation measures, build resilience, and transition to sustainable development pathways. However, the disbursement of funds has often been slow and inadequate, highlighting the need for streamlined processes and greater transparency to ensure that resources reach those most in need promptly.

Small island states need to adopt diverse adaptation techniques that combine scientific understanding with customs and local knowledge. Community safety from storm surges and sea level rise depends on coastal protection measures including building sea walls, restoring mangroves, and implementing sustainable land management techniques. Additionally, concerns about freshwater shortages and food security may be addressed by strengthening water management systems and encouraging climate-resilient agricultural techniques. In addition to lowering reliance on foreign fuels, implementing renewable energy solutions may increase energy security and support international efforts to cut emissions. Regional cooperation among small island states can amplify their voices in international forums and strengthen collective resilience. Regional organizations, such as the Pacific Islands Forum and the Caribbean Community (CARICOM), play a pivotal role in coordinating regional climate action, facilitating the sharing of resources and knowledge, and advocating for the interests of small island states on the global stage. Collaborative initiatives, such as joint climate monitoring systems and regional adaptation projects, can enhance the adaptive capacity of these states and promote sustainable development. Using community-based adaptation strategies is also crucial for fostering resilience at the local level. Local communities can guarantee that adaptation plans and execution are sustainable and contextually appropriate by actively participating in the process. They also offer vital expertise and experience in managing environmental changes. In addition to increasing the efficacy of adaptation initiatives, empowering communities via capacity-building, education, and the fusion of traditional knowledge with scientific understanding may also promote resilience and a sense of ownership.

Small island states are experiencing environmental, socioeconomic, and cultural effects from climate change. Migration and displacement brought on by harsh weather and increasing sea levels present serious threats to societal cohesiveness and stability. Increased poverty, social unrest, and mental health problems might result from losing one's house, land, or source of income. The cultural identity and survival of island people are also threatened by the deterioration of natural and cultural heritage assets. To ensure that no community is left behind, addressing these issues calls for a comprehensive strategy that combines social and economic growth with climate adaptation. International support for small island states must go beyond financial assistance to include capacity-building, technology transfer, and knowledge sharing. Developed nations have an obligation to assist developing countries that are at risk from climate change by offering them access to cutting-edge technology, technical know-how, and training. Small island states have particular requirements and circumstances, thus assistance should be provided in a way that takes into account their opportunities and difficulties.

The urgency of climate action for small island states cannot be overstated. The window for effective action is narrowing, and the costs of inaction are rising. At every level—local, national, regional, and international—immediate and decisive action is necessary to lessen the

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worst effects of climate change and aid vulnerable governments in their adaptation efforts. This entails strengthening climate funding, increasing carbon reduction pledges, and putting in place effective adaptation strategies. Furthermore, in international climate discussions, the opinions of tiny island governments need to be given more weight. These countries' opinions and needs must be at the center of the decision-making process since they have a moral and practical stake in the results of global climate policy. Ensuring the significant involvement of small island nations in global forums can aid in the development of more equitable and inclusive climate policies that take into account the experiences of the people who are most impacted by the changing climate.

In summary, it is the obligation and concern of the entire world to ensure the existence of tiny island governments in the face of climate change. The international community must take immediate and consistent action in response to the serious, complex, and blatantly unfair effects of climate change on these governments. We can ensure the resilience and sustainable development of small island governments by identifying and resolving their specific vulnerabilities. This requires a concerted effort to strengthen international legal frameworks, enhance financial and technical support, promote regional and community-based adaptation, and amplify the voices of small island states in global climate discourse. Through collaborative and equitable action, we can work towards a future where small island states can thrive despite the challenges posed by a changing climate.

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References:

1. Abram, S., Atkins, E., Dietzel, A., Jenkins, K., Kiamba, L., Kirshner, J., et al. (2022). **Just transition: A whole-systems approach to decarbonisation.** *Climate Policy*, 22, 1033. <https://doi.org/10.1080/14693062.2022.2108365>
2. Abu Rayhan, Kinzler, R., & Rayhan, R. (2023). **Climate change and global warming: Studying impacts, causes, mitigation, and adaptation.** <https://doi.org/10.13140/RG.2.2.23746.76489>
3. Aitsi-Selmi, A., Egawa, S., Sasaki, H., et al. (2015). **The Sendai Framework for Disaster Risk Reduction: Renewing the global commitment to people's resilience, health, and well-being.** *International Journal of Disaster Risk Science*, 6, 164. <https://doi.org/10.1007/s13753-015-0050-9>
4. Barnett, J., & Waters, E. (2016). **Rethinking the vulnerability of small island states: Climate change and development in the Pacific Islands.** In J. Grugel & D. Hammett (Eds.), *The Palgrave Handbook of International Development*. Palgrave Macmillan.
5. Bersalli, G., Tröndle, T., Lilliestam, J., et al. (2023). **Most industrialised countries have peaked carbon dioxide emissions during economic crises through strengthened structural change.** *Communications Earth & Environment*, 4, 44. <https://doi.org/10.1038/s43247-023-00687-8>.
6. Beusch, L., Nauels, A., Gudmundsson, L., et al. (2022). **Responsibility of major emitters for country-level warming and extreme hot years.** *Communications Earth & Environment*, 3, 7. <https://doi.org/10.1038/s43247-021-00320-6>
7. Bodle, R., Donat, L., & Duwe, M. (2016). **The Paris Agreement: Analysis, assessment and outlook.** *Carbon & Climate Law Review*, 10(1), 5–15.
8. Breidenich, C., Magraw, D., Rowley, A., & Rubin, J. W. (1998). **The Kyoto Protocol to the United Nations Framework Convention on Climate Change.** *American Journal of International Law*, 92(2), 315–331. <https://doi.org/10.2307/2997974>

- 10th International CEO Communication, Economics, Organization & Social Sciences Congress**
9. Cadman, T. (2019). The United Nations Framework Convention on Climate Change. In T. M. Shaw, L. C. Mahrenbach, R. Modi, & X. Yi-chong (Eds.), *The Palgrave handbook of contemporary international political economy* (Palgrave Handbooks in IPE). Palgrave Macmillan. https://doi.org/10.1057/978-1-137-45443-0_23
 10. Cauchi, J. P., Correa-Velez, I., & Bambrick, H. (2019). Climate change, food security and health in Kiribati: A narrative review of the literature. *Global Health Action*, 12(1). <https://doi.org/10.1080/16549716.2019.1603683>
 11. Cavallo, E., Hoffmann, B., & Noy, I. (2023). Disasters and climate change in Latin America and the Caribbean: An introduction to the special issue. *Economics of Disasters and Climate Change*, 7, 135. <https://doi.org/10.1007/s41885-023-00132-2>
 12. Chappe, R. (2015). The legal framework of global environment governance on climate change: A critical survey. In L. Bernard & W. Semmler (Eds.), *The Oxford handbook of the macroeconomics of global warming* (online edn, 5 May 2015). Oxford Academic. <https://doi.org/10.1093/oxfordhb/9780199856978.013.0025>
 13. Choudhury, T., Kayani, U. N., Gul, A., Haider, S. A., & Ahmad, S. (2023). Carbon emissions, environmental distortions, and impact on growth. *Energy Economics*, 126, 107040. <https://doi.org/10.1016/j.eneco.2023.107040>
 14. Crisman, T. L., & Winters, Z. S. (2023). Caribbean small island developing states must incorporate water quality and quantity in adaptive management of the water-energy-food nexus. *Frontiers in Environmental Science*, 11, Article 1212552. <https://doi.org/10.3389/fenvs.2023.1212552>
 15. De Zoysa, S., Perera, H., Gunathilake, M. B., & Rathnayake, U. (2023). Development of rainfall intensity-duration-frequency curves for the Fiji Islands: Integrating TRMM-3B42 and measured gauge data with future projections. *All Earth*, 35(1), 361–380. <https://doi.org/10.1080/27669645.2023.2278827>
 16. den Elzen, M. G. J., Dafnomilis, I., Forsell, N., et al. (2022). Updated nationally determined contributions collectively raise ambition levels but need strengthening further to keep Paris goals within reach. *Mitigation and Adaptation Strategies for Global Change*, 27, 33. <https://doi.org/10.1007/s11027-022-10008-7>
 17. Devi, B., Devi, J., & Bhattacharyya, N. (2024). Subsistence agriculture—An approach towards food security in changing climate. In R. Chakraborty, P. Mathur, & S. Roy (Eds.), *Food production, diversity, and safety under climate change* (Advances in Science, Technology & Innovation). Springer. https://doi.org/10.1007/978-3-031-51647-4_5
 18. Dhanapal, G., Gupta, D., & Prakash, A. (2023). Barriers and opportunities in achieving climate and sustainable development goals in India: A multilevel analysis. *Journal of Integrative Environmental Sciences*, 20(1), 1. <https://doi.org/10.1080/1943815X.2022.2163665>
 19. Dienelt, A. (2022). The environment and international environmental law. In A. Dienelt (Ed.), *Armed conflicts and the environment*. Springer. https://doi.org/10.1007/978-3-030-99339-9_4
 20. Dissanayake, H., Perera, N., Abeykoon, S., Samson, D., Jayathilaka, R., et al. (2023). Nexus between carbon emissions, energy consumption, and economic growth: Evidence from global economies. *PLOS ONE*, 18(6), e0287579. <https://doi.org/10.1371/journal.pone.0287579>
 21. Doorga, J. R. S. (2022). Climate change and the fate of small islands: The case of Mauritius. *Environmental Science & Policy*, 136, 282–290. <https://doi.org/10.1016/j.envsci.2022.06.012>
 22. Douglas, C. H. (2006). Small island states and territories: Sustainable development issues and strategies—Challenges for changing islands in a changing world. *Sustainable Development*, 14(2), 75–80. <https://doi.org/10.1002/sd.297>
 23. Fallah, B., & Rostami, M. (2024). Exploring the impact of the recent global warming on extreme weather events in Central Asia using the counterfactual climate data ATTRICI v1.1. *Climatic Change*, 177, 80. <https://doi.org/10.1007/s10584-024-03743-0>
 24. Farbotko, C. (2023). Mobilities and immobilities in Tuvalu: An unexpected pandemic experience? *Australian Geographer*, 54(4), 527. <https://doi.org/10.1080/00049182.2023.2179333>
 25. Filonchyk, M., Peterson, M. P., Zhang, L., Hurynovich, V., & He, Y. (2024). Greenhouse gases emissions and global climate change: Examining the influence of CO₂, CH₄, and N₂O. *Science of The Total Environment*, 935, 173359. <https://doi.org/10.1016/j.scitotenv.2024.173359>
 26. Gao, Y., Gao, X., & Zhang, X. (2017). The 2 °C global temperature target and the evolution of the long-term goal of addressing climate change—from the United Nations Framework Convention on Climate Change to the Paris Agreement. *Engineering*, 3, 272. <https://doi.org/10.1016/j.eng.2017.01.022>
 27. Giacomini, G. (2022). The international legal framework: Human rights and climate change. In *Indigenous peoples and climate justice* (Energy, Climate and the Environment). Palgrave Macmillan. https://doi.org/10.1007/978-3-031-09508-5_3

- 10th International CEO Communication, Economics, Organization & Social Sciences Congress**
28. Gohar, A. A., Cashman, A., & Ward, F. A. (2019). Managing food and water security in Small Island States: New evidence from economic modelling of climate-stressed groundwater resources. *Journal of Hydrology*, *569*, 239-251. <https://doi.org/10.1016/j.jhydrol.2018.12.008>
 29. Golub, A., Mahoney, M., & Harlow, J. (2013). Sustainability and intergenerational equity: Do past injustices matter? *Sustainability Science*, *8*(2), 269–277. <https://doi.org/10.1007/s11625-013-0201-0>
 30. Government of Maldives. (2021) United Nations urge greater action to address devastating impact of climate change on children and young people | United Nations in Maldives
 31. Han, X., & Cheng, Y. (2023). Drivers of bilateral climate finance aid: The roles of Paris Agreement commitments, public governance, and multilateral institutions. *Environmental and Resource Economics*, *85*, 783. <https://doi.org/10.1007/s10640-023-00783-5>
 32. Hsieh, Y. L., & Yeh, S. C. (2024). The trends of major issues connecting climate change and the sustainable development goals. *Discover Sustainability*, *5*, 31. <https://doi.org/10.1007/s43621-024-00183-9>.
 33. Hugonnet, R., McNabb, R., Berthier, E., et al. (2021). Accelerated global glacier mass loss in the early twenty-first century. *Nature*, *592*, 726-731. <https://doi.org/10.1038/s41586-021-03436-z>
 34. Human Rights Council resolutions on human rights and climate change | OHCHR. www.ohchr.org/en/climate-change/human-rights-council-resolutions-human-rights-and-climate-change
 35. Huxham, M., Dencer-Brown, A., Diele, K., Kathiresan, K., Nagelkerken, I., & Wanjiru, C. (2017). Mangroves and people: Local ecosystem services in a changing climate. In V. Rivera-Monroy, S. Lee, E. Kristensen, & R. Twilley (Eds.), *Mangrove ecosystems: A global biogeographic perspective* (pp. 293-332). Springer, Cham. https://doi.org/10.1007/978-3-319-62206-4_8
 36. Islam, S. N., Reinstädler, S., Reza, M. S., et al. (2023). Climate change versus livelihoods, heritage and ecosystems in small island states of the Pacific: A case study on Tuvalu. *Environmental Development and Sustainability*, *25*(10), 7669-7712. <https://doi.org/10.1007/s10668-022-02367-7>
 37. Jin, L., Chang, Y. H., Wang, M., et al. (2022). The dynamics of CO2 emissions, energy consumption, and economic development: Evidence from the top 28 greenhouse gas emitters. *Environmental Science and Pollution Research*, *29*, 36565. <https://doi.org/10.1007/s11356-021-18069-y>
 38. Jones, M.W., Peters, G.P., Gasser, T., et al. (2023). National contributions to climate change due to historical emissions of carbon dioxide, methane, and nitrous oxide since 1850. *Scientific Data*, *10*, 155. <https://doi.org/10.1038/s41597-023-02041-1>.
 39. Kamali Saraji, M., Streimikiene, D., et al. (2023). Challenges to the low carbon energy transition: A systematic literature review and research agenda. *Energy Strategy Reviews*, *49*, 101163. <https://doi.org/10.1016/j.esr.2023.101163>
 40. Karthikheyam, T. C. (2010). Environmental challenges for Maldives. *South Asian Survey*, *17*(2), 343–351. <https://doi.org/10.1177/097152311201700210>
 41. Kaushal, S. S., Likens, G. E., Pace, M. L., et al. (2021). Freshwater salinization syndrome: From emerging global problem to managing risks. *Biogeochemistry*, *154*(2), 255–292. <https://doi.org/10.1007/s10533-021-00784-w>
 42. Kazmi, S. N. A. (2021). Impacts of industrialization on climate change and potential mitigation strategies.
 43. Khan, A., & Amelie, V. (2015). Assessing climate change readiness in Seychelles: Implications for ecosystem-based adaptation mainstreaming and marine spatial planning. *Regional Environmental Change*, *15*, 721-733. <https://doi.org/10.1007/s10113-014-0662-4>
 44. Khojasteh, D., Haghani, M., Nicholls, R. J., et al. (2023). The evolving landscape of sea-level rise science from 1990 to 2021. *Communications Earth & Environment*, *4*, 257. <https://doi.org/10.1038/s43247-023-00920-4>
 45. Kim, Y., Tanaka, K., & Matsuoka, S. (2020). Environmental and economic effectiveness of the Kyoto Protocol. *PLOS ONE*, *15*, Article e0236299. <https://doi.org/10.1371/journal.pone.0236299>
 46. Klein, S. G., Roch, C., & Duarte, C. M. (2024). Systematic review of the uncertainty of coral reef futures under climate change. *Nature Communications*, *15*, 2224. <https://doi.org/10.1038/s41467-024-46255-2>
 47. Klöck, C., Nunn, P. D. (2019). Adaptation to climate change in Small Island Developing States: A systematic literature review of academic research. *The Journal of Environment & Development*, *28*(2), 196. <https://doi.org/10.1177/1070496519835895>
 48. Krzesni, D., & Brewington, L. (2022). What do climate impacts, health, and migration reveal about vulnerability and adaptation in the Marshall Islands? *Climate Action*, *1*, 22. <https://doi.org/10.1007/s44168-022-00023-4>
 49. Kumar, L., Jayasinghe, S., & Gopalakrishnan, T. (2020). Climate change and impacts on biodiversity on small islands. In L. Kumar (Ed.), *Climate change and impacts in the Pacific* (pp. 221–234). Springer Climate. https://doi.org/10.1007/978-3-030-32878-8_12

- 10th International CEO Communication, Economics, Organization & Social Sciences Congress**
50. Kumar, R., Kumar, A., Saikia, P. (2022). Deforestation and forests degradation impacts on the environment. In V.P. Singh, S. Yadav, K.K. Yadav, & R.N. Yadava (Eds.), *Environmental Degradation: Challenges and Strategies for Mitigation* (Vol. 104, pp. 23-34). Springer, Cham. https://doi.org/10.1007/978-3-030-95542-7_2
 51. Lai, M., Robinson, S. A., Salas, E., Thao, W., & Shorb, A. (2022). Climate justice for small island developing states: Identifying appropriate international financing mechanisms for loss and damage. *Climate Policy*, 22(9-10), 1213. <https://doi.org/10.1080/14693062.2022.2112017>
 52. Lawrence, P., & Reder, M. (2019). Equity and the Paris Agreement: Legal and philosophical perspectives. *Journal of Environmental Law*, 31, 511. <https://doi.org/10.1093/jel/eqz017>
 53. Lazrus, H. (2010). Water scarcity and climate change in Tuvalu. In *Anthropology News* (Ed.).
 54. Leal Filho, A. M. Azul, L. Brandli, A. Lange Salvia, & T. Wall (Eds.), *Industry, innovation and infrastructure* (Encyclopedia of the UN Sustainable Development Goals). Springer. https://doi.org/10.1007/978-3-319-95873-6_69
 55. Lesnikowski, A., Ford, J., Biesbroek, R., Berrang-Ford, L., Maillet, M., Araos, M., & Austin, S. E. (2016). What does the Paris Agreement mean for adaptation? *Climate Policy*, 17, 825. <https://doi.org/10.1080/14693062.2016.1248889>
 56. Li, Y., Brando, P.M., Morton, D.C., et al. (2022). Deforestation-induced climate change reduces carbon storage in remaining tropical forests. *Nature Communications*, 13, 1964. <https://doi.org/10.1038/s41467-022-29601-0>.
 57. Liu, D. (2023). Clean Development Mechanism (CDM). In S. N. Romaniuk & P. N. Marton (Eds.), *The Palgrave Encyclopedia of Global Security Studies*. Palgrave Macmillan. https://doi.org/10.1007/978-3-319-74319-6_387
 58. Loo, C. (2023). Climate change and environmental justice. In G. Pellegrino & M. Di Paola (Eds.), *Handbook of the philosophy of climate change* (pp. [page numbers]). Springer. https://doi.org/10.1007/978-3-031-07002-0_57
 59. Lyons, K., & Walters, P. (2021). Policy and planning responses to climate change in Solomon Islands: A place for forest-based carbon offset initiatives in building just and resilient territories? In P. H. Campello Torres & P. R. Jacobi (Eds.), *Towards a just climate change resilience* (pp. [insert page range]). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-81622-3_4
 60. Mantlana, B., Jegede, A.O. (2022). Understanding the multilateral negotiations on climate change ahead of COP27: Priorities for the African region. *South African Journal of International Affairs*, 29(3), 255–270. <https://doi.org/10.1080/10220461.2022.2053767>
 61. Mayer, B. (2021). Climate change mitigation as an obligation under human rights treaties? *American Journal of International Law*, 115, 409. <https://doi.org/10.1017/ajil.2021.9>
 62. Mohd Afjal. (2023). The tapestry of green economics: Mapping the nexus of CO2 emissions, economic growth, and renewable energy. *International Journal of Sustainable Energy*, 42(1), 1364.
 63. Moosa, A., Do, K., & Jonsescu, E. (2020). Design response to rising sea levels in the Maldives: A study into aquatic architecture. *Frontiers of Architectural Research*, 9(3), 623. <https://doi.org/10.1016/j.foar.2020.04.002>
 64. Morton, S., Pencheon, D., & Squires, N. (2017). Sustainable Development Goals (SDGs) and their implementation: A national global framework for health, development, and equity needs a systems approach at every level. *British Medical Bulletin*, 124, 81. <https://doi.org/10.1093/bmb/idx031>
 65. NU. CEPAL. (2011). *An assessment of the economic impact of climate change on the tourism sector in the Bahamas*. CEPAL. <https://www.cepal.org/en/publications/19913-assessment-economic-impact-climate-change-tourism-sector-bahamas>
 66. Oreskes, N. (2018). The Scientific Consensus on Climate Change: How Do We Know We're Not Wrong? In A. Lloyd & E. Winsberg (Eds.), *Climate Modelling*. Palgrave Macmillan, Cham.
 67. Ourbak, T., & Magnan, A. K. (2018). The Paris Agreement and climate change negotiations: Small islands, big players. *Regional Environmental Change*, 18(8), 2201-2207. <https://doi.org/10.1007/s10113-017-1247-9>
 68. Pahuja, S. (2023). Kyoto Protocol. In S. O. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, & R. Abreu (Eds.), *Encyclopedia of Sustainable Management* (pp. [insert page range]). Springer. https://doi.org/10.1007/978-3-031-25984-5_562
 69. Payet, R., & Agricole, W. (2006). Climate change in the Seychelles: Implications for water and coral reefs. *Ambio*, 35, 182-189. <http://www.jstor.org/stable/4315717>
 70. Petri, F., & Biedenkopf, K. (2020). Common but differentiated responsibility in international climate negotiations: The EU and its contesters. In E. Johansson-Nogués, M. Vlaskamp, & E. Barbé (Eds.), *European Union contested* (Norm Research in International Relations). Springer. https://doi.org/10.1007/978-3-030-33238-9_3

10th International CEO Communication, Economics, Organization & Social Sciences Congress

71. Petzold, J., Magnan, A. K. (2019). Climate change: thinking small islands beyond Small Island Developing States (SIDS). *Climatic Change*, 152, 145. <https://doi.org/10.1007/s10584-018-2363-3>
72. Qi, J., & Qian, H. (2023). Climate finance at a crossroads: It is high time to use the global solution for global problems. *Carbon Neutrality*, 2, 31. <https://doi.org/10.1007/s43979-023-00071-7>
73. Rajamani, L. (2019). Understanding the 2015 Paris Agreement. In N. K. Dubash (Ed.), *India in a warming world: Integrating climate change and development*. Oxford Academic. <https://doi.org/10.1093/oso/9780199498734.003.0012>
74. Robinson, S. A. (2018). Climate change adaptation limits in small island developing states. In W. Leal Filho & J. Nalau (Eds.), *Limits to climate change adaptation (Climate Change Management*, pp. 15-29). Springer. https://doi.org/10.1007/978-3-319-64599-5_15
75. Robinson, S. A., & Gilfillan, D. (2017). Regional organisations and climate change adaptation in small island developing states. *Regional Environmental Change*, 17(3), 989–1004. <https://doi.org/10.1007/s10113-016-0991-6>
76. Robinson, W. A. (2021). Climate change and extreme weather: A review focusing on the continental United States. *Journal of the Air & Waste Management Association*, 71(10), 1186–1209. <https://doi.org/10.1080/10962247.2021.1942319>
77. Scandurra, G., Romano, A. A., Ronghi, M., & Carfora, A. (2018). On the vulnerability of small island developing states: A dynamic analysis. *Ecological Indicators*, 84, 382-389. <https://doi.org/10.1016/j.ecolind.2017.09.016>
78. Sharma, I., & Birman, S. (2024). Biodiversity loss, ecosystem services, and their role in promoting sustainable health. In P. Singh & N. Yadav (Eds.), *The climate-health-sustainability nexus* (pp. 97-115). Springer, Cham. https://doi.org/10.1007/978-3-031-56564-9_7
79. Shiiba, N., Singh, P., Charan, D., Raj, K., Stuart, J., Pratap, A., & Maekawa, M. (2023). Climate change and coastal resiliency of Suva, Fiji: A holistic approach for measuring climate risk using the climate and ocean risk vulnerability index (CORVI). *Mitigation and Adaptation Strategies for Global Change*, 28(2), 9. <https://doi.org/10.1007/s11027-022-10043-4>
80. Shivanna, K. R. (2022). Climate Change and its Impact on Biodiversity and Human Welfare. *Proceedings of the Indian National Science Academy*, 88(2), pp. 160. doi: 10.1007/s43538-022-00073-6. Epub 2022 May 2. PMID: PMC9058818.
81. Singh, C., Iyer, S., New, M. G., Few, R., Kuchimanchi, B., Segnon, A. C., & Morchain, D. (2021). Interrogating ‘effectiveness’ in climate change adaptation: 11 guiding principles for adaptation research and practice. *Climate and Development*, 14, 650. <https://doi.org/10.1080/17565529.2021.1964937>
82. Singh, V. (2024). Global warming and climate change. In *Textbook of Environment and Ecology*. Springer, Singapore.
83. Stankovic, T., Hovi, J., Skodvin, T., et al. (2023). The Paris Agreement’s inherent tension between ambition and compliance. *Humanities and Social Sciences Communications*, 10, 550. <https://doi.org/10.1057/s41599-023-02054-6>
84. Stennett-Brown, R. K., Stephenson, T. S., & Taylor, M. A. (2019). Caribbean climate change vulnerability: Lessons from an aggregate index approach. *PLOS ONE*, 14(7), e0219250. <https://doi.org/10.1371/journal.pone.0219250>
85. Stewart, C., Damby, D.E., Horwell, C.J., et al. (2022). Volcanic air pollution and human health: Recent advances and future directions. *Bulletin of Volcanology*, 84, 11. <https://doi.org/10.1007/s00445-021-01513-9>.
86. Tebaldi, C., Ranasinghe, R., Vousdoukas, M., et al. (2021). Extreme sea levels at different global warming levels. *Nature Climate Change*, 11, 746. <https://doi.org/10.1038/s41558-021-01127-1>
87. Temakei, E. (2023). Responding to drought in Kiribati. *UNICEF Pacific Islands*.
88. The Maldives is threatened by rising seas, but coastal development is causing even more pressing environmental issues. Retrieved July 11, 2024, from <https://phys.org/news/2021-10-maldives-threatened-seas-coastal-environmental.htm>
89. Tollefson, J. (2021). IPCC climate report: Earth is warmer than it’s been in 125,000 years. In *Nature*. Nature.
90. Tosun, J., & Peters, B. G. (2021). The politics of climate change: Domestic and international responses to a global challenge. *International Political Science Review*, 42(1), 3-19. <https://doi.org/10.1177/0192512120975659>
91. Ulibarri, N., Ajibade, I., Galappaththi, E. K., Joe, E. T., Lesnikowski, A., et al. (2021). A global assessment of policy tools to support climate adaptation. *Climate Policy*, 22(1), 77-92. <https://doi.org/10.1080/14693062.2021.2002251>



10th International CEO Communication, Economics, Organization & Social Sciences Congress

92. van der Geest, K., Burkett, M., Fitzpatrick, J., Stege, M., & Wheeler, B. (2020). Climate change, ecosystem services and migration in the Marshall Islands: Are they related? *Climatic Change*, 161. <https://doi.org/10.1007/s10584-019-02648-7>
93. Victor, D. G., Lumkowsky, M., & Dannenberg, A. (2022). Determining the credibility of commitments in international climate policy. *Nature Climate Change*, 12, 793. <https://doi.org/10.1038/s41558-022-01454-x>
94. Vousdoukas, M. I., Athanasiou, P., Giardino, A., et al. (2023). Small island developing states under threat by rising seas even in a 1.5 °C warming world. *Nature Sustainability*, 6, 1552-1561. <https://doi.org/10.1038/s41893-023-01230-5>
95. Wright, L. D., Wu, W., & Morris, J. (2019). Coastal erosion and land loss: Causes and impacts. In L. Wright & C. Nichols (Eds.), *Tomorrow's coasts: Complex and impermanent* (Vol. 27, pp. 145-160). Coastal Research Library. Springer. https://doi.org/10.1007/978-3-319-75453-6_9
96. Wu, Y., & Wan, J. (2024). The race between global economic growth and carbon emissions: Based on a comparative study of developed and developing countries. *Environmental Science and Pollution Research*, 31, 19226. <https://doi.org/10.1007/s11356-024-32275-4>
97. Wyett, K. (2014). Sea level rise and migration in Kiribati. *Asia and the Pacific Policy Studies*, 1(2), 171-185. <https://doi.org/10.1002/app5.7>
98. Yasmeen, F., Pumijumnong, N., Arunrat, N., Punwong, P., Sereenonchai, S., & Chareonwong, U. (2024). Nature-based solutions for coastal erosion protection in a changing climate: A cutting-edge analysis of contexts and prospects of the muddy coasts. *Estuarine, Coastal and Shelf Science*, 298, 108632. <https://doi.org/10.1016/j.ecss.2023.108632>
99. Zhang, Y.J., Zhang, K.B., et al. (2018). The linkage of CO2 emissions for China, EU, and USA: evidence from the regional and sectoral analyses. *Environmental Science and Pollution Research*, 25, 20179. <https://doi.org/10.1007/s11356-018-1965-7>.



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Assessment of The Effectiveness Governance, Risk and Compliance (GRC)
Initiatives by Using Importance-Performance Analysis – An Alternative
Method to Evaluate Integrated GRC in Organization

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ABSTRACT

Organization needs to periodically assess the effectiveness of Governance, Risk and Compliance (GRC) initiatives to ensure integration, alignment and effectiveness of resources and capabilities in achieving goals. The assessment conducted to produce necessary recommendations to implement GRC continuous improvement. Notwithstanding, empiric research regarding of methodology to assess the integrated GRC initiative performance is currently rare. Therefore, this study offers a systematic methodology and approach by using Importance-Performance Analysis (IPA) Survey supported with descriptive analysis as primary data. This study focused on human (i.e., leaders and employees) as key internal factor. They have views and perceptions that could influence the organization's effectiveness of integrated GRC practice and performance. The scope of the topic discussed in this study limited to developing a systematic methodology and approach to be simulated and applied in general type of organization. The actual data extraction and analysis required to elaborate when their views and perception aligned, it would be indicative evidence that the organization has bigger opportunity and capability to exercise and implement more robust and integrated GRC than those who are not aligned.

Keywords: Governance, Risk, Compliance, Performance, Assessment



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1. INTRODUCTION

Governance, Risk and Compliance (GRC) are the three key functions that help organizations achieve their objectives, address uncertainties, and act with integrity. GRC is a holistic approach that integrates these functions across the organization, rather than managing them in silos. (OCEG, 2002).

GRC is an integrated, holistic approach to organization-wide Governance, Risk, and Compliance ensuring that an organization acts ethically correct and in accordance with its risk appetite, internal policies, and external regulations through the alignment of strategy, processes, technology, and people, thereby improving efficiency and effectiveness. (Racz et al., 2010).

Leadership Role Perspective

Senior leaders typically had a more positive perception of the risk culture than the general staff. (Sheedy, Elizabeth A., and Griffin, 2018). This aligns with Signaling Theory, which suggests that management tends to send favorable signals to stakeholders. However, only 41% of CEOs believe that current employee behaviors largely align with company values and direction. (PwC 26th Annual Global CEO Survey, 2023). Leadership and organizational culture significantly impact the performance of State-Owned Enterprises (SOEs). (Prasetyo, et al., 2021).

Employee Role Perspective

Employees' views do matter in the retention or dismissal of the CEOs. Employees evaluate their leaders and the strategies being implemented within their companies. (Wang, D., Zhu, et.al, 2023).

Al Habsyi, S., Suharman, H., & Handoyo, S. (2021) suggest that Governance, Risk, and Compliance (GRC) along with Intellectual Capital positively influent a company's performance.

The relationship between the GRC model and employees' performance was inversely proportional. Conversely, the model had a direct correlation with employees' perceptions of it. (Alabbas, A., & Mahdy, F., 2023).

According to Gartner HR Research (2021), six significant disparities exist between leaders' and employees' perceptions regarding the future of the employee experience. Executives believe they foster a culture of flexibility, whereas employees do not share this view. Additionally, executives are more prepared for remote work compared to their employees, and there is a notable difference in trust levels, with employees having less trust than executive leaders. Executives think they listen, but employees disagree. Executives hear one thing and employees another. Executives feel greater purpose than employees. Research by Wang, D., Zhu et al. (2023) indicates that employees' opinions play a significant role in the retention or dismissal of a CEO. It suggests that CEOs should be attentive to how their employees perceive their leadership and the strategies being implemented within their organizations.

Problem in Organizational Context

According to OCEG GRC Maturity Survey (2020) Siloed strategies increase costs to the organization. Organizations with siloed, non-integrated, approaches to GRC overwhelmingly state they have increased costs. These encompass higher overall operational expenses, increasing costs for data management, and the time expenditure for personnel. Lack of a clear strategy is the greatest barrier to GRC integration. Organizations that have inadequate GRC integration could indicated lack of a clear integration strategy as their primary barrier. The rest of the barriers to GRC integration can all be mapped back to the lack of an established strategy to facilitate GRC collaboration and integration. These include challenges in getting departments to work together, assigning GRC champions to lead the integration, and defining a business



10th International CEO Communication, Economics, Organization & Social Sciences Congress case for GRC integration. To overcome these barriers and realize the benefits highlighted in the survey report, it's essential to appoint a champion for integrated GRC and develop a clear and persuasive business case. This business case should illustrate how an integrated GRC strategy will enhance the organization's efficiency, effectiveness, and agility.

GRC initiatives relevancy/importance gaps and performance gaps in organizational leadership perspective could indicate the identified fundamental yet significant issues might occur in the organization. The organizational capacity and capability adequacy (or inadequacy) could corroborate the organizational strength (or weakness).

Problem in Individual Context

From individual perspective, leaders and employees in particular organization mostly have different views and perception about GRC initiatives and implementation due to their personal motivation and interest. OCEG GRC Maturity Survey (2020) further highlighted that GRC professionals routinely find they are swamped with manual processes and consolidating information from documents, spreadsheets, and emails. With uncoordinated approaches across departments, it takes a significant amount of time to consolidate, normalize, aggregate, and report on data.

GRC initiatives relevancy/importance gaps and performance gaps arising in individual perspective could indicate the identified human inter-relationship and communication issues that potentially occur in the organization. They might pervasively escalate due to lack of leaders' commitment, supports and incentives, low employee engagement, feeling lack of capacity and unconfident capability.

2. LITERATURE REVIEW

Agency Theory

Agency Theory, proposed by Michael C. Jensen and William H. Meckling in 1976, primarily focuses on the relationship between principals (e.g., shareholders) and agents (e.g., company executives). The theory explores how to best align the interests of agents with those of the principals to minimize costs and maximize company value. Agency Theory provides a framework for understanding and addressing conflicts of interest within an organization, which is crucial for effective GRC. By aligning the interests of principals and agents, organizations can create a more transparent, accountable, and ethical environment.

Signaling Theory

Signaling Theory Brigham & Houston (2019) is a concept in business that deals with the communication of information between parties where there is an asymmetry of information. The correlation between Signaling Theory and GRC lies in the emphasis on transparency and communication. Effective GRC practices can enhance the signals sent by management to stakeholders, thereby improving investor confidence and trust. By maintaining robust governance structures, managing risks proactively, and ensuring compliance with regulations, organizations can provide clear and reliable signals to the market, which is in line with the principles of Signaling Theory.

Conceptual Model of GRC

The GRC concept goes beyond the critical roles of Governance, Risk, and Compliance. It includes other key areas such as internal audit, compliance, risk, legal, finance, IT, HR as well as the lines of business, executive suite, and the board itself. The goal of GRC is to help an

10th International CEO Communication, Economics, Organization & Social Sciences Congress organization achieve Principled Performance, which is achieved when an organization reliably achieves objectives, addresses uncertainty, and acts with integrity.

There are several theories and models that support the concept of Governance, Risk, and Compliance (GRC):

- a. Three Lines Model (TLM): This model is a development of the widely adopted and time-tested three lines of defense (TLOD). The new TLM attempts to reflect model criticism and widen the model scope towards integrated governance. It introduces principles to keep its precision and appeal. The Institute of Internal Auditors (2020).
- b. Conceptual Model for Integrated Governance, Risk, and Compliance: This model presents the concepts and the key functions of GRC using the OCEG Capability Model. Vicente, P., & Silva, M.M. (2011).

Those theories and models provide a framework for organizations to manage risks, ensure compliance with regulations, and strengthen governance practices. They enable organizations to identify potential risks, implement controls to mitigate those risks, and ensure compliance with legal and regulatory requirements.

3. RESEARCH METHOD

Before developing an IPA survey, some researches relevant to GRC importance and performance assessment were gathered. For instance, the researchers highlighted some selected studies, but not limited to below, regarding of importance of GRC Initiatives and Implementation including Goh, C., Kusnadi, Y., Pan, G., & Seow, P. S. (2022), which emphasized the importance of digital transformation as GRC initiative to attract investors. Their study used investor's (external) perspective instead of management and employee (internal) perspective.

Prasetyo, et al. (2021) conclude that performance was affected by leadership and work culture. Leadership and work culture as intangible independent variable might have intervened each other.

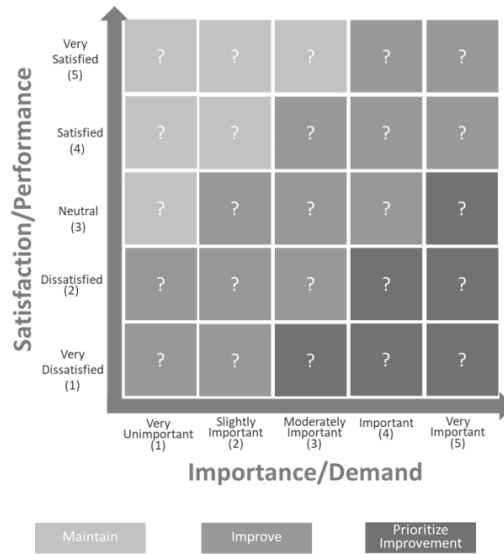
Racz et al. (2010) investigated the application of Integrated GRC and GRC software, highlighting that many companies remain uncertain about the significance of an integrated approach, and participants expressed dissatisfaction with their current reporting solutions. When importance and performance/satisfaction are not optimized, the GRC performance would be need further improvement.

Refer to Chen, Shun-Hsing, et al. (2020) we develop a design of IPA Survey. Below is a brief overview from their research:

- a. Survey Design: The survey contains two parallel sets of questions asking respondent to indicate the importance of certain features/services and how satisfied they are with those GRC Initiatives and Implementation.
- b. Top 2 Boxes Concept: The responses are analyzed using the concept of "Top 2 Boxes", where the percentage of people who indicated the GRC Initiatives and Implementation as "Important" or "Very Important" (the top two possible choices out of five for importance) and "Satisfied" or "Very Satisfied" (the top two choices for Satisfaction) are compared.
- c. Visualization of Results. The results visualized in several ways, such as a bar-in-bar chart, scatterplot with a 45-degree line, or a dot plot with a line. The goal is to match satisfaction with importance, i.e., not to underserve or overserve respondents.
- d. The Importance-Performance Analysis uses both variables to calculate a single number which can be used as a prioritization rank.

After formulating the survey questionnaire, a simulation performed to ensure the consistency and the applicability of the model.

Figure 1 – Design of IPA Matrix



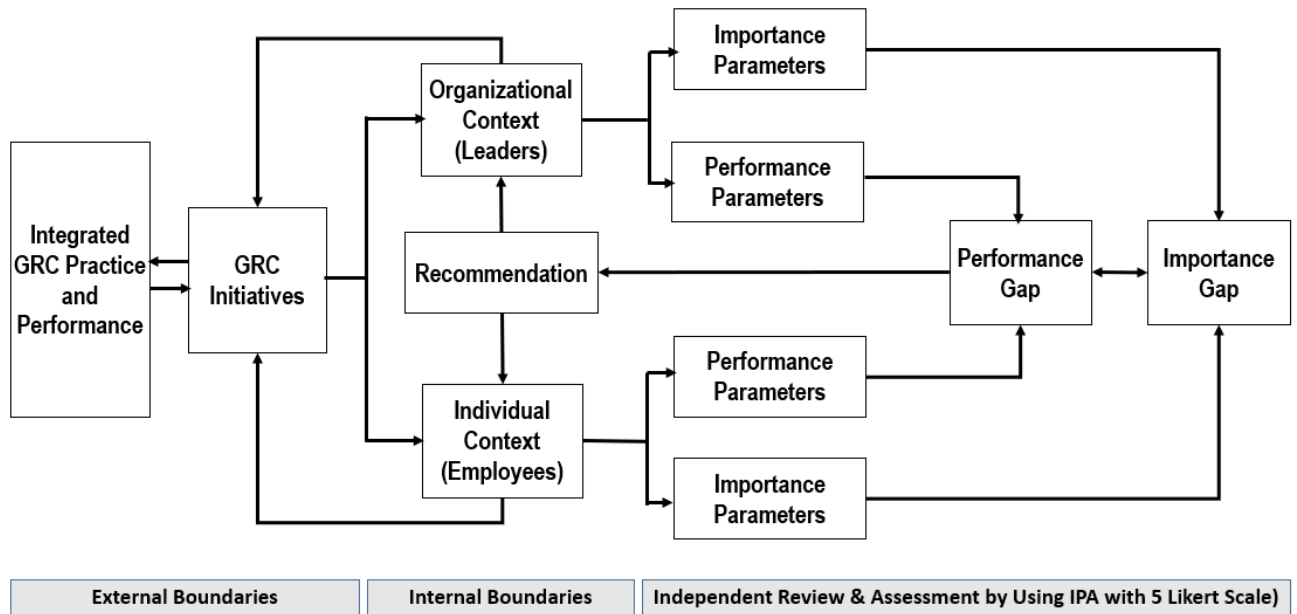
The indices of Importance and Satisfaction/Performance are defined as follows:

$$\text{Mean Importance} = \frac{\sum \text{Importance Scores}}{\text{Number of Respondents}}$$

$$\text{Mean Performance} = \frac{\sum \text{Performance Scores}}{\text{Number of Respondents}}$$

$$\text{Importance-Performance Ratio} = \frac{\text{Mean Performance}}{\text{Mean Importance}}$$

Figure 2 - Model & Variables of Measurement



The above figure the logical flow to develop the model. The external boundaries are area of scope which may come from regulators or other key external stakeholders that impose mandatory and voluntary initiatives should be adopted and implemented by organization. The

10th International CEO Communication, Economics, Organization & Social Sciences Congress internal boundaries comprised human factors as the most important element of the GRC, that in this case, dichotomized into leaders and employees. With the independent review and assessment by using the IPA methodology with 5 Likert scale, the IPA score can be used to determine criteria, for example as below:

Table 1 – Example of Assessment Rating Results

Scores	Rating	Statement of Assessment Results
0.5 – 0.7	Poor	GRC integration is significantly below expectations and requires immediate improvement.
0.7 – 0.9	Fair	GRC integration meets some but not all expectations; improvement is needed.
0.9 – 1.1	Good	GRC integration meets expectations and occasionally exceeds them in certain areas.
1.1 – 1.3	Very Good	GRC integration consistently exceeds expectations in most areas.
1.3 – 1.5	Excellent	GRC integration exceeds expectations in all areas and sets a benchmark for others.

The output of the model is the recommendation for improvements as feedback in the context of organizational and individual.

4. RESULT AND DISCUSSION

Because GRC initiatives and implementation as corporate policies are also form of product and service in nature, the IPA technique can be applied to obtain informed decision analysis by measuring priority for improvement.

The table below is the customized able design and structure of the questionnaire as a primary tool for data gathering analysis.

Table 2 – Operational Variables and Measurement

No.	Remarks / Variable	Questions / Instruction	Measurement	Notes / Context Ref.
A. Respondent Data				
1	Descriptive Data	Fill in the blank with respondent working identity and profile. Anonymous identity is an option allowed.	Descriptive information. No value.	General information
B. Organizational Experience				
2	Descriptive Data	In the last 3 years, has your organization implemented the following Governance, Risk Management and Compliance initiatives?	Descriptive information. No value.	General information
3	Descriptive Data	In the last 3 years, has your organization experienced any of the following risk incidents? If yes, was the organization have adequate capacity and capability to handle and resolve the incidents?	Descriptive information. No value.	General information

No.	Remarks / Variable	Questions / Instruction	Measurement	Notes / Context Ref.
C. Level of Importance from the Perspective of Organizational Leadership				
4	Leaders' Perceptions on Importance of GRC Initiatives and Implementation	How important are the GRC initiatives in supporting your organization's goals? What is/are your consideration(s) to support your answer?	1-5 Likert Scale	Goh, C., Kusnadi, Y., Pan, G., & Seow, P. S. (2022) Makaš, A. (2023) Andronache, Alina & Matin, Mandana & Althonayan, Abraham (2018)
D. Performance Satisfaction Level from the Perspective of Organizational Leadership				
	Leaders' Satisfaction on GRC Initiatives and Implementation	How satisfied are the Leaders in your Organization/Work Unit with the implementation of the GRC initiatives in supporting the achievement of your Organization/Work Unit's goals? What is/are your consideration(s) to support your answer?	1-5 Likert Scale	Habsyi, S. Al, Suharman, H. & Handoyo, S. (2021) Sembiring Kembaren, S. Y., Endro, G., & Pendrian, O. (2022) Pertiwi, A.P., & Muslih, M. (2023) Prasetyo, I., Endarti, E. W., Endarto, B., Aliyyah, N., Rusdiyanto, R., Suprapti, S., ... & Al-asqolaini, M. Z. (2021)
E. Level of Importance from the Individual Perspective				
6	Perceptions on Importance of GRC Initiatives and Implementation	How important is the development and/or implementation of the GRC initiatives in supporting your personal career development and achievement? What is/are your consideration(s) reason to support your answer?	1-5 Likert Scale	Prasetyo, I., Endarti, E. W., Endarto, B., Aliyyah, N., Rusdiyanto, R., Suprapti, S., ... & Al-asqolaini, M. Z. (2021). Racz, N., Panitz, J., Amberg, M., Weippl, E.R., & Seufert, A. (2010).
F. Performance Satisfaction Level from the Individual Perspective				
7	Satisfaction on GRC Initiatives and Implementation	How satisfied are you with the implementation the GRC initiatives in providing added value and helping improve your career and work? What is/are your consideration(s) to support your answer?	1-5 Likert Scale	Racz, N., Panitz, J., Amberg, M., Weippl, E.R., & Seufert, A. (2010)
G. Organizational Capacity and Capability				
8	Descriptive Data	How adequate is your organization's capacity and capability level for the GRC Initiatives implemented? What is/are your consideration(s) to support your answer?	Descriptive information. No value.	Habsyi, S. Al, Suharman, H. & Handoyo, S. (2021).
H. Individual Capacity and Capabilities				
9	Descriptive Data	How adequate is your capacity and capability to be involved in the GRC Initiatives?	Descriptive information. No value.	Racz, N., Panitz, J., Amberg, M., Weippl, E.R., & Seufert, A. (2010).

No.	Remarks / Variable	Questions / Instruction	Measurement	Notes / Context Ref.
I. Organizational Leadership Support				
10.	Descriptive Data	How much support does your Organization/Work Unit Leader have for the implementation of the GRC initiatives? What is/are your consideration(s) to support your answer?	Descriptive information. No value.	Prasetyo, I., Endarti, E. W., Endarto, B., Aliyyah, N., Rusdiyanto, R., Suprapti, S., ... & Al-asqolaini, M. Z. (2021).
J. Individual Employee Support				
11.	Descriptive Data	How much do you personally support the implementation of the GRC initiatives? What is/are your consideration(s) to support your answer?	Descriptive information. No value.	Prasetyo, I., Endarti, E. W., Endarto, B., Aliyyah, N., Rusdiyanto, R., Suprapti, S., ... & Al-asqolaini, M. Z. (2021).

According to recent exercise with 100 sample of simulated respondent data comprise of 20 leaders and 80 employee level, the exercise come up with the following results:

Table 3 – Summary of Simulated IPA Analysis on a GRC Initiative

Category	GRC Initiative A			
	Organizational		Individual	
	Importance (I)	Performance (P)	Importance (I)	Performance (P)
	Question1	Question2	Question3	Question4
Sample Size (n=100, 20% Leaders, 80% Employee)				
Leaders' Total IP Scores	67	75	73	77
Employees' Total IP Scores	213	274	281	284
Total	280	349	354	361
IPA Scores				
Mean Leaders' IP Scores	3.35	3.75	3.65	3.85
Mean Employee's IP Scores	2.66	3.43	3.51	3.55
Total	2.80	3.49	3.54	3.61
IPA Ratio (P/I)				
IPA Ratio Leaders		1.12		1.05
IPA Ratio Employees		1.29		1.01
Total		1.25		1.02



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Based on above simulation the Organizational IPA Ratio is 1.25 higher than Individual IPA Ratio 1.02. It is indicated that GRC integration in organizational level consistently exceeds expectations in the areas and sets a benchmark for others. Meanwhile, GRC integration in individual level meets expectations and occasionally exceeds them in certain areas. It is recommended that although the employees' performance in organizational level collectively perform beyond expectation, the individual performance still require attention among others by maintaining good work-life balance, keeping up employee engagement and individual career plan.

5. CONCLUSION AND RECOMMENDATIONS

Organization can perform assessment of the effectiveness Governance, Risk and Compliance (GRC) initiatives by using the Importance-Performance Analysis. This approach can help organizations to measure and allocate resources effectively by focusing on areas that are important to both organizational and individual stakeholders, especially where organizational sense of importance and satisfaction levels on particular GRC implementation can be improved. It is recommended that an independent assessment conducted by using purposive sampling method to gather stratified population in particular level of departmental functions, areas or business segments. The actual data extraction and analysis required to identify gaps and elaborate whether the respondents' views and perceptions aligned or misaligned. When their perception and understanding aligned it would be indicative evidence that the organization has bigger opportunity and capability to exercise and implement more robust and integrated GRC than those who are not aligned, vice versa.

While this study has made significant progress in designing and formulating a model for GRC assessment as alternative and supplemental for GRC Maturity Assessment, it is important to acknowledge its limitations. The current study's scope was confined to the theoretical development and initial validation of the model. As such, practical application and real-world testing were beyond the scope of this research. Therefore, the topic raised in this study open and invite opportunities for future research, to expand and enrich studies in the field of GRC practice.

6. REFERENCES

- Alabbas, A., & Mahdy, F. A Human Resources Management Perspective on the Complementary Relationship between the Success of the GRC Model, Employee Perception, and the Impact of This Relationship on Performance. *Migration Letters*, 20(5), 1272-1292.
- Brigham, E. F., & Houston, J. F. (2019). *Fundamentals of financial management* (15th edition). Boston. Cengage.
- Chen, Shun-Hsing, Fan-Yun Pai, and Tsu-Ming Yeh. 2020. "Using the Importance–Satisfaction Model and Service Quality Performance Matrix to Improve Long-Term Care Service Quality in Taiwan" *Applied Sciences* 10, no. 1: 85. <https://doi.org/10.3390/app10010085>
- Gartner. (2021, August 4). Gartner HR research identifies six gaps between leader and employee sentiment on the future employee experience. Gartner. <https://www.gartner.com/en/newsroom/press-releases/2021-08-04-gartner-hr-research-identifies-six-gaps-between-leader-and-employee-sentiment-on-the-future-employee-experience>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- OCEG. (2020). GRC Capability Model 3.5. OCEG. <https://www.oceg.org/grc-capability-model-red-book/>
- OCEG. (2020). GRC Maturity Survey 2020 Report. OCEG. <https://www.oceg.org/oceg-grc-maturity-survey-2020-report/>
- PwC. (2023). 26th Annual Global CEO Survey. PwC. Retrieved from https://www.pwc.com/gx/en/ceo-survey/2023/main/download/26th_CEO_Survey_PDF_v1.pdf
- Racz, N., Weippl, E., Seufert, A.: A Frame of Reference for Research of Integrated Governance, Risk and Compliance (GRC). In: De Decker, B., Schaumüller-Bichl, I. (eds.) *CMS 2010. LNCS*, vol. 6109, pp. 106–117. Springer, Heidelberg (2010)
- Sheedy, E., & Griffin, B. (2018). Risk governance, structures, culture, and behavior: A view from the inside. *Corporate Governance* (Oxford), 26(1), 4-22. <https://doi.org/10.1111/corg.12200>



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The Institute of Internal Auditors. (n.d.). The IIA's Three Lines Model: An update of the Three Lines of Defense. Retrieved from <https://www.theiia.org/globalassets/documents/resources/the-iias-three-lines-model-an-update-of-the-three-lines-of-defense-july-2020/three-lines-model-updated-english.pdf>

Vicente, P., & Silva, M.M. (2011). A Conceptual Model for Integrated Governance, Risk and Compliance. International Conference on Advanced Information Systems Engineering.

Wang, D., Zhu, Q., Avolio, B. J., Shen, W., & Waldman, D. (2023). Do employees' views matter in corporate governance? The relationship between employee approval and CEO dismissal. *Strategic Management Journal*, 44(5), 1328-1354.



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**Factors That Influence Generation Z's Purchase Decisions Towards
Modern Kebaya in Indonesia**

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ABSTRACT

This study explores the factors influencing Generation Z's purchase decisions regarding modern Kebaya in Indonesia, a traditional garment that has adapted to contemporary fashion trends while retaining cultural significance. As Generation Z emerges as a key consumer demographic, understanding their preferences and motivations is essential for fashion businesses. This research builds upon existing literature in consumer behavior and generational marketing, focusing on the impact of cultural identity, social media influence, price sensitivity, product quality, and brand reputation on purchase intentions. Utilizing a descriptive conceptual approach, this study proposes that cultural identity and social media influence significantly enhance purchase intentions, while price sensitivity, product quality, and brand reputation also play crucial roles. The findings aim to provide valuable insights for marketers and retailers targeting Generation Z in the modern Kebaya market. Limitations of this study include the reliance on theoretical frameworks rather than empirical data. Future research should adopt quantitative methods to validate the proposed relationships and further explore the complexities of consumer preferences within this demographic.

Keywords: Generation Z, Modern Kebaya, Purchase decision, Consumer behaviour, Cultural identity, Price perception, Product quality, Social media influence, Brand reputation



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INTRODUCTION

Lots of Indonesian people can't forget who they are, where they are coming from, and what culture are they celebrating in. One important cultural products that has been visually becomes a national identity is Kebaya. As a national dress, Kebaya represents nation's cultural identity and becoming lifestyle. By wearing Kebaya, allows someone to represent their identity, social status and lifestyle through Kebaya.

The emergence of the modern Kebaya has brought forth contemporary designs, fabric innovations, and style adaptations to suit changing consumer preferences while preserving its traditional roots. This transformation reflects the dynamic blend of Indonesia's rich culture and global fashion trends, making it relevant not only for ceremonial occasions but also for daily wear and modern events.

In recent years, there has been a resurgence of interest in traditional fashion across Indonesia, largely fueled by a sense of cultural pride and identity among younger generations. The modern Kebaya market has shown considerable growth due to its adaptability, aesthetic appeal, and alignment with contemporary fashion sensibilities. Retailers, designers, and fashion entrepreneurs see it as an opportunity to leverage this demand by innovating designs and strategically targeting different market segments, thereby enhancing the garment's marketability.

Understanding the purchase decisions of consumers is pivotal for businesses aiming to gain a competitive edge in the fashion industry. In the context of the modern Kebaya, various factors may drive consumer behavior, including cultural identity, price perception, product quality, brand reputation, and the impact of social media. However, despite its significance, limited research has been conducted to explore these factors in depth, particularly in relation to Indonesian consumer behavior. Exploring these determinants can offer valuable insights into consumer motivations and decision-making processes, ultimately aiding businesses in optimizing their marketing and product strategies.

This research seeks to identify and analyze the key factors that influence purchase decisions related to modern Kebaya in Indonesia. Specifically, it aims to examine the roles of cultural identity, price sensitivity, product quality, social media influence, and brand reputation in shaping consumer preferences. By addressing these areas, this study will contribute to a better understanding of the evolving consumer landscape within the Indonesian fashion industry.

BACKGROUND OF MODERN KEBAYA

Kebaya is a traditional garment that holds deep cultural value and meaning as a symbol of regional identity and its wearer. It is also one of the traditional attires that has undergone significant transformation in this era of modernization. Cultural shifts have prompted cultural practitioners and artists to adapt to these changes, ensuring that traditions are preserved without becoming outdated. This evolution is partly driven by the influence of dominant foreign cultures in the modern era, inspiring creativity among artists, including designers, to sustain the kebaya's relevance and make it competitive in contemporary times. Many designers are competing to innovate and modify the kebaya. The rapid development of this traditional attire has made it versatile for various occasions, with continuous innovations to expand its appeal (Hadi et.al, 2024).

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The re-traditionalization of the kebaya reflects a social phenomenon where its resurgence acts as a reaction to its de-traditionalization during the early reform era, which coincided with the collapse of the New Order regime. The shifts in socio-cultural and political structures following the reform period have empowered women to become cultural agents, driving movements to reclaim the kebaya's significance. Women have embraced the kebaya as a form of resistance against its former perception as "old-fashioned," restrictive, outdated, and limited to formal, ceremonial, or traditional use. Field findings reveal that wearing the kebaya has also evolved into a medium for self-expression (Trismaya, 2022).

METHODOLOGY

This paper uses a conceptual descriptive approach, which involves insights from existing literature on consumer behaviour, cultural studies, and generational marketing. In a conceptual descriptive approach, this typically involves identifying patterns, themes, or relationships within the literature that help to draw the research problem which demonstrates the rigor and validity of the approach. This study also relies on secondary data from journals, industry reports, and market analyses to construct a theoretical framework. Additionally, hypothetical consumer scenarios and anecdotal evidence from focus groups with Generation Z fashion consumers will be used to enhance understanding. The primary focus is on Indonesian Generation Z consumers aged 18–25 who are actively engaged with social media platforms like Instagram and TikTok. This demographic represents a critical market for modern Kebaya, characterized by their digital fluency and preference for unique, value-driven fashion.

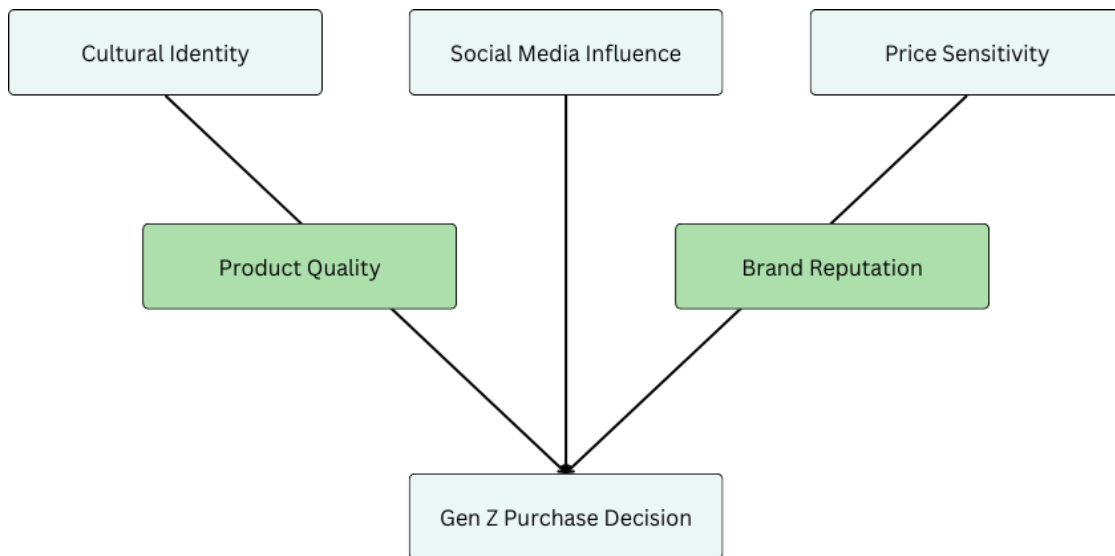


Figure 1. Theoretical Framework Diagram

RESULT AND DISCUSSION

The findings of this study reveal that several factors significantly influence Generation Z's purchase decisions regarding modern Kebaya in Indonesia. These factors include cultural identity, social media influence, price sensitivity, product quality, and brand reputation. Each factor interacts uniquely with the preferences and behaviors of this demographic, shaping their decisions in meaningful ways.

Cultural Identity

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Cultural identity emerged as a foundational driver of Generation X's interest in modern Kebaya. The garment not only serve as fashion statement but also as a medium for expressing cultural pride and heritage. For Generation Z, who are navigating a globalized world, the modern Kebaya represents a blend of tradition and innovation, allowing them to reconcile their cultural roots with contemporary lifestyles. According to Halim et al. (2020), cultural identity plays a pivotal role in shaping consumer preferences in traditional fashion markets, particularly in multi-ethnic countries like Indonesia. This connection between heritage and modernity is further amplified during cultural celebrations or events, where the modern Kebaya is often seen as a marker of both individual and collective identity.

Social Media Influence

Social media platforms such as Instagram, Tiktok, and Pinterest have transformed the way modern Kebaya is marketed and perceived by Generation Z. As digital natives, this demographic relies heavily on visual and interactive content to discover and evaluate fashion products. Studies by Smith et al. (2021) and Ardiansyah et al. (2022) highlight the growing impact of influencers, viral content, and peer reviews in shaping purchase decisions. For modern Kebaya, social media campaigns featuring influencers who align with Generation Z's values – such as authenticity and creativity – are particularly effective. Additionally, viral trends, such as styling challenges and behind the scene content will push the appeal of the garment that create a sense of community and engagement among potential buyers.

Price Sensitivity

Price remains an important factor and consideration for Generation Z although this demographic is willing to invest in premium products that offer perceived value the most. The findings indicate that affordability is often balanced with the uniqueness and quality of the product. This is consistent with Fadjar (2022), who notes that while Generation Z values cost efficiency, they are also drawn to products that align with their ethical and aesthetic standards. The ability of modern Kebaya brands to offer customization and tiered pricing models can help mitigate concerns about affordability while catering to a broader audience.

Product Quality

The quality of materials, craftsmanship, and design emerged as a critical determinant of purchase decisions. Generation Z expects their purchases to reflect both style and functionality, with an emphasis on comfort and durability. As Indrawati et al. (2020) suggest, the appeal of traditional garments such as modern Kebaya lies in their ability to adapt to diverse occasions while maintaining aesthetic value. High-quality products not only enhance customer satisfaction but also foster brand loyalty, as consumers are more likely to return to brands that consistently deliver on their promises.

Brand Reputation

Ethical practices and transparency have become key components of brand reputation for Generation Z. This study aligns with Williams and Page (2022) findings, which indicate that consumers in this demographic prioritize sustainability and authenticity when evaluating brands. Modern Kebaya brands that adopt sustainable sourcing practices, promote fair labor, and communicate openly about their production processes are more likely to gain the trust and loyalty of Generation Z. Moreover, the incorporation of storytelling that highlights the brand's commitment to preserving cultural heritage can further enhance its reputation.

Synthesis of Findings

The link of these factors suggest that modern Kebaya resonates with Generation Z because it aligns with their values, lifestyles, and digital habits. Cultural identity serves as the foundation, while social media amplifies visibility and engagement. Price sensitivity and product quality address practical concerns, whereas brand reputation reinforces trust and loyalty. This

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combination of factors positions modern Kebaya as both a cultural artifact and a contemporary fashion choice, making it highly appealing to this demographic.

CONCLUSION AND RECOMMENDATION

The study concludes that Generation Z's purchase decisions regarding modern Kebaya are deeply influenced by a combination of cultural identity, social media influence, price sensitivity, product quality, and brand reputation. Modern Kebaya has successfully captured the interest of this demographic by bridging the gap between cultural heritage and contemporary fashion trends. For Generation Z, the garment is more than just clothing – it is a representation of personal values, cultural pride, and social connectivity. Social media plays a pivotal role in amplifying the visibility of modern Kebaya, while factors like affordability, quality, and ethical practices reinforce trust and loyalty toward the brands.

To remain competitive, modern Kebaya brands must prioritize cultural storytelling and actively engage with Generation Z through digital platforms. Investing in influencer collaborations, interactive content, and transparent communication about production processes can strengthen their market position. Additionally, addressing the balance between affordability and premium quality through customization options or tiered pricing can broaden their appeal. This generation's value-driven mindset also calls for greater emphasis on sustainability and ethical practices, which can enhance brand reputation and build lasting consumer relationship.

Ultimately, this study emphasizes the importance of understanding the evolving preferences of Generation Z and adapting business strategies to align with their unique expectations. Further empirical study is recommended to validate these findings and explore additional factors that may influence their purchasing behavior in diverse cultural and economic context.

REFERENCES

- Ardiansyah, B., Kartini, D., & Nugraha, P. (2022). The Role of Social Media in Promoting Traditional Indonesian Fashion. *International Journal of Digital Marketing*, 8(2), 45–60.
- Fadjar, H. (2022). Consumer Behavior in Fashion: The Case of Indonesian Millennials and Gen Z. *Journal of Cultural Studies*, 3(2), 35–50.
- Halim, T., Saraswati, R., & Utomo, A. (2020). Cultural Identity in Indonesian Youth: A Study of Fashion and Tradition. *Journal of Southeast Asian Studies*, 12(4), 320–340.
- Indrawati, R., Sari, F., & Wijaya, L. (2020). Modern Kebaya: Evolving Trends in Indonesian Fashion. *Asian Journal of Fashion Studies*, 5(1), 15–29.
- Smith, J., Anderson, K., & Lee, H. (2021). The Influence of Social Media on Gen Z's Buying Habits. *Journal of Social Media and Marketing*, 7(4), 220–235.
- Trismaya, N., Shahab, Y., Siscawati, M., Probonegoro, N. (2022). Retraditionalization of Kebaya: The Reappearance of Kebaya in Modern Constructions. Study Case: Kebaya Community in Jakarta. *Dissertation from University of Indonesia*.
- United Nations Environment Programme (UNEP). (2011). Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication. Retrieved from [UNEP](#).
- Williams, K., & Page, R. (2022). Sustainability and Ethics in Generation Z Consumer Behavior. *Journal of Consumer Studies*, 14(3), 112–125.
- Yusuf, H., & Wulandari, T. (2021). Personalization in Traditional Clothing: A New Approach to Consumer Engagement. *International Journal of Marketing Research*, 10(1), 50–70.



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Evaluation of E-Learning in Society 5.0: Current and Future Perspectives
with Exponential Technologies

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ABSTRACT

This article analyses the profound transformations that exponential technologies are bringing about in the education sector. It emphasises the critical need for continuous professional development for educators and leaders so that they can effectively navigate the rapid advances of digital technologies. It also advocates the promotion of scientific dialogue in teacher training programmes to better understand the implications of these technologies on the professional competences of educational institutions. In addition, it investigates innovative assessment methods that are congruent with online pedagogy, emphasising the importance of feedback and the application of various assessment tools in distance learning contexts. Finally, it aims to establish a theoretical framework for understanding exponential technologies, intelligent education and adaptive learning, with the ultimate goal of contributing to the evolution of an agile learning society capable of responding to the demands of the digital age.

Keywords: Exponential Technologies, Smart Method, Adaptive Learning

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INTRODUCTION

With advances in connectivity, data processing and computing power, digital technologies have led to an exponential increase in the amount of data available in all areas of knowledge.

Keeping professionals up to date with what's new is important and updating leaders is fundamental, because one of the characteristics of exponential technologies is to give machines the role of introducing change in such a way as to remove the human being from this leading role [ISC - Intelligence Service Centre (n.d.)].

There is therefore an urgent need for a scientific dialogue that can be shared in the initial and ongoing training of teachers in different areas of education (de Queiroz *et al.*, 2023), in order to understand the transformations brought about by exponential technologies in professional skills within educational institutions (Llanga Cantuña *et al.*, 2021).

‘At a time when online pedagogy is taking centre stage, showing how learning does not necessarily have to be centred on the teacher's discourse and how technology can be used creatively, it is important to discuss and reflect on how to carry out an assessment that meets this pedagogy and does not detract from it.’ (Amante, 2021: 1).

Santo *et al.* (2023) emphasise that, in the face of a society immersed in digital culture, the assessment of learning in the context of *online* distance learning presupposes a high level of feedback through the use of various assessment tools.

Considering the relevance of this topic, this reflection focuses on the insertion of a theoretical framework that includes what is meant by exponential technologies and organisations; exponential leadership; *smart* education; adaptive learning with artificial intelligence; virtual learning objects; learning object repositories and the suggestive presentation of assessment methods, strategies and instruments that can be used in the educational process of society 5.0.

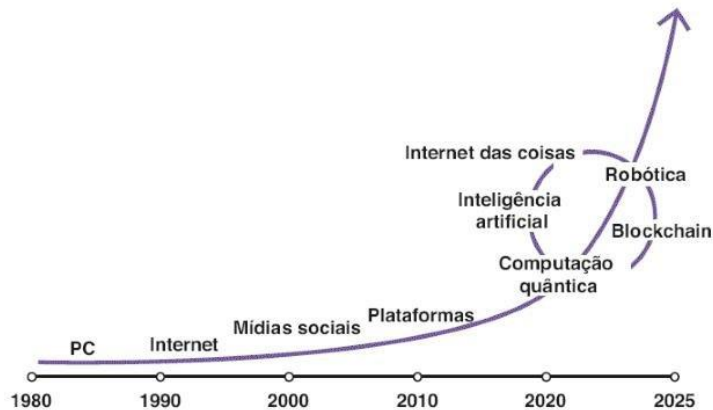
1. CONCEPTUAL FRAMEWORK

According to the research carried out by de Queiroz Gonçalves *et al.* (2021: 495) **evaluation** is seen ‘as a set of complementary and intentional actions that show the result of what was planned for a given situation, being able to identify whether or not the objectives were achieved and also contribute to the direction of future actions.’ In this circular reflection, ‘**technologies** cannot be understood only as deterministic, instrumental or techniques to be followed because they are also the fruit of human labour and, as such, there is a human and cultural relationship to be considered and developed.’ (de Queiroz Gonçalves *et al.*, 2021: 503).

1.1 Exponential technologies

According to Tolfo (2023), in the last decade technological advances have made available a set of educational and disruptive technologies that promote the digital transformation of society. They are thus associated with the concept of Industry 4.0 with great potential to influence the lives of countless people in an innovative way (Figure 1).

Figure 1 - Exponential growth of technology



Source: Gabriel (2019) cit. por Schorn & Borba (2019: 7)

This is in line with Portella (2022) who defines exponential technologies as the ability to scale a business on an exponential curve, just like a country. Let's say that it's the ability of its leaders to implement a culture of collaboration with academic institutions and companies that drives the development of educational technologies.

1.2 Exponential organisations

Ismail *et al.* (2015) indicate that exponential organisations are disruptive and based on information technology whose impact is disproportionately large compared to their peers. Llanga Cantuña *et al.* (2021) state that their ten attributes characterise Massive Transformative Purpose (MPT) and are divided into two parts (Ideas, with 5 external attributes & Scale, with 5 internal attributes), as shown in Figure 2.

Figure 2 - Characteristics of Exponential Organisations



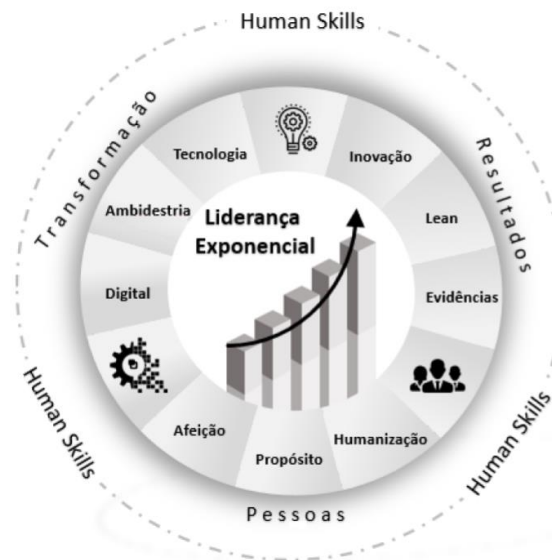
Source: <https://leonardo-matsumota.com/2018/03/30/organizacoes-exponenciais-resumo-do-livro/>

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 We can't say that there is a recipe ready to be replicated, but some basic ingredients are essential for paving the way for scaling results, which Muniz *et al.* (2020) call the five exponential facts, namely: #1 building a product, platform or service; #2 incorporating the new from the outside in; #3 connecting people to a common purpose; #4 adopting a new form of management and #5 increasing exponential thinking and competences in leadership.

1.3 Exponential leadership

Simply put, according to Muniz *et al.* (2023: 3), exponential leadership ‘is knowing how to build and generate contexts.’ For this to happen, it is necessary to focus on certain aspects that can be consolidated in a model (Figure 3) based on *human skills* around three main dimensions (people, transformation and results).

Figure 3 - Exponential leadership model



Source: <https://pt.linkedin.com/pulse/lideran%C3%A7a-exponencial-%C3%A9-resposta-esse-novo-mundo-j%C3%BAnior-rodrigues->

‘A leader is a scarce resource, difficult to obtain and whose training and development are a crucial asset’ (Roseira, 2019: 1), particularly in the 5.0 society in which we live and in which human beings are at the centre of technological innovations and transformations (Kuzaqui & Lisboa, 2020). The use of advanced and enabling technologies is proving to be an opportunity to respond to the Sustainable Development Goals (SDGs) in order to balance economic progress with the resolution of social problems (Figure 4) towards the development of an extraordinarily intelligent society. In this new social context, efforts must be focused on *Smart Education* to train people and professionals with the skills they need to fulfil their role (Herrero Consultoria, 2021) in a way that is committed to growth and well-being.



Source: https://www.gpif.go.jp/en/investment/Report_Society_and_SDGs_en.pdf

1.4 Smart Education

The notion of smart *education* emerged out of the context of smart cities (Tham & Verhulsdonck, 2023), as part of initiatives and programmes launched by a number of countries since 1997 (Table 1), with the aim of emphasising the role of technology in education as part of economic growth.

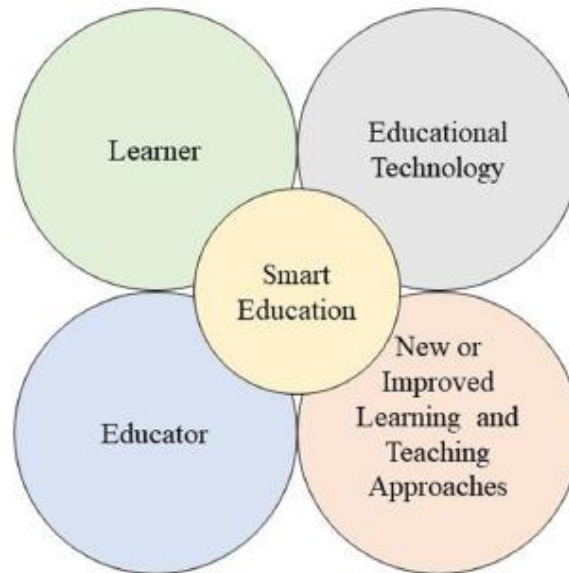
Table 1 - SE initiatives and programmes

Country	Initiative/program name	References
Malaysia	Malaysian smart school implementation plan	Chan (2002)
Singapore	Intelligent nation (iN2015) master plan	Hua (2012)
South Korea	SMART education project	Kim et al. (2013)
Finland	Systemic learning solutions (SysTech)	Kankaanranta and Mäkelä (2014)
Arab Countries	ALECSO & ITU smart learning framework	Jemni and Khribi (2017)
Australia	Smart student-centric education system	Zhu et al. (2016b)
United Arab Emirates	Mohammed Bin Rashid smart learning program (MBRSLP)	Lavine and Croome (2018)

Source: Demir (2021)

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 Demir (2021) defines *smart education* as the effective and coherent use of digital technologies to achieve certain learning outcomes through appropriate pedagogical methods (Figure 5).

Figure 5 - Essential elements of SE



Source: Demir (2021)

In an intelligent education environment, the learner is autonomous and collaborative, as well as being an efficient user of technology, and the educator is a facilitator of learning through technological support. Barros Neto's testimony (2020: 24) emphasises that 'technology has had a very positive impact on the way people learn because it enables new and impressive ways of carrying out the teaching-learning process, allowing everyone to follow their own learning path.' Magaldi & Neto (2022) point out that the expansion of any platform results from building a strategy for progress, between the present and future focuses, through new network connections. Tham & Verhulsdonck (2023) portray the current state of networked learning as essentially formal and facilitated. In the future, they see networked learning becoming increasingly experiential, sensory and immersive, valuing the principle of self-education.

1.5 Adaptive Learning (AL) with Artificial Intelligence (AI)

In 1983, Howard Gardner revolutionised psychology and education by presenting the [theory of multiple intelligences](#) (Figure 6). In his study, he states that there are types of intelligence and that they differ according to the way information is processed.



Source: <https://www.edools.com/aprendizagem-adaptativa/>

Arce (2022) points out that the concept of intelligence is abstract and presents new trends that include four more intelligences (Figure 7).

Figure 7 - The 12 types of intelligence



Source: <https://www.juanbarrios.com/los-tipos-de-inteligencia-nuevas-tendencias/>

Adaptive learning represents an intelligent educational approach that is based on a flexible and personalised model, where content, methodology and interaction with the student are shaped according to the individual characteristics and needs of each learner. Its fusion with artificial intelligence (AI) creates a scenario in which teaching-learning processes become dynamic, responsive and highly effective (Júnior *et al.*, 2023). Adaptive learning is an open innovation service that can be developed by specialists in education, technology, science and psychology. Moreover, its application is not limited to individuals, but can also cover learning groups (DiccionarioTec, 2022).

The thinking of the leadership of an exponential organisation must consider an intelligent and adaptive strategy in order to establish objectives and goals that can be specific, measurable, achievable, relevant and time-bound (SMART) for individual and/or collective application.

2.1 Smart Methods and Adaptive Learning with AI: a possible interconnection

The SMART method (Figure 8) was first mentioned by George Doran in 1981, but it was Peter Drucker who popularised the idea with the notion of ‘Management by Objectives’. The aim of this method is to make the **goal-setting process** as simple as possible (Souza dos Santos *et al.*, 2023).

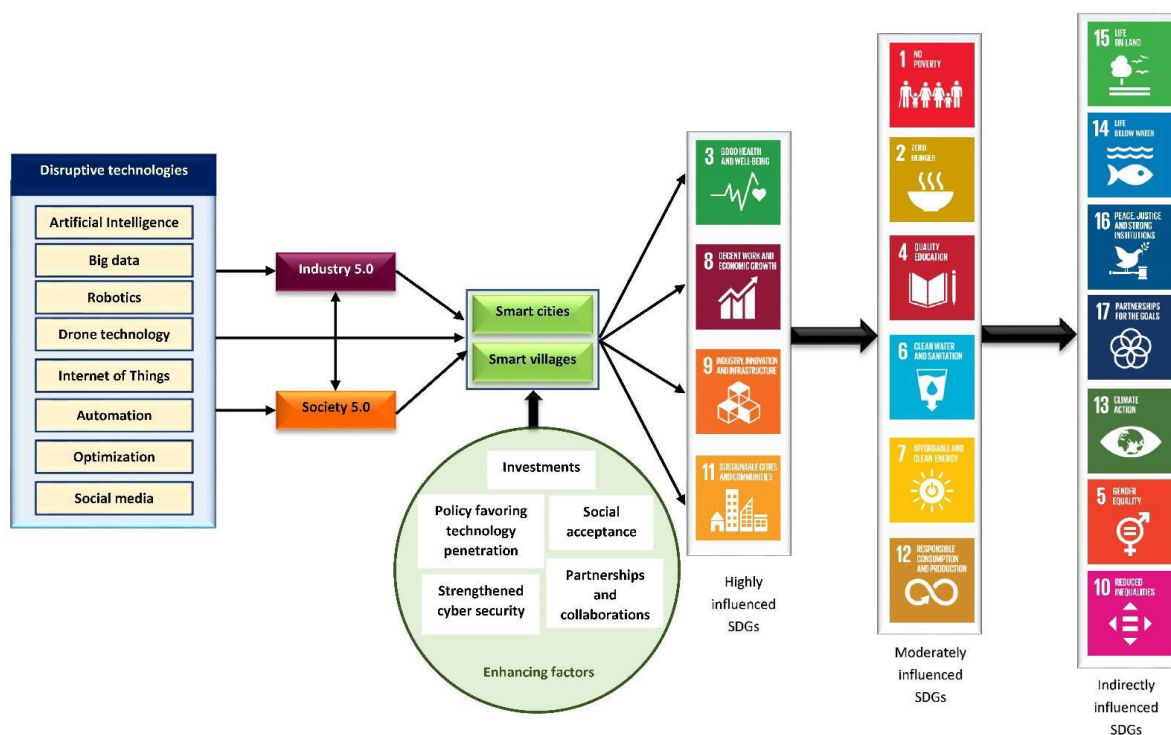
Figure 8 - *Smart Method*



Source: <https://blog.anhanguera.com/o-que-e-o-metodo-smart/>

The application of this method is versatile because it can be used for any objective, regardless of its nature. The aim of intelligent education is to develop the quality of continuous improvement of learners (Zala *et al.*, 2023), through technology and innovation, towards achieving progress in the interaction between local government and citizen participation (Branco *et al.*, 2023). With this in mind, the diagram (Figure 9) presented by Kasinathan *et al.* (2022) shows the contribution of disruptive technologies to meeting the SDGs and establishing society 5.0 through the development of *smart cities* and *smart villages*.

Figure 9 - Influence of the integration of disruptive technologies on the SDGs



Source: Kasinathan et al. (2022)

Muis & Suparman (2023) add that each individual must be able to respond to the development of this technology so that it can be used optimally. In order to be able to realise their aspirations to self-education, each person must be able to find, not only at school and university, but also in all the places and circumstances they can, processes and instruments capable of making personal study a fruitful activity (Almeida, 2023). The article by Jing *et al.* (2023) refers to the need to explore and promote pilot programmes for future learning centres - initially incorporated into university libraries - for the development of a new paradigm in the training of first-class talent, in order to drive a society that learns to learn, with satisfaction, anytime and anywhere.

2.2 Assessment strategies and tools on adaptive platforms with AI

‘If adaptive learning requires teachers to be curators and no longer guardians and transmitters, they need to acquire skills and develop strategies to teach *online*’ (Andrade, 2018: 40). ‘With the consolidation of virtual learning spaces via the internet, these environments have strategically hosted virtual learning objects’ (Dayse *et al.*, 2022: 10). Virtual Learning Objects (VLOs) articulate different digital educational resources in a dynamic, didactic and motivating context and are classified according to their pedagogical use into four groups: instruction, collaboration, practice and assessment (Gutiérrez-González *et al.*, 2023). VLOs are stored in Learning Object Repositories (LOs), which are available free of charge on various *websites*. Mendes (2023) points out that the virtual environment for adaptive learning can be implemented using simulators, virtual laboratories, gamification and games; not neglecting the use of ‘brain storming, concept mapping, discussion lists/forums, problem solving, learning/evaluation in

10th International CEO Communication, Economics, Organization & Social Sciences Congress pairs/groups/teams, case studies, dramatisation/storytelling, symposium, panel, seminar, brainstorming/word cloud, verbalisation and observation group, mock jury, directed study, objective test, discursive test, rubrics, portfolios/blogs, *podcasts/videos*, social networks, among others’ (de Queiroz Gonçalves *et al.* , 2021: 504). Adaptive platforms with AI (Figure 10) make it possible for each person and/or organisation to draw up an effective learning plan that includes: well-defined goals; their implementation in small steps; the carrying out of activities using diverse resources and tools, as well as the adoption of detailed deadlines with the respective assessment (diagnostic and compatible with the different ways and paces of learning; continuous and recursive - taking advantage of mistakes - so that the learner and/or organisation redoes the learning tasks whenever necessary).

Figure 10 - *Smart* assessment in adaptive learning with AI



Source: <https://espresso3.com.br/serie-hospital-albert-einstein-6-de-6-aprendizagem-adaptativa-na-saude/>

The use of rubrics (holistic and analytical) to accompany this process is very practical as an evaluation guide, because according to Amante and Oliveira (2019: 19): ‘They clarify standards and grading norms to be followed; They help students to have clear expectations of what is required of their performance; Encourage reflective practice by students and teachers; Holistic rubrics save time by minimising the number of decisions made by assessors; Analytical rubrics help provide useful feedback on specific areas of performance, identifying strengths and weaknesses.’ Communicating results in a timely manner ‘implies providing *feedback*, a fundamental component of learning in reflective construction’ (Amante and Oliveira, 2019: 20) to improve performance, and one that is ideally aligned with each type of human intelligence. In this context, new AI tools are awaited for this purpose, in order to reach diverse audiences. Holding well-founded discussions with evaluation rubrics included - using the Kialo Edu tool (<https://www.kialo-edu.com/pt>) - is very suitable for stimulating collective intelligence in virtual learning environments and, in this sense, could be applied within an exponential organisation to debate the current and future evolution of AI tools for providing adequate *feedback* to the different types of human (and non-human?) intelligence in order to continue moving towards the development of a society that is happily learning to learn, anytime and anywhere.

Society 5.0 offers an optimistic vision of the future, where technology acts as a powerful ally in building a more intelligent, sustainable and human-centred world. Intelligent education, with the effective use of digital technologies, has the potential to prepare individuals and professionals for a constantly evolving future, where learning is continuous, formative, satisfying, accessible anywhere and at any time, towards the principle of self-directed learning. Learning assessment on adaptive platforms with AI, suited to different types of intelligence, can transform the educational landscape. By personalising the learning and assessment process, these platforms promote more autonomous, equitable, effective and satisfying education, better preparing learners for the challenges and opportunities of the future.

REFERENCES

- Almeida, K. S. (2023). *Educação Inclusiva: a resignificação do resgate da cidadania*. Editora Dialética.
- Amante, L. (2021). avaliação digital. *RE@ D-Revista de Educação a Distância e Elearning*, 1-4.
- Amante, L.; Oliveira, I. (2019). Avaliação e Feedback. Desafios Atuais. e-book, MPV Inovaç@o, Universidade Aberta: Lisboa 27 pp. ISBN 978-972-674-846. <https://repositorioaberto.uab.pt/handle/10400.2/8419>
- Andrade, Jéssica Zacarias de. *Aprendizagem Híbrida e Adaptativa: Caminhos na Relação Educação e Tecnologias*. 2018. Tese (Doutorado em Educação) - Programa de Pós-Graduação em Educação, Pontifícia Universidade Católica do Rio de Janeiro, Rio de Janeiro, 2018.
- Arce (2022). Los tipos de Inteligencia – Nuevas tendencias. <https://www.juanbarrios.com/los-tipos-de-inteligencia-nuevas-tendencias/> Consultado em 9/6/2024
- Branco, T., Fonseca, I. C., & Ugeda, L. (2023, June). Smart Governance Models and Solutions. In *2023 18th Iberian Conference on Information Systems and Technologies (CISTI)* (pp. 1-6). IEEE.
- Dayse da Silva Nascimento, A. ., de Brito Xavier, D. ., Adeilton de Oliveira Andrade, E. ., & José Ribeiro Carapuça, M. . (2022). OBJETOS VIRTUAIS DE APRENDIZAGEM COMO POTENCIALIZADOR DO ENSINO. *Humanas Em Perspectiva*, 7. <https://doi.org/10.51249/hp07.2022.1047>
- de Abreu, E. E., & de Andrade, F. J. (s.d.). OBJETOS VIRTUAIS DE APRENDIZAGEM: UM INSTRUMENTO AVALIATIVO PARA A EDUCAÇÃO.
- de Barros Neto, J. P. (2020). Gestão de pessoas 4.0: liderança e aprendizado diante da inteligência artificial e da Quarta Revolução Industrial. *na Gestão de Pessoas*, 13.
- Demir, K. A. (2021). Smart education framework. *Smart Learning Environments*, 8(1), 29.
- de Queiroz Gonçalves, G. S., Nunes, K. D. C. S., & Souza, R. A. (2021). A avaliação da aprendizagem e as tecnologias digitais: apontamentos para a prática pedagógica. *Revista Meta: Avaliação*, 13(40), 491-514.
- de Queiroz, M. A. L., Borralho, A. M. Á., & de Matos, M. G. (2023). Avaliação formativa: interação entre ensino, avaliação e aprendizagem na prática docente: Formative assessment: interaction between teaching, assessment and learning in teaching practice. *Revista Cocar*, 18(36).
- de Oliveira, F. M. F., & Bizerra, A. M. C. (2023). Objetos virtuais de aprendizagem como recurso pedagógico na educação ambiental: Um mapeamento dos repositórios institucionais. *Revista Contexto & Educação*, 38(120), e13292-e13292.
- DicionarioTec (2022). Aprendizagem Adaptativa. <https://dicionariotec.com/posts/aprendizagem-adaptativa> Consultado em 9/6/2024
- Guimarães, R. R., Malacarne, V., & Alves, F. L. (2024). CHATGPT, Metaverso, Web3 e outras tecnologias: desafios à educação do futuro. *Debates em Educação*, 16(38), e16114-e16114.
- Gutiérrez-González, C., Caicedo, L. M., Maldonado, L. E., & Cubillos, Y. T. (2023). Análisis de la producción científica relacionada con Recursos Educativos Digitales (RED) y Objetos Virtuales de Aprendizaje (OVA), entre 2000–2021. *Revista de Investigacion Educativa*, 41(1), 263-280.
- Herrero Consultoria (2021). A Indústria 5.0, a Sociedade 5.0 e a Nova Estratégia dos Negócios. <https://herreroconsultoria.com.br/industria-5-0/> Consultado em 3/6/2024
- ISC - Intelligence Service Center (s.d.). Gestão de TI na Era da tecnologia Exponencial. <https://isc.net.br/blog/gest%C3%A3o-de-ti-na-era-da-tecnologia-exponencial> Consultado em 1/6/2024
- Ismail, S., MALONE, M. S., & GEEEST, Y. V. (2015). Organizações exponenciais. *Por que elas são*, 10.
- Jing, Y., Cong, H., Jixun, W. e Xue, B. (2023). Exploração e Prática do Centro de Aprendizagem do Futuro no Contexto da Biblioteca Inteligente. *Diário Libraly*, 42 (389), 23.

- 10th International CEO Communication, Economics, Organization & Social Sciences Congress**
- Júnior, J. F. C., de Lima, P. P., de Oliveira, L. C. F., dos Santos Maulais, C. N., Reinoso, L. F., dos Reis Neto, R. A., & Moraes, L. S. (2023). APRENDIZAGEM ADAPTATIVA COM INTELIGÊNCIA ARTIFICIAL: UMA PROPOSTA PARA A EDUCAÇÃO. *Revista Educação, Humanidades e Ciências Sociais*.
- Kasinathan, P., Pugazhendhi, R., Elavarasan, R. M., Ramachandaramurthy, V. K., Ramanathan, V., Subramanian, S., & Alsharif, M. H. (2022). Realization of sustainable development goals with disruptive technologies by integrating industry 5.0, society 5.0, smart cities and villages. *Sustainability*, 14(22), 15258.
- Llanga Cantuña, J. P., Vazco Silva, C. D., Aguas Díaz, C. J., & Acosta Coba, V. G. (2021). Tecnologias exponenciais no desenvolvimento de novas habilidades de trabalho. *Horizontes Revista de Investigación en Ciencias de la Educación*, 5(20), 205-214.
- Magaldi, S., & Neto, J. S. (2022). *Liderança disruptiva: habilidades e competências transformadoras para liderar na gestão do amanhã*. Editora Gente.
- Matsumota (2018). Organizações exponenciais – Resumo do livro. <https://leonardo-matsumota.com/2018/03/30/organizacoes-exponenciais-resumo-do-livro/> Consultado a 2/6/2024
- Mendes, S. R. P. N. (2023). Aedes em foco: ambiente virtual com recursos de aprendizagem adaptativa.
- Muis, A., Nasruddin, N., & Suparman, S. (2023). Life Skills in Education in the Smart Society 5.0 Era. *JUPE: Jurnal Pendidikan Mandala*, 8(4), 1381-1385.
- MUNIZ et al. (2020). Jornada do Ágil Escalado. Brasport.
- Muniz, A., Rodrigues, J., Almeida, J. G., Paulo, P., & Pereira, G. (2023). *Jornada da Liderança Exponencial: construindo uma relação humanizada nas organizações com destaque para o papel executivo*. Brasport.
- Portella (2022). Tecnologias exponenciais e as transformações pelo mundo. <https://pt.linkedin.com/pulse/tecnologias-exponenciais-e-transforma%C3%A7%C3%B5es-pelo-mundo-braga-portella> Consultado em 2/6/2024
- ROSEIRA, J. V. G., & JOSÉ, M. (2020). *O Processo individual de coaching executivo como exponencial das competências de liderança-Estudo de Caso numa amostra de chefias intermédias grande empresa* (Doctoral dissertation).
- Santo, E. D. E., Cardoso, A. D. L., & Santos, A. G. D. (2023). Avaliação da Aprendizagem no Ensino a Distância Online: perspectivas teórico-metodológicas. *Revista da FAEBA: Educação e Contemporaneidade*, 32(69), 261-276.
- Schorn, B., & Borba, E. Z. (2019). O Impacto da Inteligência Artificial na Relação dos Bancos com os Millennials na Era Pós-Digital.
- Souza dos Santos, J., Souza de Carvalho, M. L., Batista da Costa, V. E., Alves Roberto, J. C., & Lira Pinto Junior, J. R. (2023). Planejamento estratégico do centro de ensino alberto conceição: desenvolvimento da gestão estratégica educacional. *GeSec: Revista de Gestao e Secretariado*, 14(10).
- Tham, J. C., & Verhulsdonck, G. (2023). Smart education in smart cities: Layered implications for networked and ubiquitous learning. *IEEE Transactions on Technology and Society*, 4(1), 87-95.
- Tolfo, C. (2023). Uma abordagem para o ensino e aprendizagem sobre Transformação Digital. *Research, Society and Development*, 12(8), e0212842805-e0212842805.
- Zala, K., Kothari, S., Patel, H., Bhola, A., & Acharya, B. (2023, October). Smart Education Model: Future Learning and Teaching. In *2023 IEEE 11th Region 10 Humanitarian Technology Conference (R10-HTC)* (pp. 64-67). IEEE



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**A DuPont Analysis and Evaluation Approach: Impact of Government
Restrictions Related to COVID-19 on Financial Performance of PT Blue
Bird Tbk (2019 – 2023)**

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ABSTRACT

The COVID-19 disease outbreak has affected various industries globally, including the transportation service sector in Indonesia, particularly PT Blue Bird Tbk. The objective of this research is to examine and assess PT Blue Bird Tbk's financial performance between 2019 and 2023, with an emphasis on the consequences of government-imposed COVID-19 restrictions in Indonesia, namely the Large Scale Social Restrictions, known as PSBB and the Community Activity Restrictions, known as PPKM on PT Blue Bird Tbk's financial performance outcome. The DuPont technique is adopted in this research analysis by decluttering Return on Equity (ROE) to gain more insights about financial leverage, assets efficiency and also profitability over time. This approach enables the identification of strengths and weaknesses in the Company's financial structure. Results reveal significant and notable financial fluctuations, directly linked to the timing and the implementation of COVID-19 restrictions, especially PSBB, which influenced passenger demands and operational capacities within the transportation service sector. Furthermore, this study highlights how resilient PT Blue Bird Tbk has been in the face of regulatory obstacles and provides a comprehensive understanding of how macroeconomic factors can shape financial performance. The DuPont Analysis approach of Blue Bird from 2019 to 2023 reveals substantial financial impacts due to government-imposed COVID-19 restrictions, especially the Community Activity Restrictions (PPKM) and the Large Scale Social Restrictions (PSBB).

Keywords: COVID-19, Transportation Service, DuPont Analysis, Return on Equity, Financial Performance

1. INTRODUCTION

a. Background

COVID-19 has shocked and brought changes in human history, affecting various industries in different parts of the world. The transportation service sector in Indonesia is no exception, namely PT Blue Bird Tbk (Blue Bird). Among the industries that saw the biggest downturns was the transportation and warehousing business sector. Only 58.75% of all companies in the transportation sector are still operating actively (Aziz & Momon, 2021). In an effort to contain and eradicate the COVID-19 pandemic, the government has imposed a number of restrictions that have had a significant impact on Blue Bird, one of the major participants in the transportation services industry. In compliance with Law No. 6 of 2018 related to Health Quarantine, the Indonesian government is placing into action the health quarantine as one of its measures to stop the virus's spread. This is accomplished through the application of Community Activity Restrictions (PPKM) and Large Scale Social Restrictions (PSBB), which are social engineering measures intended to disrupt the COVID-19 transmission chain (Basniwati, 2023). These restrictions constrained mobility and led to reduced passenger volume, creating significant financial pressure on the company.

b. Problem

For Blue Bird, these restrictions brought substantial challenges to the Company, as the restrictions imposed was reducing passengers volume and limiting operational capacities, therefore having an effect on Blue Bird's financial performance. The primary objective of this research is to identify the financial implications of the COVID-19 related restrictions, mainly PSBB and PPKM, to the financial performance of Blue Bird.

c. Scope and Objective

Scope

This research is limited to Blue Bird audited financial performance data from 2019 to 2023, covering both pre-pandemic and post-pandemic, to observe the shifting in the financial performance, as derived below:

- Audited financial performance data through Blue Bird's annual report and other publicly available financial statements.
- The DuPont Analysis's three main elements are the equity multiplier, asset turnover, and profit margin.

Objective

The primary objective of this research is to assess the financial impact of government-imposed COVID-19 restrictions on Blue Bird's performance over the period 2019 to 2023. Specifically, the research aims to decluttering Return on Equity (ROE) through DuPont Analysis to gain insights into profitability, asset efficiency, and financial leverage over the period.

d. Methodology

Research Design

This research adopts a quantitative approach, leveraging the DuPont Analysis to evaluate Blue Bird's financial performance over five years period (2019 - 2023). The DuPont System analysis is a multi-phase financial formula that sheds light on a company's main performance metrics. The primary metrics influencing an organization's ROE are thoroughly examined by the DuPont System model. Determining how well businesses

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manage their capital is the goal of the DuPont System analysis. This analysis combines the DuPont coefficient, which combines the total asset turnover ratio with the profit margin in sales and shows how the two interact to determine the return on assets, the profitability of the assets owned by the company (Oktaviani, Ramli, & Anwar, 2022). ROE is split into three aspects: the first aspect is Net Profit Margin, second aspect is Asset Turnover and the third aspect is Equity Multiplier by the DuPont Analysis, leading to a comprehensive examination of profitability, asset efficiency and financial leverage.

Data Collection

Data is derived from audited Blue Bird's financial statements for period 2019 – 2023 in their annual reports, particularly focusing on Income Statements and Balance Sheets. Contextual data on government's restrictions are obtained from publicly available source.

Research Limitations

Limitations include the reliance on publicly available financial data. It may not capture all qualitative factors.

e. Result Summary

The DuPont Analysis approach of Blue Bird from 2019 to 2023 reveals substantial financial impacts due to government-imposed COVID-19 restrictions, especially the Community Activity Restrictions (PPKM) and the Large Scale Social Restrictions (PSBB). The key findings include:

- Profitability (Net Profit Margin): Profit margin declined significantly, especially during the PSBB period, reflecting the reduced passengers demand and limited operational capacity. Revenue also dropped significantly.
- Asset Efficiency (Asset Turnover): Asset turnover ratio decreased, aligned with the fleet utilization. The reduced frequency of passengers services, resulting in lower asset productivity, especially in the PSBB period.
- Financial Leverage (Equity Multiplier): Financial leverage fluctuated across the observed period as Blue Bird adjusted its capital structure to maintain financial stability. This demonstrates the Company's effort to manage financial risks associated by reduced profitability.

2. LITERATURE REVIEW

a. Impact of COVID-19 on Transportation Services

The transportation sector is an important industrial sector in the economy because it is related to the movement of people and products. The industry most negatively impacted by the COVID-19 epidemic is transportation. The government has imposed extensive social restrictions (PSBB) as a result of the coronavirus outbreak, resulting in people not being able to leave their homes to travel and carry out activities as usual, which has made people's mobility drop dramatically. In the second quarter of 2020, Indonesia's gross domestic product (GDP) dropped by 5.32%, according to statistics released by the Central Statistics Agency (BPS). The sector that saw the biggest decline, accounting for 3.57% of GDP, was transportation and warehousing. This makes national transportation as a whole experience a very drastic decline to the detriment of many companies engaged in transportation (Kusmiati & Sunardi, 2023).

b. PSBB & PPKM PSBB

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The term PSBB emerged from President Joko Widodo who called PSBB an effort that must be made to fight the Covid-19 pandemic. Tuesday (31/3/2020), the government issued Government Regulation Number 21 of 2020. Details regarding the technical implementation of PSBB are regulated through the Regulation of the Minister of Health (Permenkes) of the Republic of Indonesia Number 9 of 2020 concerning Guidelines for Large Scale Social Restrictions in the Context of Accelerating the Handling of Corona Virus Disease 2019 (COVID-19). Referring to the Regulation of the Minister of Health (Permenkes) of the Republic of Indonesia Number 9 of 2020, PSBB is a restriction on certain activities of residents in an area suspected of being infected with corona virus disease 2019 (COVID-19) in such a way as to prevent the possibility of its spread. All of this is done to prevent the spread of public health emergencies that are occurring between people in a certain area (Azanella & Wedhaswary, 2020). The implementation of the PSBB officially ended on January 5, 2021, when the government replaced it with the Enforcement of Community Activity Restrictions (PPKM) as a new approach to controlling the pandemic. PPKM is then enforced at various levels depending on the situation in each region.

PPKM

The government implemented the imposition of restrictions on community activities (PPKM) in Java-Bali starting Monday (11/1/2021). The PPKM restriction rules are contained in the Instruction of the Minister of Home Affairs Number 01 of 2021 concerning the Implementation of Activity Restrictions for the Implementation of Activity Restrictions to Control the Spread of Covid-19 (Arnani & Nugroho, 2021). PPKM lasted almost two years and went through several changes, including Micro PPKM (community-based) and a level system (Level 1 to 4) that is adjusted to the level of COVID-19 cases in each region. The government officially ended PPKM on December 30, 2022. At that time, President Joko Widodo announced the revocation of PPKM throughout Indonesia because the overall situation was considered under control and the level of herd immunity was considered high. PPKM is considered to tend to be looser than PSBB. This is because in the strict PSBB policy, based on preset standards, the governor suggested limitations on community activities to the health minister. Meanwhile, in PPKM, restrictions are determined by regional heads. Indicators for determining the Java and Bali PPKM areas, including; the death rate is above the national average death rate, the recovery rate is below the national average recovery rate, the active case rate is above the national average active case rate and the hospital occupancy rate or bed occupancy ratio for intensive care units (ICUs) and isolation rooms is above 70 percent (Prasetyo & Habibi, 2021). The time frame period of the PSBB restriction was around March 2020 – January 2021 and PPKM restriction was around January 2021 – December 2022.

c. DuPont Analysis in Crisis Situation

The secret to a company's success is its capacity to turn a profit. Financial statement analysis can be used to measure the company's performance and determine its level of success. The DuPont System is one of the instruments available for financial statement analysis. The DuPont system is a graph that displays the return on assets, which is calculated by multiplying the profit margin by the total assets' turnover. This study can be used to characterize the company's general state which includes the level of efficiency of the company in the use of its assets and the net profit on the sales of products generated by the company (Hutasoit, 2019). This approach is particularly useful in times of economic stress, allowing for insights into which elements of ROE are most affected by external shocks.

3. RESEARCH METHOD

a. Question

How did the government-imposed COVID-19 restrictions, particularly PSBB & PPKM, impact the financial performance of Blue Bird, specifically in terms of profitability, asset efficiency and financial leverage, as measured by the element of DuPont analysis from 2019 to 2023?

b. Framework

This research applies the DuPont analysis framework to evaluate the financial performance of Blue Bird by dividing ROE into three main parts:

1. Net Profit Margin (NPM): This calculates the percentage of revenue stays after all costs are subtracted in order to determine **profitability**.

$$\text{Net Profit Margin} = \frac{\text{Net Income}}{\text{Revenue}} \times 100$$

2. Asset Turnover (ATO): This illustrates how effectively the business uses its assets to produce income (**asset efficiency**).

$$\text{Asset Turnover} = \frac{\text{Revenue}}{\text{Total Asset}}$$

3. Equity Multiplier (EM): This scales **financial leverage**, revealing the degree of an asset's financing comes from Shareholder's equity rather than debt.

$$\text{Equity Multiplier} = \frac{\text{Total Asset}}{\text{Shareholder's Equity}}$$

4. Return on Equity (ROE): Combining three fundamental aspects.

$$\text{ROE} = \frac{\text{Net Income}}{\text{Revenue}} \times \frac{\text{Revenue}}{\text{Total Asset}} \times \frac{\text{Total Asset}}{\text{Shareholder's Equity}}$$

Or

$$\text{ROE} = \text{Net Profit Margin} \times \text{Asset Turnover} \times \text{Equity Multiplier}$$

Can be simplified to

$$\text{ROE} = \frac{\text{Total Asset}}{\text{Shareholder's Equity}}$$

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 The DuPont analysis enables a comprehensive view of how each element of ROE contributes to overall performance. By applying this approach, the research attempts to isolate the effects of the restrictions on profitability, asset efficiency and financial leverage (Dwiningsih, 2018).

c. Method Application

The data analysis covers the calculation of ROE and its components for each year from 2019 to 2023 using the DuPont model, then analyzing the trend over the period to get the understanding of the financial impact of PSBB and PPKM. The data collected from publicly audited financial reports of the company. The steps taken are as follow:

- Decluttering ROE: Over the period 2019 – 2023, calculate ROE and the three components (NPM, AT & EM) based on the Blue Bird’s financial data.
- Trend Comparison: Compare each year’s results to observe any significant shifts, especially in the timeframe of PSBB & PPKM.
- Correlation Analysis: Connect the financial fluctuations to the timeframe of PSBB & PPKM.

4. RESEARCH RESULTS

a. Table 1. Net Profit Margin (NPM) Analysis

FY	Net Income (in IDR Mio)	Revenue (in IDR Mio)	NPM (%)
2019	315,622	4,047,691	7.80
2020	-163,183	2,046,660	-7.97
2021	8,720	2,220,841	0.39
2022	364,027	3,590,100	10.14
2023	463,068	4,422,472	10.47

Source: PT Blue Bird Tbk. (2020, 2021, 2022 & 2023). Annual & Sustainability Report.

Based on the data in table 1, this research will give more comprehensive view in form of chart to see the trend and the financial fluctuations. Please see Figure 1.

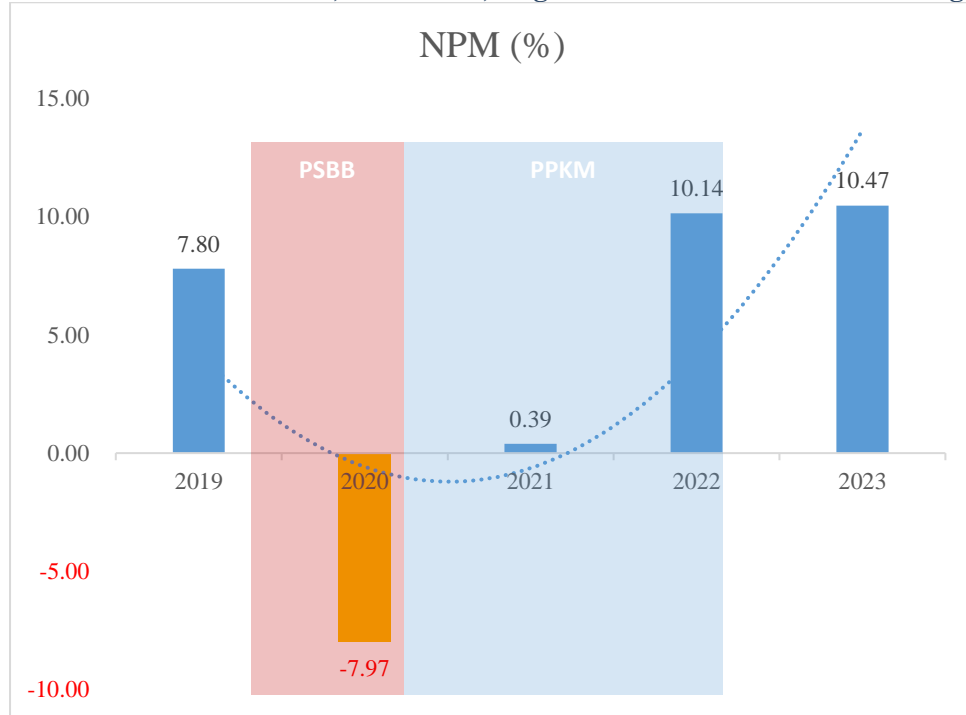


Figure 1. NPM Trend of Blue Bird for Period 2019 – 2023 – PSBB & PPKM Timeframe

Based on Figure 1, we can see that there was a significant correlation between the strict PSBB period and the decrease in Net Profit Margin in 2020 where NPM reached -7.97% compared to 2019 where NPM was 7.8%. The company's 2020 net revenue was Rp2.05 trillion, a substantial drop of 49.44% or Rp2.00 trillion from the previous year's Rp4.05 trillion. Regulations that limit community mobility during the pandemic in 2020 are the root cause of this circumstance, which has a significant influence on declining revenue generated by both taxi and non-taxi vehicles (PT Blue Bird Tbk, 2020). After the PSBB was replaced by PPKM in early 2021, we can see that NPM gradually improved and returned positive to 0.39%. In comparison to 2020, when there was a loss of Rp163.18 billion, total net income in 2021 was Rp8.72 billion, up Rp171.90 billion or 105.34%. The company's improved operational profit and higher Other Income component were the causes of this performance boost (PT Blue Bird TBK, 2021). The looser PPKM in the end of 2022, we can see that the NPM ratio increased significantly at the end of 2022, to 10.14%. Bluebird reported operational revenues of Rp3,590.1 billion for the entire year 2022, a 61.7% increase over Rp2,220.8 billion for the previous year. Operating income for all segments contributed to this gain, which was bolstered by improved fleet utilization and a second semester tariff hike in response to the company's major expense component—the rise in fuel prices. The greater mobilization of PPKM, which is no longer enforced in 2022, is another aspect that contributes to the company's revenue growth (PT Blue Bird TBK, 2022). In 2023, we can conclude that there was no longer residual impact of the government-imposed COVID-19 restrictions to the Blue Bird's financial performance, as seen from the positive and increasing NPM.

b. Table 2. Asset Turnover (ATO) Analysis

FY	Revenue (in IDR Mio)	Total Asset (in IDR Mio)	ATO (Times)
2019	4,047,691	7,424,304	0.55
2020	2,046,660	7,253,114	0.28
2021	2,220,841	6,598,137	0.34
2022	3,590,100	6,893,160	0.52
2023	4,422,472	7,580,224	0.58

Source: PT Blue Bird Tbk. (2020, 2021, 2022 & 2023). Annual & Sustainability Report.

Based on the data in table 2, this research will give more comprehensive view in form of chart to see the trend and the financial fluctuations. Please see Figure 2.

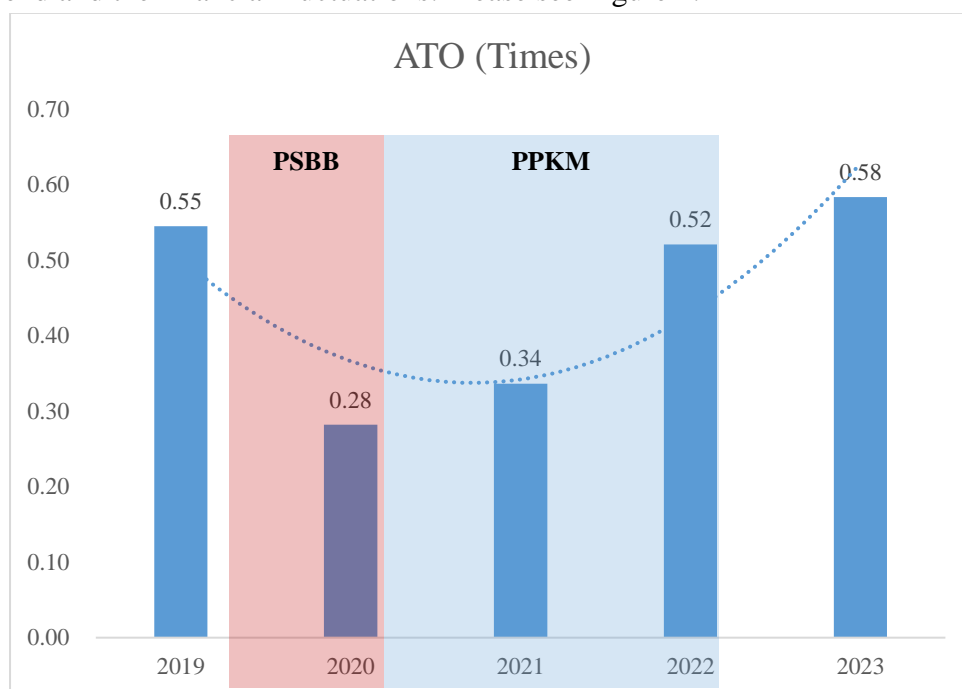


Figure 2. ATO Trend of Blue Bird for Period 2019 – 2023 – PSBB & PPKM Timeframe

Based on figure 2, we can see that there was a significant correlation between the strict PSBB period and the decrease in Asset Turnover in 2020 where ATO was declined to 0.28 times compared to 2019 where ATO was 0.55 times. After the PSBB was replaced by PPKM in early 2021, we can see that ATO gradually improved to 0.34 times. The Company’s total assets as of December 31, 2021, amounted to Rp6,598.14 billion, decreased by 9.03% from the total assets in 2020 at Rp7,253.11 billion. The decrease in assets was mainly due to a decrease in fixed assets (PT Blue Bird TBK, 2021). The looser PPKM in the end of 2022, we can see that the ATO ratio increased quite significantly at the end of 2022, almost similar to 2019 – before COVID-19, to 0.52 times, it was contributed by the increment in the Net Revenue in 2022. In 2023, we can conclude that there was no longer residual impact of the government-imposed COVID-19 restrictions to the Blue Bird’s financial performance, as seen from the increasing ATO.

c. Table 3. Equity Multiplier (EM) Analysis

FY	Total Asset (in IDR Mio)	Shareholder's Equity (in IDR Mio)	EM (Times)
2019	7,424,304	5,408,102	1.37
2020	7,253,114	5,235,523	1.39
2021	6,598,137	5,147,579	1.28
2022	6,893,160	5,350,691	1.29
2023	7,580,224	5,631,438	1.35

Source: PT Blue Bird Tbk. (2020, 2021, 2022 & 2023). Annual & Sustainability Report.

Based on the data in table 3, this research will give more comprehensive view in form of chart to see the trend and the financial fluctuations. Please see Figure 3.

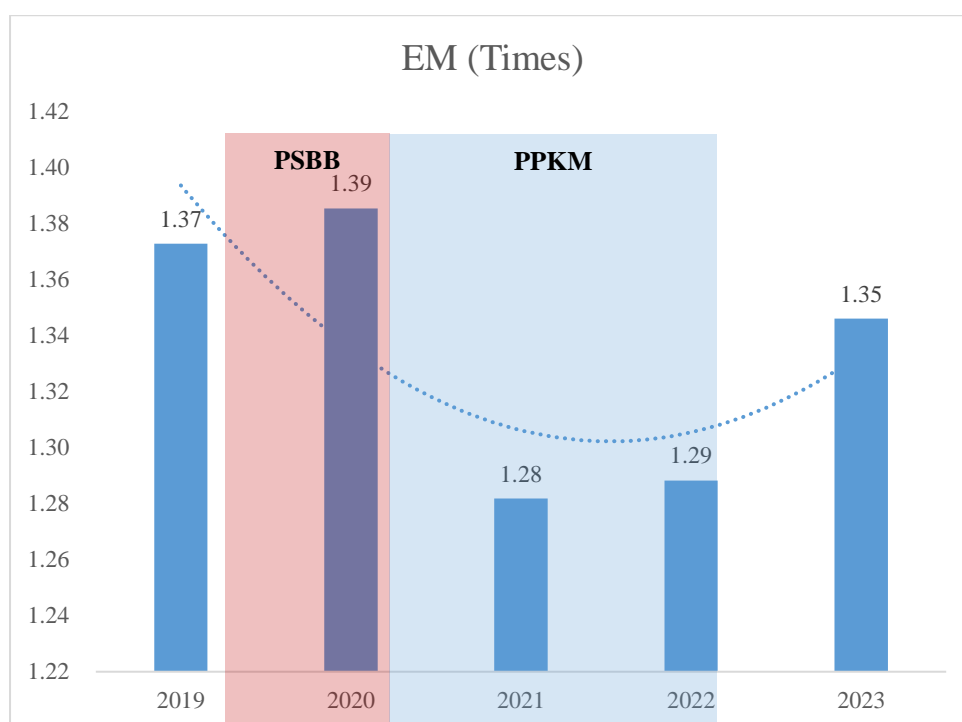


Figure 3. EM Trend of Blue Bird for Period 2019 – 2023 – PSBB & PPKM Timeframe

Based on the figure 3, we can see that there was a slight correlation between the strict PSBB period and the increase in Equity Multiplier in 2020 where EM was inclined to 1.39 times compared to 2019 where EM was 1.37 times. After the PSBB was replaced by PPKM in early 2021, we can see that EM improved to 1.28 times and keep stable in 2022, about 1.29 times. In 2023, the EM ratio increased to 1.35, it was due Total Asset increased significantly. In 2023, the total value of current assets was Rp1.50 trillion, an 8.48% increase over 2022's Rp1.38 trillion. The main cause of this gain is the 10.38% growth in cash and cash equivalents, which went from Rp890.96 billion to Rp983.43 billion, indicating better liquidity. Prepaid taxes also contributed to the increase, rising by Rp60.90 billion, or 10.92%, to Rp66.45 billion. In contrast, there was a 13.5% and 16.4% decline in trade receivables and other receivables, respectively, showing that, in comparison to the prior year, the company's customer profile has improved liquidity. In 2023, the total value of non-current assets was Rp6.08 trillion, a 10.34% rise over 2022's Rp5.51 trillion. In keeping with the company's expansion through fleet additions and rejuvenation in 2023, which is represented in the increase in fleet numbers from 20,830 to 22,998 across all segments, the primary cause of this increase is the growth in fixed assets. In 2022, the company's total assets were Rp6.89 trillion; in 2023, they were Rp7.58 trillion, a

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9.97% growth. This rise is a result of the company's investments and business expansion (PT Blue Bird Tbk, 2023).

d. Table 4. Return of Equity (ROE) Analysis

FY	NPM (%)	ATO (Times)	EM (Times)	ROE (%)
2019	7.80	0.55	1.37	5.84
2020	-7.97	0.28	1.39	-3.12
2021	0.39	0.34	1.28	0.17
2022	10.14	0.52	1.29	6.80
2023	10.47	0.58	1.35	8.22

Source: PT Blue Bird Tbk. (2020, 2021, 2022 & 2023). Annual & Sustainability Report.

For the calculation of ROE, we are validating the results using the simplified formula, as seen in table 5.

Table 5. Validation of ROE of Blue Bird for Period 2019 – 2023 Using Simplified Formula

FY	Net Income (in IDR Mio)	Shareholder's Equity (in IDR Mio)	ROE (%)
2019	315,622	5,408,102	5.84
2020	-163,183	5,235,523	-3.12
2021	8,720	5,147,579	0.17
2022	364,027	5,350,691	6.80
2023	463,068	5,631,438	8.22

Source: PT Blue Bird Tbk. (2020, 2021, 2022 & 2023). Annual & Sustainability Report.

Based on the data in table 4 and 5, this research will give more comprehensive view in form of chart to see the trend and the financial fluctuations. Please see Figure 4.

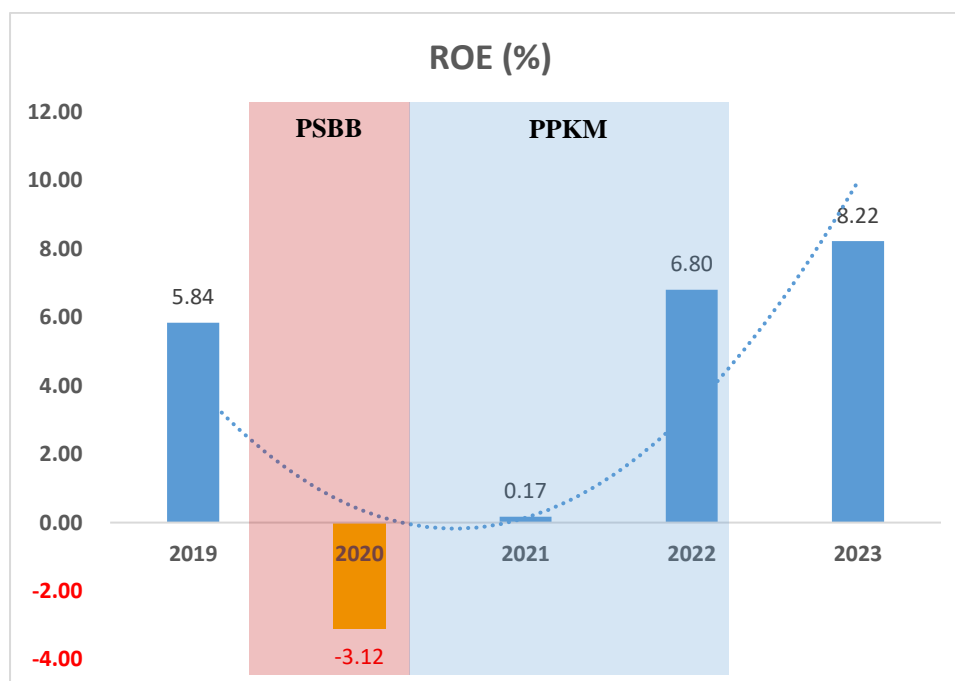


Figure 4. ROE Trend of Blue Bird for Period 2019 – 2023 – PSBB & PPKM Timeframe

From the ROE perspective seen in figure 4, we can conclude that the impact of PSBB significantly impacted the Company's ROE in 2020, shifting the ROE to -3.12%, compared to ROE in 2019 amounting 5.84%. After the PSBB was replaced by PPKM in early 2021, along



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the way, the ROE returned to positive in 2021, amounting 0.17% and rose significantly in 2022, amounting 6.8%. In 2023, we can conclude that there was no longer residual impact of the government-imposed COVID-19 restrictions to the Blue Bird's financial performance, as seen from the positive and increasing ROE.

5. CONCLUSION AND RECOMMENDATIONS

Conclusion

This research is aiming on evaluating the financial impact of government-imposed COVID-19 restrictions (PSBB & PPKM) using the DuPont analysis method. The analysis covers for financial year period 2019 to 2023, using publicly available financial performance data of Blue Bird.

This research finds that the restrictions significantly influenced the Company's financial performance by limiting operational capacity and reducing passenger demand, leading to notable decline in profitability and asset efficiency, especially in PSBB period, rather than PPKM timeframe. This research also demonstrates that government-imposed restrictions, can directly impact the financial health of a transportation service companies. The results suggest that profitability, asset efficiency and financial leverage, are vulnerable to sudden criteria, as shown by the fluctuations in Blue Bird's NPM, ATO and EM over the study period. Conclusions can be drawn, that Blue Bird has demonstrated their resilience amidst regulatory pressures.

The findings indicate that the PSBB restrictions contributed substantial adverse impact, as derived below:

- Profitability (Net Profit Margin): Profit margin declined significantly, especially during the PSBB period, reflecting the reduced passengers demand and limited operational capacity. Revenue also dropped significantly.
- Asset Efficiency (Asset Turnover): Asset turnover ratio decreased, aligned with the fleet utilization. The reduced frequency of passengers services, resulting in lower asset productivity, especially in the PSBB period.
- Financial Leverage (Equity Multiplier): Financial leverage fluctuated across the observed period as Blue Bird adjusted its capital structure to maintain financial stability. This demonstrates the Company's effort to manage financial risks associated by reduced profitability.

Limitations include the reliance on publicly available financial data. It may not capture all qualitative factors such as impacts of PSBB and PPKM restrictions on the Company's performance, customer sentiments, internal Company's strategies, etc. Additionally, the analysis does not account for potential recovery efforts outside of the observed financial data, which might have impacted the company's operational resilience.

Theoretically, this research emphasizes the approach of DuPont Analysis in times of force majeure, where Decluttering ROE offers insight into specific areas that significantly affected by external shocks. Practically, it highlights the importance of operational flexibility and efficient capital management in facing challenges.

Recommendation

Based on the research, some recommendations were as follow:

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- Operational flexibility: To improve resilience against similar conditions in the future, it is recommended that Blue Bird diversify their services or adopting a flexible business model that can operate efficiently under various conditions.
- Leverage and liquidity management: Maintaining an optimized capital structure and adequate liquidity are important for their financial stability.
- Business Continuity Management: Blue Bird should develop a long-term crisis management strategy that includes contingency plan for prompt adaptation to external shocks, such as force majeure, regulatory restrictions, consumer demand changes, etc.

REFERENCES

- Arnani, M., & Nugroho, R. S. (2021, January 11). *PPKM Mulai Diberlakukan Hari Ini, Simak Berikut Bedanya dengan PSBB*. Retrieved from Kompas.com: <https://www.kompas.com/tren/read/2021/01/11/141500665/ppkm-mulai-diberlakukan-hari-ini-simak-berikut-bedanya-dengan-psbb>
- Azanella, L. A., & Wedhaswary, I. D. (2020, April 13). *Apa Itu PSBB hingga Jadi Upaya Pencegahan Covid-19?* Retrieved from Kompas.com: <https://www.kompas.com/tren/read/2020/04/13/153415265/apa-itu-psbb-hingga-jadi-upaya-pencegahan-covid-19>
- Aziz, M. I., & Momon, A. (2021). Analisis Kinerja Keuangan PT. Blue Bird, TBK Indonesia Sebelum dan Saat Pandemi. *Jurnal Ilmiah Wahana Pendidikan, Vol. 7, No. 7, November 2021*, 43.
- Basniwati, A. (2023). Kedudukan Hukum PSBB dan PPKM Dalam Penerapan. *COLLEGIUM STUDIOSUM JOURNAL, VOL. 6 NO. 1, JUNI 2023*, 125.
- Dwiningsih, S. (2018). Analisis Du Pont System untuk Menilai Kinerja Keuangan Perusahaan (Studi Pada Perusahaan Property & Real Estate LQ45 Yang Terdaftar Di Bursa Efek Indonesia Periode Tahun 2013-2015). *INOBI: Jurnal Inovasi Bisnis dan Manajemen Indonesia, Volume 1, Nomor 2, Maret 2018*, 106-107.
- Hutasoit, Y. R. (2019). ANALISIS DU PONT SYSTEM DALAM MENGUKUR KINERJA KEUANGAN PERUSAHAAN PADA PT FAST FOOD INDONESIA, Tbk YANG TERDAFTAR DI BURSA EFEK INDONESIA. *Financial Jurnal Akuntansi, Volume 5-Nomor 2, Desember 2019*, 41.
- Kusmiati, M., & Sunardi, N. (2023). Analisis Dupont System Dalam Penilaian Kinerja Keuangan Perusahaan (Studi pada Perusahaan Sub Sektor Transportasi yang Terdaftar di BEI Periode 2018 - 2022). *Jurnal Ekonomi, Manajemen dan Akuntansi*, 228.
- Oktaviani, A. V., Ramli, A., & Anwar, I. L. (2022). Analisis Kinerja Keuangan Menggunakan Dupont System pada PT. Mandom Indonesia TBK. *Jurnal Economix Volume 10 Nomor 2 Desember 2022*, 212.
- Prasetyo, W., & Habibi, I. (2021, February 2). *Data: PSBB Ketat Lebih Efektif Tekan Kasus Corona di Jakarta Dibanding PPKM*. Retrieved from Kumparan News: <https://kumparan.com/kumparannews/data-psbb-ketat-lebih-efektif-tekan-kasus-corona-di-jakarta-dibanding-ppkm-1v651YHT2nk/full>
- PT Blue Bird Tbk. (2020). *Annual & Sustainability Report*. Jakarta: PT Blue Bird Tbk.
- PT Blue Bird Tbk. (2021). *Annual & Sustainability Report*. Jakarta: PT Blue Bird Tbk.
- PT Blue Bird Tbk. (2022). *Annual & Sustainability Report*. Jakarta: PT Blue Bird Tbk.
- PT Blue Bird Tbk. (2023). *Annual & Sustainability Report*. Jakarta: PT Bluebird Tbk.



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Navigating The Post Covid-19 Media Landscape: Analyzing MD Pictures
TBK Financial Resilience during the Over The Top (OTT) Boom Post
Covid (2018 – 2023)

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ABSTRACT

The global outbreak of COVID-19 reshaped the media and entertainment industry, accelerating the growth of over-the-top (OTT) platforms as traditional cinema attendance sharply declined. This research explores how MD Pictures adapted to these transformative changes. Through financial ratio analysis, this study analyzes and evaluates the MD Pictures' performance before, during, and after the pandemic period with major concerns in liquidity, profitability, and debt management ratios for the periods 2018 up to 2023. The research gives strategic insights into the strategic decisions that enabled MD Pictures to weather the challenges and capitalize on new opportunities of the digital space by assessing trends of asset utilization and cost efficiency. Key findings from this research reveal that MD Pictures achieved 18% Compound Annual Growth Rate (CAGR) in digital revenues from 2020 to 2023, surpassing the global OTT market average of 6.3%. This growth was driven by strategic partnership with platforms like Disney+ Hotstar, a focus on localized content and optimization of operational costs. Financial ratio analysis brings forth improvements in profitability, liquidity, and debt management as evidence of the adaptability of the company through challenging times. This research presents strategic perspectives regarding the choices made by MD Pictures that facilitated its alignment with global trends while utilizing its local expertise, offering valuable lessons for media executives and stakeholders navigating a rapidly evolving digital ecosystem.

Keywords: Media Industry, Entertainment Industry, OTT Platform, Financial Ratio, Strategic Decision.

The COVID-19 pandemic acted as a disruptive force across industries, with the media sector experiencing accelerated digitization (PwC Global Entertainment & Media Outlook, 2020-2023). In Indonesia, the pandemic underscored the dominance of OTT platforms, as traditional cinema revenues dwindled due to social distancing measures and lockdowns (Samuel Sekuritas MD Pictures Financial Insights, 2023). OTT platforms such as Netflix, Disney+ Hotstar, and Vidio emerged as primary content consumption channels, driven by increased smartphone penetration and affordable data plans (Statista, 2023).

Before the pandemic, MD Pictures was one of the big film production companies in Indonesia, with strong pushes in the local cinema landscape through big hits like *Habibie & Ainun* and *Surga yang Tak Dirindukan*. The company mostly relied on box office releases for profit, which accounted for more than 80% of its income. However, when COVID-19 started, there was a drastic decline in cinema-goers since mandates required the closure of theaters and delayed various productions. The steep drop forced MD Pictures to review its distribution strategy and diversify its income streams (MD Pictures Tbk Annual Reports, 2020).

COVID-19 has dramatically changed Indonesia's media strategy as the country sees a huge rise in digital adoption. OTT platforms, which had been at the secondary level in the entertainment landscape, became primary sources of content consumption.

The younger population in Indonesia, armed with smartphones and affordable data packages, has shifted consumption to on-demand content. During this period, the platforms Netflix, Disney+ Hotstar, and local players Vidio and WeTV continued to expand robustly and became a very competitive digital space (Statista, 2023). In response to these changes, MD Pictures has shifted the focus of its business to OTT distribution, whereby the company uses its large library of content to acquire partnerships with popular platforms such as Disney+ Hotstar and Amazon Prime. The strategic shift minimized losses in revenue and positioned MD Pictures as a key content provider in the Southeast Asian digital ecosystem. This transformation indicates how important digital strategy is to business continuity and growth in a time of disruption. (Chen, 2020; Samuel Sekuritas MD Pictures Financial Insights, 2023).

1. LITERATURE REVIEW

OTT Platforms and Market Dynamics

Trained on data until October 2023, the OTT market around the world saw a swift growth through the COVID-19 pandemic. According to Statista (2023), this growth has been so substantial, rising from \$104.11 billion in 2019 to \$316.4 billion in 2024, with a projected CAGR of 14.3%. In Asia Pacific, a key growth driver added over 40% of global subscriptions, with Indonesia growing into a single biggest market. This was spurred on by affordable OTT subscriptions increasing by 68% from 2020 to 2023 (Bisnis Indonesia, 2023).

Despite these opportunities, challenges persist. Global OTT players face intense competition from regional platforms like Vidio and WeTV, which leverage culturally relevant content and ad-supported models to attract cost-sensitive audiences. Regulatory barriers, including content restrictions and tax policies, further impact growth in emerging markets like Indonesia (Johnson and Allen, 2022)

The rise of OTT platforms has brought opportunities but also challenges, such as intensified competition, rising content production costs, and evolving regulatory frameworks. According to Kumar and Verma (2022), hybrid OTT models like AVOD and TVOD have proven resilient



10th International CEO Communication, Economics, Organization & Social Sciences Congress in monetizing diverse audience segments. Additionally, McKinsey's 2023 report emphasizes the role of AI-driven analytics in improving content recommendations and audience retention.

Localization and Cultural Relevance

Localization is pivotal to engage diverse audience in fragmented markets. Rahman et al. (2021) highlight that localized content enhancing engagement and loyalty with audiences. MD Pictures capitalized on this by producing culturally resonant films, securing a competitive edge over global players like Netflix and Amazon Prime (Samuel Sekuritas MD Pictures Financial Insights, 2023). Kaplan and Haenlein (2021) further emphasize that social media campaign that tailored to regional audiences can amplify content visibility and boost the engagement. MD Pictures' partnership with Disney+ Hotstar to produce Indonesian originals movie contribute significantly to its 30% increase in viewership in 2022.

Localized content not only drives the engagement but also contribute to market penetration in tier-two and tier-three cities, where regional language preferences dominate. Platforms integrate regional language and subtitles expanded their reach significantly, demonstrate the value of localization in reaching underserved markets.

Strategic Partnerships and Technological Integration

Strategic partnerships are critical in scaling operations and enhancing market position. Gomez and Martines (2020) note that collaborations with established global platforms enable content to monetize and audience expansion. MD Pictures leveraged partnership with Disney+ Hotstar and Amazon Prime to secure 500 million views across its digital library by 2023, where it marks a pivotal shift in its revenue streams.

Technology integration has further bolstered these strategies. Patel (2021) highlights that AI-driven analytics enable platforms to align content with consumer preferences, improving engagement and retention. MD Pictures utilize similar tools to optimize its offer, contributing to its financial resilience during the OTT boom.

2. OBJECTIVE

Following are the objectives of this study:

- a. To analyze MD Pictures' financial performance from the year of 2018 to 2023
- b. To evaluate the impact of the OTT boom on the company's revenue streams
- c. To explore strategic initiatives employed by MD Pictures for financial resilience
- d. To assess liquidity, profitability, and debt management ratios and their role in strategic decision-making
- e. To provide actionable insights for industry stakeholders on adapting to evolving consumer preferences

3. METHODOLOGY

This study employs a mixed-method approach that includes:

- a. **Quantitative Analysis:** analyze the financial statements of MD Pictures from 2018 to 2023 to assess revenue growth, profitability, and cost efficiency, referencing the MD Pictures Tbk Annual Reports for these years.
- b. **Financial Ratio Analysis:** calculate and evaluate key financial ratios such as liquidity, profitability, and debt management to gain insights into the company's financial health and its adaptability during the pandemic, and cross-referenced with Samuel Sekuritas MD Pictures Financial Insights (2023).

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- c. Qualitative Analysis: examine case studies of strategic partnerships and digital initiatives to understand the operational shifts within the company, drawing from *Bisnis Indonesia Market Analysis*, 2021.
- d. Comparative Benchmarking: compare the company’s performance with that of local and regional competitors to better understand its market position, as noted by Patel in 2021 and leveraged data from *Bisnis Indonesia Market Analysis* (2021, 2023)
- e. Global Trend Analysis: evaluate MD Pictures' strategies and performance in relation to global OTT market trends to determine their alignment and competitiveness, using data from Statista (2023).

4. RESULT AND DISCUSSION

4.1 Revenue Growth during The OTT Boom

a. MD Pictures experienced a significant revenue boost after 2020, shifting from traditional box office sales to digital platforms (MD Pictures Tbk Annual Reports, 2020-2023). By 2021, digital sales made up more than 80% of total revenue, showcasing a successful transition to OTT distribution (PwC Global Entertainment & Media Outlook, 2020-2023). This shift led to a compound annual growth rate (CAGR) of 18% in digital revenues from 2020 to 2023, outpacing the global average OTT market CAGR of 6.3% during the same timeframe (Statista, 2023). Additionally, MD Pictures' collaborations with major platforms like Disney+ Hotstar significantly expanded its audience reach, with the company reporting over 500 million views across its digital content library by 2023 (Samuel Sekuritas MD Pictures Financial Insights, 2023).

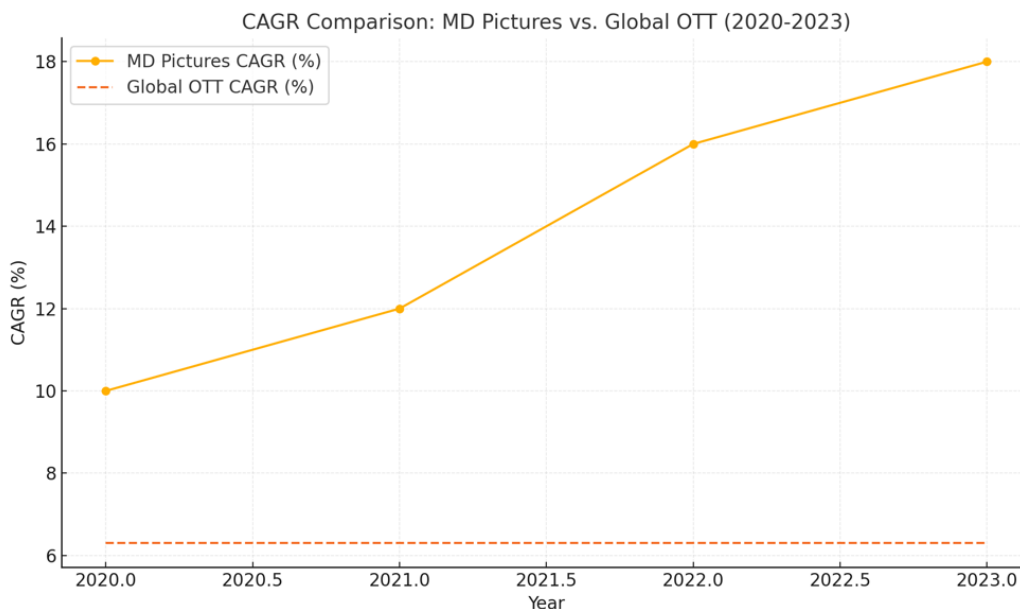


Figure 1: CAGR MD Pictures vs Global

- b. Partnerships with platforms such as Disney+ Hotstar and Amazon Prime enhanced content monetization (Samuel Sekuritas MD Pictures Financial Insights, 2023).
- c. A comparative analysis with competitors shows that MD Pictures has excelled in adapting to digital distribution channels (*Bisnis Indonesia Market Analysis*, 2023).

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- d. By 2023, MD Pictures achieved a compound annual growth rate (CAGR) of 18% in digital revenues, while the overall industry average stood at 12% (Statista, 2023).

Revenue Data

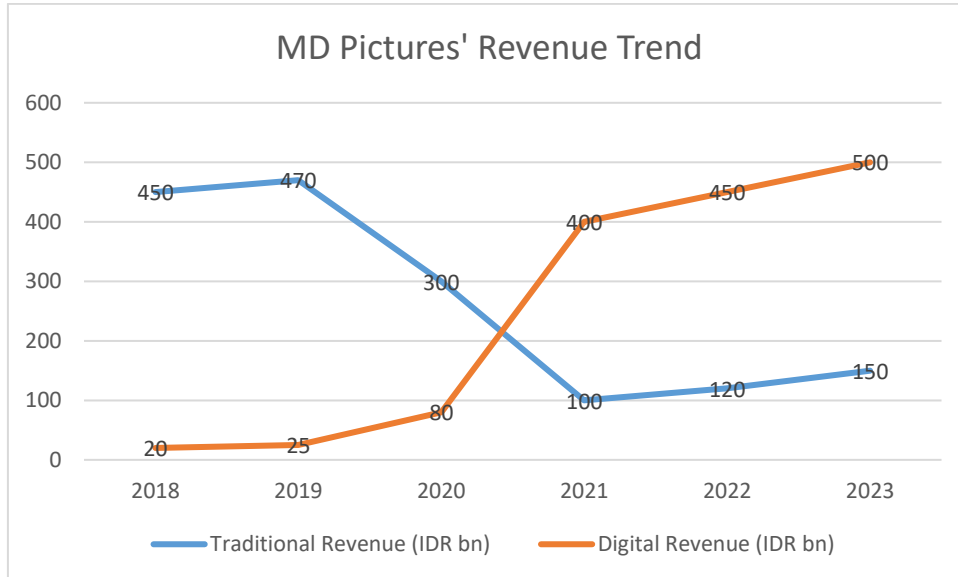


Figure 2: Revenue Trend MD Pictures (2018 – 2023)

Global Comparison

The global OTT market grew significantly during the same period, with revenue reaching 316.40bn in 2024 and projected to grow to 429.40bn by 2029 at a CAGR of 6.30% (Statista, 2023). MD Pictures’ digital revenue growth outpaced this global average highlighting its strong position in the OTT sector

4.2 Cost Management and Profitability

- a. Strategic reductions in Marketing and production expenses during the pandemic improved cost efficiencies (MD Pictures Tbk Annual Reports, 2020 – 2023).
- b. Nett profits rose by 122% in the 1st half of 2021 compare to 2020 (Samuel Sekuritas MD Pictures Financial Insights, 2021).
- c. MD Pictures achieved economies of scale by repurposing existing content for digital platforms (Chen, 2020)
- d. Marketing costs lowered by 40% through targeted digital campaigns (Bisnis Indonesia Market Analysis, 2023).

Expense Data

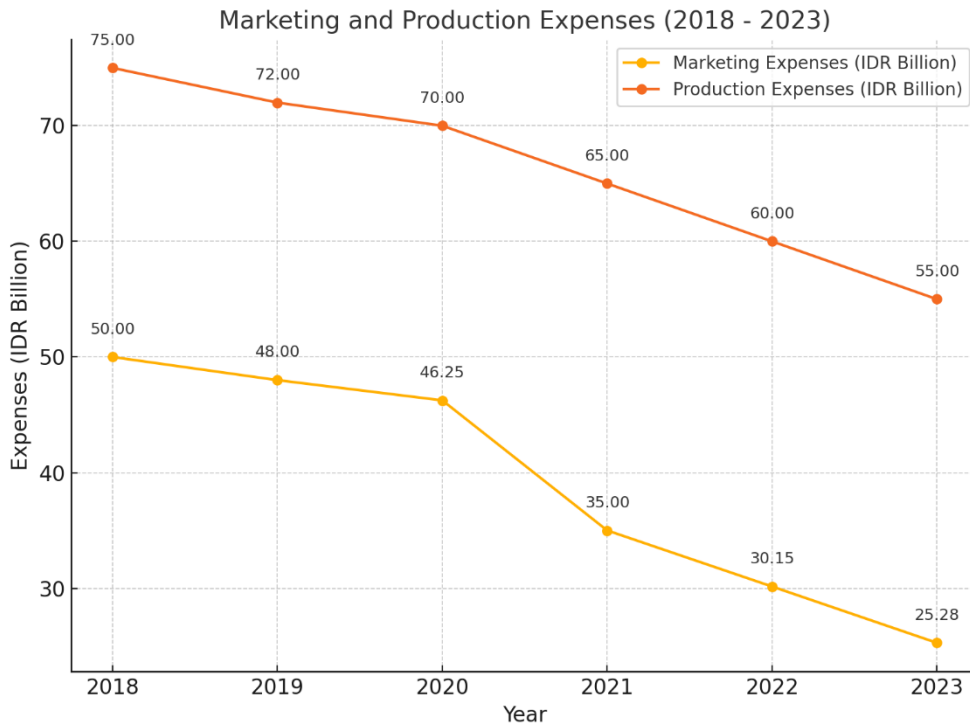


Figure 3: MD Pictures’ Marketing & Production Expense Trends (2018 – 2023)

Global Comparison

Globally, OTT platforms such as Netflix and Amazon Prime implemented similar cost optimizations (PwC Global Entertainment & Media Outlook, 2020 – 2023). MD Pictures’ approach aligns with these global strategies

4.3 Financial Ratio Analysis

	2018	2019	2020	2021	2022	2023
Net Profit Margin (%)	09.57	10.10	09.21	16.00	16.19	18.46
ROE (%)	07.50	07.81	05.83	12.31	13.04	16.00
Debt to Equity Ratio	0.67	0.64	0.70	0.69	0.67	0.67
Current Ratio	2.10	2.20	1.80	2.50	2.40	2.60
Asset Turnover Ratio	0.50	0.55	0.48	0.60	0.65	0.70
Interest Coverage Ratio	4.5	4.8	4.2	5.0	5.5	6.0
Gross Profit Margin (%)	48.00	49.50	45.00	52.00	51.50	53.00
Operating Profit Margin (%)	12.00	13.00	10.00	18.00	17.00	19.00
EPS (IDR)	50.00	60.00	45.00	80.00	90.00	100.00
Cash Flow (IDR-bn)	120	130	80	150	180	200
ROA (%)	6.5	7.0	4.8	8.0	9.0	9.5

Figure 4: MD Pictures’ Financial Ratios (2018 – 2023)

4.3.1 Profitability Metrics:

- a) Net Profit Margin shows consistent improvement from 9.57% in 2018 and peaking up at 18.56% in 2023, with 2022 showing a slight dip to 15.79%. this temporary reduction

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 was due to increased production and marketing costs ties to post-pandemic theatrical releases

- b) Gross Profit Margin improve from 45.00% in 2022 to 51.50% in 2022. It demonstrating better cost management. By 2024, GPM peaked at 53.00% as digital revenues outpaced traditional ones
- c) Operating Profit Margin (OPM) grew from 10.00% in 2020 to 17.00% in 2022, and in 2023 increase to 19.00%, which reflecting sustain efficiency in operational spending and higher revenue contributions from OTT platforms.

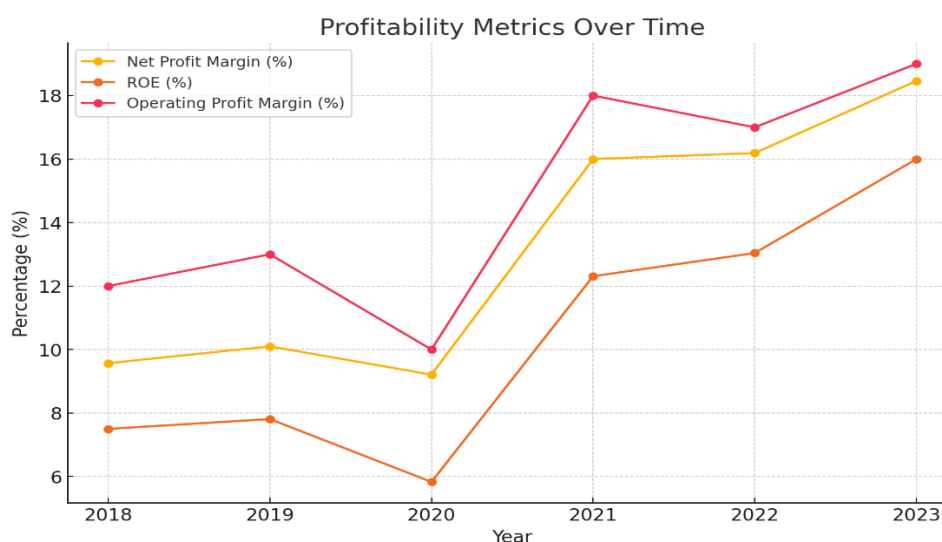


Figure 5: Steady growth in NPM, ROE, OPM from 2018 to 2023

4.3.2 Liquidity and Debt Management

- a) Current Ratio increase consistently from 1.80 in 2020 to 2.40 in 2022, and 2.60 in 2023 where this indicate a stable cash flow situation with sufficient short-term assets to cover liabilities.
- b) Debt to Equity Ratio held steady at around 0.67 during 2022 and 2023, reflecting that MD Pictures' disciplined approach to leverage debt

4.3.3 Stakeholder and Asset Utilization Metrics

- a) ROE increased from 12.31% in 2021 to 13.04% in 2022 and increased further to 16.00% in 2023 where this highlights that the company able to generate higher returns for its shareholders through improvement in digital revenue streams
- b) EPS rose from IDR 80 in 2021 to IDR 90 in 2022 and achieved IDR 100 in 2023, underscoring growth profitability per share as MD Pictures expanded its OTT partnership

4.3.4 Operational Efficiency

- a) Asset Turnover Ratio recovered from 0.48 in 2020 to 0.65 in 2022 and 0.70 in 2023 shows enhanced utilization of assets to generate revenue through digital first content distribution
- b) Interest Coverage Ratio improved from 4.2 in 2020 to 5.5 in 2022 and 6.0 in 2023 showcase better coverage of interest obligations due to rising operating income

5. CHALLENGES AND LIMITATIONS

5.1 Challenges

- 5.1.1 The Indonesian market is heavily influenced by global OTT players such as Netflix and Amazon, which have made substantial investments and utilize sophisticated analytics (Statista, 2023)

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- 5.1.2 The Indonesian OTT market is influenced by rapid changes in consumer preferences and regulatory barriers, which encompass censorship policies and local tax regulations. Competitors like Netflix employ advanced analytics creating a competitive disadvantage for local players (Statista, 2023)
- 5.1.3 Cost pressures are mounting due to increasing production and marketing expenses on the competitive OTT landscape (Samuel Sekuritas MD Pictures Financial Insights, 2023)

5.2 Limitations

- 5.2.1 Limited Access to real-time data: financial ratios depends on reported data which may not reflect real-time changes
- 5.2.2 Market Volatility: rapid changes in consumer behaviour could render recommendations less effective over time
- 5.2.3 Unpredictable Competition: strategic moves taken by competitors specially global OTT players may affect all strategies set by MD Pictures

6. CONCLUSION

MD Pictures Tbk has shown impressive resilience and adaptability amid the significant changes in the media landscape due to the COVID-19 pandemic and the rise of OTT platforms. By forming strategic partnerships with global and regional OTT services like Disney+ Hotstar and Amazon Prime, the company successfully shifted from its traditional revenue model, which relied heavily on theatrical releases, to a more diversified and digital-centric approach. This strategic change not only helped mitigate the negative effects of the pandemic on its core operations but also established MD Pictures as a significant player in the rapidly expanding Southeast Asian OTT market.

The Financial performance of MD Pictures underscores its strategic success. The company successfully achieved 18% CAGR in digital revenues from 2020 to 2024 and this achievement significantly outpacing the global OTT market average of 6.3% during same period. This growth accompanied by notable improvements in key financial metrics as follow:

- 6.1 **Profitability:** Net profit margins rose from **9.57% in 2018 to 18.46% in 2023**, showcase the company's operational efficiency and success in capitalizing on higher-margin digital content.
- 6.2 **Liquidity and Stability:** The current ratio improved from **1.80 in 2020 to 2.60 in 2023**, reflecting enhanced financial stability and effective cash flow management during challenging market conditions impacted by COVID-19.
- 6.3 **Shareholder Returns:** ROE increased from **7.50% in 2018 to 16.00% in 2023**, while EPS doubled to IDR 100, underscoring strong value creation for stakeholders and investors.
- 6.4 **Operational Efficiency:** The company's asset turnover and interest coverage ratios improved steadily, highlight efficient resource utilization and financial discipline.

Additionally, MD Pictures' emphasis on localized content production, tailored to regional consumer preferences, has allowed the company to maintain a competitive advantage over global OTT players in the Indonesian market. This cultural alignment, paired with innovative marketing strategies like targeted digital campaigns, has significantly boosted audience engagement and brand loyalty. These efforts underscore the importance of aligning global industry trends with local market dynamics, a strategy that has proven vital for sustaining growth in diverse markets such as Indonesia.

This study's objectives is to evaluate financial performance, assess strategic adaptations, and provide actionable insights—have been comprehensively met. MD

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Pictures not only exemplifies financial adaptability but also provides a roadmap for media companies navigating periods of rapid technological innovation and shifting consumer expectations. The company's ability to leverage digital innovation, foster strategic partnerships, and sustain financial stability serves as a case study for media executives, investors, and industry stakeholders.

As MD Pictures continues to align its operations with evolving market demands and technological advancements, it is well-positioned to sustain growth and maintain its leadership in both regional and global media landscapes. By capitalizing on its strengths in localization, operational efficiency, and strategic foresight, MD Pictures sets a benchmark for resilience and innovation in the digital era.

7. RECOMMENDATIONS

To sustain or even strengthen its leadership in Southeast Asian OTT market and continues its growth trajectory, here are several strategic initiatives that MD Pictures could focus on:

7.1.1 Expand Localization Effort:

- a) Increase investments in cultural content tailored to diverse regional audiences, particularly in Indonesia's tier-two and tier-three cities where demand for regional language content is high.
- b) Expand collaboration with local filmmakers and writers to ensure authenticity in storytelling, enhancing viewer loyalty and engagement.
- c) Collaborate with regional influencers and content creators to amplify engagement in underserved markets. Localized marketing campaigns tailored to cultural milestones could enhance visibility.

7.1.2 Diversity Revenue Streams:

- a) Exploring hybrid revenue models such Advertising Video On Demand (AVOD) to attract cost-sensitive consumers, specifically in emerging markets.
- b) Exploring Transactional Video On Demand (TVOD) models for premium content to cater niche – high value audiences.

7.1.3 Leverage Emerging Technologies:

- a) Expand the use of AI-driven analytics to predict consumer preferences and use it to optimize content offerings
- b) Integrate blockchain technology to secure and transparent royalty tracking where it can help to reduce revenue leakage and ensuring fair compensation for creators.

7.1.4 Strengthen Strategic Partnerships:

- a) Establish further partnerships with global and regional OTT platforms to improve content dissemination and expand audience engagement
- b) Collaborate with telecommunication providers and internet service providers to offer OTT subscriptions alongside data packages, thereby enhancing accessibility and promoting subscriber increase.

7.1.5 Optimize Production Costs:

- a) Continue to adapt existing content for digital platforms to enhance the return on investment from current intellectual assets.
- b) Invest in virtual production technologies to lower operational expenses while ensuring high-quality output.

7.1.6 Focus on Sustainable Practices:

- a) Adopt environmentally friendly practices in film production and distribution to align with global sustainability objectives and improve brand image.

7.1.7 Expand International Reach:



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- a) Aim for international markets by creating localized versions of popular Indonesian content, utilizing global distribution platforms such as Amazon Prime.
 - b) Engage in international film festivals to boost visibility and attract foreign investment.
- 7.1.8 Monitor and Adapt to Regulatory Changes:
- a) Actively collaborate with policymakers to effectively navigate the regulatory landscape affecting OTT content and revenue models in Indonesia.
 - b) Advocate for supportive policies that foster local content production and international partnerships.
- 7.1.9 Strengthen Competitive Edge:
- a) Benchmark against competitors like Vidio, which capitalizes on affordable pricing, and Disney+ Hotstar, which integrates international and localized content seamlessly.

REFERENCES

- Bisnis Indonesia Market Analysis. (2021, 2023). Insights on the Indonesian OTT Market and Strategic Adaptations. *Bisnis Indonesia*.
- Chen, L. (2020). Consumer Behavior Shifts Towards OTT Platforms During COVID-19 Lockdowns. *Media Consumption Research*, 8(4), 112-125.
- Gomez, R., & Martinez, F. (2020). Partnerships and Growth in OTT Media. *Journal of Digital Media Strategies*, 12(2), 100-122.
- Johnson, P., & Allen, M. (2022). Navigating Global OTT Challenges: A Regulatory Perspective. *International Journal of Media Regulations*, 10(1), 45-61.
- Kaplan, A., & Haenlein, M. (2021). Social Media and OTT: Synergies in Viewer Engagement. *International Journal of Media Management*, 9(1), 44-61.
- Kumar, S., & Verma, A. (2022). AVOD and TVOD: Adapting Revenue Models in Emerging OTT Markets. *Journal of Digital Revenue Models*, 5(3), 88-96.
- Lee, C., Kim, D., & Park, E. (2022). Financial Resilience Strategies for Media Companies During Economic Downturns. *International Journal of Financial Studies*, 10(2), 78-92.
- McLuhan, M. (2021). The Interplay of Traditional and Digital Media in the OTT Era. *Journal of Media Evolution*, 15(2), 55-72.
- MD Pictures Tbk Annual Reports (2018-2023). Performance and Strategic Insights of MD Pictures Tbk.
- Patel, R. (2021). AI in OTT: Enhancing User Experience and Retention. *Emerging Technologies in Media Studies*, 6(4), 112-129.
- PwC Global Entertainment & Media Outlook (2020-2023). Insights on Global OTT Trends and Media Strategies. Retrieved from <https://www.pwc.com>.
- Rahman, A., Singh, K., & Das, P. (2021). Localization Strategies in Emerging OTT Markets: A Case Study on Southeast Asia. *Media Localization Studies*, 4(3), 67-85.
- Samuel Sekuritas MD Pictures Financial Insights. (2023). Financial and Market Performance of MD Pictures.
- Smith, A., & Jones, B. (2021). Digital Transformation in the Media Industry: A Pandemic Perspective. *Journal of Media Management*, 15(3), 45-60.
- Statista. (2023). Global OTT Market Size and Projections. Retrieved from <https://www.statista.com>.



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**Financial Ratio Analysis and Evaluation: An Insight into PT. Sinarmas
Agro Resources and Technology (SMART) Tbk's Performance
in the Palm Oil Industry**

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ABSTRACT

PT Sinar Mas Agro Resources and Technology Tbk (PT SMART Tbk), a subsidiary of Golden Agri Resources (GAR) is one of the world's leading seed-to-shelf agribusinesses and is renowned as a prominent player in the consumer goods sector, within the palm oil industry. PT SMART Tbk has established itself as a leader in both production and distribution through an integrated business model that encompasses the cultivation, processing, and marketing of palm oil products. With a commitment to sustainability, in 2015 PT SMART Tbk launched The GAR Social and Environmental Policy (GSEP) as a roadmap to realizing the twin objectives of sustainable growth and leading a sustainable palm oil industry. The continued focus on consumer preferences and sustainable practices underscores PT SMART Tbk's commitment to long-term growth and profitability in the consumer goods sector. This study examines the financial performance of PT SMART Tbk through financial ratio analysis, by focusing on key metrics such as liquidity, profitability, leverage, and efficiency ratios over the past seven years (2017-2023).

Keywords: Financial Performance, Financial Ratios, Palm Oil Industry, Sustainability



10th International CEO Communication, Economics, Organization & Social Sciences Congress Introduction

Indonesia is a key player in the global palm oil market, serving as the largest producer and exporter. In 2023, the country contributed about 59% of the world palm oil production, amounting to 46,5 million metric tons (MT) out of a total 79 million MT global consumption. This significant output not only generates substantial foreign exchanges earnings (approximately \$ 39 billion in 2022), but also supports the livelihood of over 16 million people in the industry. Palm oil is essential source of GDP for Indonesia, contributing about 4 % from agricultural commodity (GAPKI, 2024). To continue growth sustainably, the business entities/companies are expected to have outstanding performance, and the pivotal backbone is a financial performance.

Financial highlights are important measure of a business or company's operational success, reflecting its overall business health. It serves as an important factor for shareholders, investors, lenders, and other stakeholders. In the context of PT Smart Tbk, a prominent player in the integrated palm oil business in Indonesia and in the global through its holding Golden Agri Resources (GAR), understanding financial performance is paramount due to the industry's inherent volatility and competitive landscape. PT Smart Tbk, as many other companies operating palm oil business, has been facing critical issues on market volatility and pricing pressure as well as regulatory and environmental challenges. The later, in particular driven by global market such as from EU markets who demand high compliance on legality and sustainability of palm oil product derivatives (Live EO, 2023). These regulation's requirement has been triggering high operational cost and limited market access for the industry. PT Smart Tbk is investing in this sustainable production of palm oil in order to meet compliance standards.

Financial statements offer a systematic summary of a business or company's financial activities and these are essential for evaluating business performance. By analyzing financial ratios drawn from these statements, stakeholders and investors can obtain important findings into different aspect of the company's operations, namely profitability, liquidity, leverage, and efficiency (Brigham and Ehrhardt, 2016).

This research's aims are to find out significance of financial ratio analysis, illustrating how these ratios reflect the company's current financial position and to shew strategic decision-making and project the future growth. By systematically examining the financial ratios, the company can have better portrait showing the complexities of business entities/company's financial highlights within broader contexts palm oil sector. For PT Smart's Tbk, this understanding is essentially important, given the industry's current challenges and competitive nature influenced by global market demand and applied trade regulations.

Literature Review

Financial Statements

Generally Accepted Accounting Principles (GAAP) and Indonesian Financial Accounting Standards both stress importance of financial analysis in evaluating a company's profitability across time, including both past and present outcomes. The goal of this analytical method is to produce accurate projections and estimations regarding the company's operational success and financial health in the future (Bernstein & Wild, 1999). The standard components of financial statements include the cash flow statement, income statement, balance sheet, and statement of



10th International CEO Communication, Economics, Organization & Social Sciences Congress changes in equity. (Anthony et al., 1999). Each of these components has a distinct purpose: the balance sheet shows a company's assets, liabilities, and equity at a specific point in time, while the income statement shows profitability over a specified time period. The statement of changes in equity provides a detailed description of the equity variations.

Analysis of financial statement involves an evaluation of company's financial data to assess its performance and facilitate future forecasts. According to Koller et al. (2010), this process utilizes historical information to detect trends and anomalies that may impact business decisions. Similarly, White et al. (2003) highlight that such analysis to aids stakeholders in understanding a company's operational efficiency and financial stability, allowing for comparisons with industry benchmarks and historical performance.

Financial Ratios

The analysis of financial ratio is a quantitative method of assessing a company's performances by comparing various figures from its financial statements. Brigham and Ehrhardt (2013), stated that financial ratios serve multiple purposes, including evaluating profitability, liquidity, efficiency and solvency. Ratio analysis compares a company's current performance with historical data or industry benchmarks to assess its operational efficiency and financial health. Furthermore, measures including the debt to equity ratio (DER), return on equity (ROE), and current ratio offer crucial information about a company's ability to gain revenue, handle short term obligations, and make efficient use of debt. By employing financial ratios, stakeholders can enhance their decision-making capabilities, detect potential issues, and identify opportunities for growth and enhancement.

METHODOLOGY

The study employs a descriptive methodology through a quantitative approach. It analyzes time series secondary data spanning seven consecutive years (2017-2023) using methods that are deemed relatively equitable for financial statements. The data utilized in the study is obtained from ratio analysis calculations based on the publicly accessible financial statements of PT Smart Tbk. Ratio analysis provides a fundamental and essential tool for evaluating the financial position by comparing data across accounts reported in the financial statements. This approach addresses inquiries regarding the company's financial condition and offers insights into both short and long-term financial and operational evaluations, aiding in the identification of business trends and the prediction of potential failures, thereby providing early warnings for necessary adjustments (Daryanto et al, 2020)

The profit and loss statement, balance sheet, income statement, and cash flow statement for a certain time period are the financial statements that are frequently utilized for ratio analysis. The author of this study concentrates the financial performance analysis on the activity, profitability, solvency, and liquidity ratios.

Liquidity Ratio

A liquidity ratio is a financial indicator to determine a company's ability to fulfil its short term debt responsibilities (Brigham and Ehrhardt, 2016). This metric assesses whether a company able to use current assets to pay off its current liabilities. The evaluation focuses on two primary ratios namely Current Ratio and Quick Ratio.



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1. **The current ratio (CR)** is determined by dividing a company's current assets by its current liabilities over a specific time frame. This ratio is commonly used to assess the business entities capacity to meet its short term financial commitments. Formula to measure the ratio is simply determined as follow.

$$\text{Current Ratio (CR)} = \text{Current Assets} / \text{Current Liabilities}$$

Secure ratio is supposed to be above 1.0 and when potential investors or creditors seek a company to invest, they will consider this minimum figure. A company with healthy liquidity ratios (more than 1.0) is more likely to be approved for credit (Gillingham, 2015).

2. **The quick ratio (QR)** is obtained by dividing liquid current assets by current liabilities (Suarjana, 2015). This ratio indicates the company's capacity to cover its short-term liabilities with its current assets, excluding inventory.

$$\text{Quick Ratio} = \text{Monetary Current Assets} / \text{Current Liabilities}$$

When the ratio hits at least 1.2x, the outcome is deemed secure for lenders, investors, and stakeholders. However, according to Gillingham (2015), 1.0x would be considered sufficient.

Solvency Ratio

The ability of a business to meet its short- and long-term obligations is evaluated using the solvency ratio. Debt to Equity Ratio (DER) and the Long term Debt to Capitalization Ratio are two important measures that show the solvency. Both ratios are important measures of a business's financial leverage and solvency. In particular, the DER compares total liabilities against shareholders' equity to determine financial leverage. Furthermore, the DER shows how much debt a business is employing to fund its assets in comparison to the equity value it represents. They can all be explained as follows:

1. **Debt to equity ratio (DER).** A preliminary indicator of solvency, DER calculates the value of debt to equity or leverage (Brigham and Ehrhardt, 2016). The ratio's outcome has no universally accepted baseline. Nonetheless, common understanding is the greater the ratio, the better for the businesses. The formula is defined as follow:

$$\text{Debt to Equity Ratio (DER)} = \text{Total liabilities} / \text{Shareholder's Equity}$$

2. **Long-term Debt to capitalization ratio.** The link between long-term debt and capital structure is measured by the long-term debt to capitalization ratio (Brigham and Ehrhardt, 2016)

A higher result signifies greater risk, while a lower result indicates reduced risk. However, concurrently, a higher result can also suggest the potential for higher returns, whereas lower risk may correlate with diminished returns. This interpretation varies depending on the industry and viewpoint. Typically, a lower result is preferred, as it reflects reduced operational risk (Gillingham CPA. 2015).

$$\text{Long-term Debt/Capitalization Ratio} = \text{Long-term Liabilities} / \text{Long-term liabilities} + \text{Shareholder's equity}$$

10th International CEO Communication, Economics, Organization & Social Sciences Congress Profitability Ratio.

The ability of the business to pursue profit is gauged by the profitability ratio. Five ratios are used in this research to examine the company's performance (Brigham and Ehrhardt, 2016). The ratios are as follow:

- a) **Gross profit margin (GPM)** is a metric used to measure a company's profitability prior to accounting for overhead costs.

$$GPM = \text{Gross Margin} / \text{Net Sales Revenue}$$

- b) **Net profit margin (NPM)** is used to evaluate the company's capacity to generate profit.

$$NPM = \text{Net income} / \text{Net Sales Revenue}$$

- c) **Return on assets (ROA)** indicates how well a business makes use of its resources to turn a profit.

$$ROA = \text{Net income} + \text{Interest (1-Tax rate)} / \text{Total assets}$$

- d) **Return on invested capital (ROIC)**. The efficiency with which a business distributes funds to profitable investments is measured by return on invested capital

$$ROIC = \text{Net Income} + \text{Interest (1-Tax Rate)} / \text{Long-term Liabilities} + \text{Shareholder's equity}$$

- e) **Return on equity (ROE)** evaluates net profit after tax in relation to the company's capital, indicating the efficiency of capital utilization.

$$ROE = \text{Net Income} / \text{Shareholder's Equity}$$

Activity Ratio

Activity ratio or efficiency ratios evaluates how well a corporation uses its resources or how well it can carry out its daily tasks (Brigham and Ehrhardt, 2016). There are 3 ratios used on this analysis, as follow:

1. **Asset turnover ratio** is to measure the efficiency level of a company on utilizing its resources and evaluates its capacity to carry out daily operations.

$$\text{Asset Turnover Ratio} = \text{Sales revenues} / \text{Total assets}$$

Greater efficiency in a company's ability to make money from its assets is indicated by a higher asset turnover ratio. In addition, a lower asset turnover ratio indicates that the business is not making the best use of its resources to increase sales (Hayes, 2020).

2. **The inventory turnover ratio** calculates the frequency of the business on investing its capital in inventory over a given time frame.

$$\text{Inventory Turnover Ratio} = \text{Cost of Sales} / \text{Inventory}$$

A high inventory turnover ratio indicates that the company operates efficiently and maintains a healthy level of liquid inventory. Conversely, a low ratio suggests inefficiency or unproductivity, often signifying excess inventory.

3. **The working capital turnover ratio** evaluates how well a business uses its working capital to sustain sales levels and produce income.

$$\text{Working Capital Turnover Ratio} = \text{Sales revenues} / \text{Working Capital}$$

A corporation can produce more revenue with less investment in current assets if it is efficiently employing its working capital to drive sales, as shown by a greater working capital turnover ratio

RESULT AND DISCUSSION

a. Liquidity Ratio

The **Table 1** presents the results from a time series analysis of PT Smart Tbk, based on published reports from 2017 to 2023. The liquidity ratios, notably both current and quick ratio are key financial metrics to evaluate a company's liquidity that reflects its ability to meet the short term obligations. Over the seven years data analyzed, the current ratio indicates that PT Smart Tbk generally maintains a healthy liquidity, with an average ratio of approximately 1.5. This number suggest that for every dollar of current liabilities, the company possesses USD \$1.50 in current assets, and this is indicating a solid capacity to cover its short-term debts. The higher ratio was happened in 2022, while the lower occurred in 2019. It's can be perceived that PT Smart Tbk was succeed to met current liabilities with available assets which could be transformed to cash, to pay company's short term.

Table 1. The current and quick ratio of PT Smart Tbk for period 2017-2023

Year	Variables	
	Current ratio	Quick ratio
2017	1,38	0,86
2018	1,49	0,91
2019	1,08	0,63
2020	1,39	1,06
2021	1,45	0,97
2022	1,96	1,24
2023	1,87	1,01
Average	1,52	0,95

Source: Data processes from company's annual consolidated financial report

Referring to the **Table 1**, it indicates that there might a concern pertaining the quick ratio. The quick ratio/acid-test ratio serves as rigorous measurement of liquidity. A quick ratio below 1.0, typically informed that a company might struggle to meet its short term obligations without selling off inventory that could led to challenges if market conditions shift. The average quick ratio presented in table 1 is 0.95, meaning that the company has \$0,95 in liquid asset (inventory excluded) for every dollar from current liabilities. This figures implies that PT Smart Tbk might face challenge in covering the short term liabilities without relying on inventory sales, which area generally less liquid.

Figure 1 visually shows that quick ratio of PT Smart Tbk fluctuated moderately during 2017-2023, averaging about 0.95. The quick ratio was also experienced lower value with 0,63 in late

10th International CEO Communication, Economics, Organization & Social Sciences Congress 2019. The lower quick ratio of PT Smart Tbk in 2017-2019 were considered risks (raises concerns) as the company assumed will not able to pay any short-term liabilities (debts) by taking current assets without considering the value of inventory.

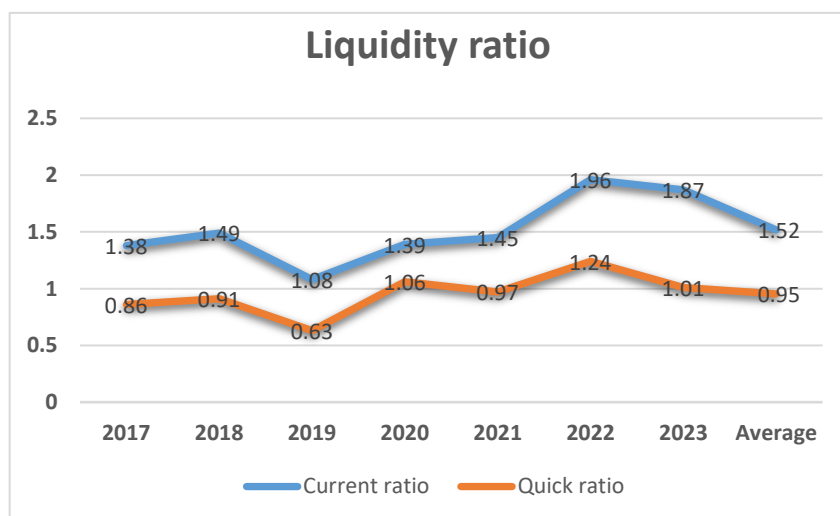


Figure 1. Liquidity Ratio of PT Smart Tbk for last 7 years performance

From these 2 ratios of liquidity, it can be concluded that PT Smart Tbk has met its obligations in the short term, but it may face difficulties in a tight cash situation when it comes to liquidating assets quickly. The discrepancy between these ratios could signal that PT Smart Tbk carries a significant amount of inventory relative to its other liquid assets. If inventory does not convert to cash quickly, it could constrain cash flow. Companies should aim to enhance their quick ratio to ensure they can promptly meet their obligations without relying on inventory.

b. Solvency Ratio

Debt to equity ratio (DER) for PT Smart Tbk over seven years is approximately 151%. This mean that for every dollar of equity, PT Smart Tbk carries \$1.51 in debt (as shown in **Table 2**). From the financial leverage point of view, the DER of 151 % suggest that PT Smart Tbk was relying more on external financing (debt) than equity to run its operation. While this can enhance returns during favourable economic conditions, but it also increases risk of financial difficulties during downturn, as the higher leverage can result in increased interest expenses, potentially putting pressure on cash flows.

Table 2. The DER and Long-term debt to capitalization PT Smart Tbk 2017-2023

Year	Variables	
	DER (%)	Long term debt to capitalization ratio (%)
2017	111	34
2018	136	41
2019	153	36
2020	176	40

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2021	249	50
2022	125	38
2023	108	35
Average	151	39

Source: Data processes from company’s annual consolidated financial report

The values mentioned in **Table 2**, apart from the potential risks as discussed earlier, yet it could be considered a good condition. PT Smart Tbk has used more creditor financing than equity. Furthermore, the proportion of financing sourced from creditors is becoming more substantial, while a relatively smaller amount of funding from equity is being utilized as collateral for debt.

Additionally, the long term debt to capitalization ratio assesses how effectively a company utilizes its financial leverage. Result of analysis indicates that PT Smart Tbk has favourable long-term debt to capitalization ratio, approximately around 39 %. This means that 39% from the company total capital, including debt and equity, are financed by long-term debt. Such a figure suggests that a considerable portion of the company capital comes from long-term borrowing. In 2021, as shown in **Figure 2**, the ratio peaked to 50 %, indicating that half of PT Smart Tbk’s operation were financed by long-term liabilities. However, with ratio consistently below 100% over the years, its can be concluded that majority of business operation are financed through equity, indicating strong financial health and confidence from the financial market. Moreover, the increase of 10 percentage points in 2021 suggests that PT Smart Tbk began to leverage debt more as funding source, showcasing a robust financial strength and trust from investor and shareholders. In summary, a DER of 151% indicates a high level of financial leverage, which can increase risk, while a long-term debt to capitalization ratio of 39% suggests a considerable portion of capital is sourced from long-term debt. Companies should aim for a more balanced capital structure to enhance financial stability and reduce solvency risk.

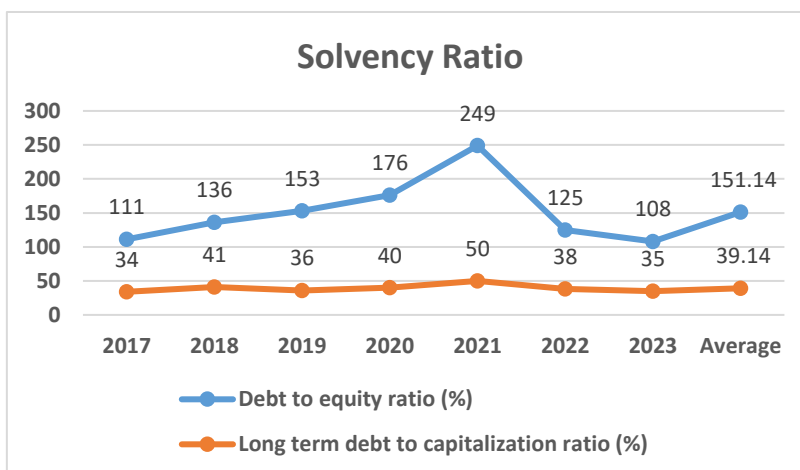


Figure 2. Solvency Ratio of PT Smart Tbk for last 7 years performance

c. Profitability Ratio

In relation to various revenue and investment parameters, profitability ratios are crucial markers of a business's financial stability and capacity to turn a profit. In this analysis, we pay particular attention to five important ratios: 1. GPM, or gross profit margin, 2. Margin of Net Profit (NPM), 3. Asset return (RoA), 4. ROIC (return on invested capital) and 5. ROE stands for return on equity. After deducting production and service expenses, the GPM shows how well the management of the business makes money (Maverick, 2020). An organization that can cover its operation, fixed costs, dividends, and depreciation while remain generating net income is

10th International CEO Communication, Economics, Organization & Social Sciences Congress said to have more efficient operations, as shown by a higher GPM. Conversely, a lower profit margin indicates a greater cost of goods sold (COGS), that could be caused by things like bad acquisition practices, cheap prices, poor sales results, a highly competitive market, or inefficient marketing campaigns. The company's long-term competitive advantages are usually reflected in a high gross margin percentage, typically exceeding 40%, which indicates its ability to set prices above costs. In contrary, companies with gross margin below 40% are likely facing diminishing competitive margins.

According to the **Table 3**, PT Smart Tbk gross margin over the past seven years averaged around 14%. The GPM measures how much of the revenue remains after covering the cost of good sold (COGS). Gross profit margin of 14% means that the company keeps \$0.14 from every dollar earned in revenue after accounting for direct production costs. This relatively low figures suggest that the company may be facing challenges with profitability at the gross level, possibly due to high production costs or competitive pricing pressures in the market

Table 3. The profitability ratios of PT Smart Tbk for the period 2017-2023

Year	Variables				
	Gross Profit margin	Net profit margin	ROA	ROIC	ROE
2017	12%	3%	4%	5%	8%
2018	12%	2%	2%	3%	5%
2019	11%	2%	3%	5%	8%
2020	15%	4%	4%	8%	13%
2021	19%	5%	7%	14%	27%
2022	18%	7%	13%	18%	29%
2023	10%	1%	2%	3%	5%
Average	14%	3%	5%	8%	14%

Source: Data processes from company's annual consolidated financial report

Margin of Net Profit (NPM) indicates the amount of revenue (percentage) that remains as profit after all costs, such as operational costs, interest, as well as taxes that have been subtracted. An NPM of 3% indicates that PT Smart Tbk keeps \$0.03 of every dollar in revenue after all expenses. This low net margin suggests that it has significant operating costs or financial burdens that limiting its profitability. The combination of a low GPM and NPM indicate that while the company may be generating revenue, it remains struggles to convert that revenue into profit after covering its costs. This could signal inefficiencies or unfavourable market conditions.

Additionally, the return on assets (ROA) measures how effectively a company utilizing its assets in order to generate profit. Having ROA of 5% indicates that the company makes \$0.05 for every dollars of assets it possesses. This reflects a moderate level of efficiency in asset utilization; however, it may be considered low in capital-intensive industries. A moderate ROA suggests that the company could improve its efficiency in using its assets. This might involve optimizing operations or divesting underperforming assets.

Return on Invested Capital (ROIC) suggests how effective a company uses its capital to produce profit. A ROIC of 8% suggests that the company generates \$0.08 for every dollar of investment. This is a useful measure for assessing whether the company is creating value for its investors, although a higher ROIC is generally preferred. The ROIC is crucial for assessing whether the company is creating value for investors. An 8% ROIC indicates that the company is generating

10th International CEO Communication, Economics, Organization & Social Sciences Congress returns that may be acceptable, but investors often seek higher returns, especially in comparison to the cost of capital. The profitability in relation to shareholders' equity is indicated by return on equity, or ROE. A ROE of 14% indicates that the company returns \$0.14 for every dollar invested by shareholders. This is generally viewed positively, suggesting that PT Smart Tbk was effective in using equity to produce profit, or the company is effectively utilizing equity funding. However, this must be balanced against the other profitability metrics, as high leverage can sometimes inflate ROE.

In summary, while the company shows a decent ROE of 14%, the overall profitability ratios suggest areas for improvement, particularly in managing costs and enhancing gross and net margins. Investors, lenders should assess these figures relative to industry benchmarks to understand the company's performance better.

d. Activity Ratio

Activity ratios determine how effectively a corporation uses its resources to produce revenue and control inventories. Three ratios, specifically asset turnover, inventory turnover, and working capital turnover ratio, were used in this analysis to assess PT Smart Tbk's activity ratios. The asset turnover ratio shows how well a business makes use of its resources to produce income. With an average asset turnover ratio of 1.41, the business makes \$1.41 in sales for every dollar of assets. This implies that the business uses its resources to generate income with a fair amount of efficiency. Good asset utilization is also indicated by an asset turnover ratio of 1.41. Since it indicates that they are making more money than the value of their assets, businesses usually strive for a ratio above

Table 4. The activity ratios of PT Smart Tbk for the period 2017-2023

Year	Variables		
	Asset turnover ratio (TATO)	Inventory turnover ratio	Working capital turnover ratio (WCTO)
2017	1,29	7,06	11,07
2018	1,28	6,7	9,01
2019	1,3	6,78	45,14
2020	1,15	7,65	7,7
2021	1,41	6,21	8,13
2022	1,76	7,13	6,47
2023	1,68	6,82	7,46
Average	1,41	6,90	13,56

Source: Data processes from company's annual consolidated financial report

That being said, the Inventory Turnover Ratio determines how often a company sells and replaces its stock periodically. With an average ratio of 6.9, PT Smart Tbk appears to sell and replace its inventory roughly 6.9 times annually. This is a powerful sign of successful inventory management since it shows that the business is making sales fast while lowering holding costs and obsolescence risk. But an overly high turnover rate could also mean that the business isn't keeping enough product on hand to satisfy demand.

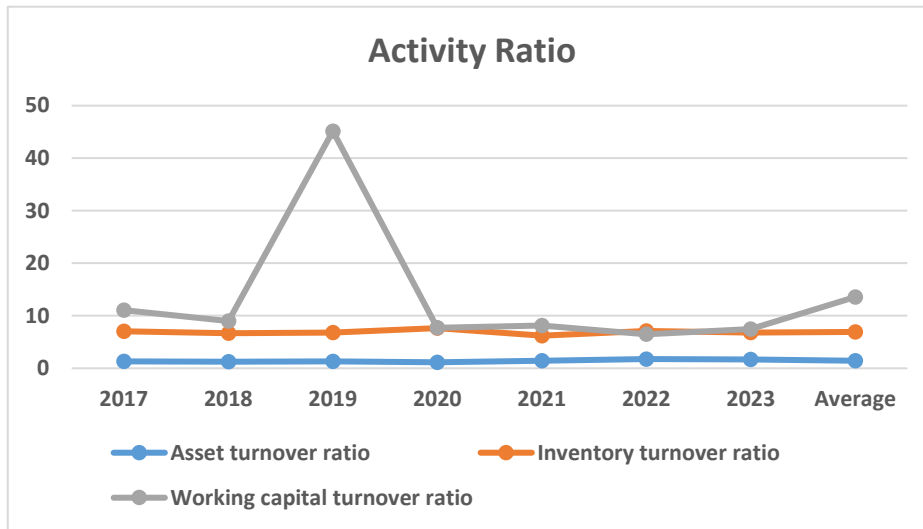


Figure 3. Activity Ratio of PT Smart Tbk for last 7 years performance

Additionally, The Working Capital Turnover Ratio examines the extent to which a company uses its working capital to produce revenue. With an average ratio of 13.56, the business makes \$13.56 in sales for every dollar invested in working capital. This is considered as an exceptionally high number, indicating that PT Smart Tbk is effectively and efficiently utilizing its short-term assets and liabilities to drive revenue. This could indicate strong operational efficiency and a robust sales strategy. However, it's important to ensure that this high turnover does not come at the expense of liquidity and the company suggested still maintain sufficient capital to meet short-term obligations.

CONCLUSION

According to the aforementioned analysis, PT Smart Tbk is perceived on health situation in terms of its liquidity ratio, as seen by its average current ratio of 1.5 for seven years in a row. Despite there was figure below 1 on acid-test ratio for 2017-2019 and 2021 (Risk that the company may face difficulties in a tight cash situation), yet PT Smart Tbk recorded recovery on 2020-2023, meaning that PT Smart Tbk met its obligations during those periods as sales revenue continued growing in the latest three years. In addition, the solvency ratio of PT Smart Tbk was also considered good in general, where the company had used more external financial leverage (debt funding) than utilising equity, despite this can be seen as risk for the company.

Additionally, the research findings show that PT Smart Tbk struggled to turn a profit when looking at profitability measures like gross profit margin, net profit margin, ROA, ROIC, and ROE because of high operating costs that resulted in high cost of goods sold or unfavourable market circumstances. These overall profitability ratios suggest areas for improvement, particularly in managing costs and enhancing gross and net margins. While the company's activity ratios suggest that PT Smart Tbk has been operating efficiently, with effective asset and inventory management. The high working capital turnover ratio indicates strong utilization of short-term resources to drive revenue, although it's essential to maintain adequate liquidity.

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Based on the evaluation of PT Smart Tbk's financial condition, a number of strategic suggestions can be proposed to improve its liquidity, solvency, and profitability. These suggestions are intended to enhance the company's overall financial standing and promote sustainable growth. The recommendation as follow: 1). Enhance cash flow management through by implementing better cash flow forecast and Optimize working capital; 2). Balance capital structure by gradually reducing company's reliance on debt and balancing with retained earning and to explore alternative financing to improve the solvency ratios; 3). Improve profitability metrics through cost management analysis to reduce operational cost and improve efficiency (i.e. adopting technology or mechanization in plantation operation as well as identify potential for enhancing pricing strategies. By doing these recommendations, PT Smart Tbk can improve its liquidity position, strengthen its solvency, and enhance profitability, ultimately leading to sustainable growth and increased shareholder value.

References:

Anthony, Robert N., Hawkins, David F., Merchant, Kenneth A.. (1999). *Accounting : Text and Cases* (10th ed.). Homewood: Irwin/McGraw-Hill.

Bernstein, L. A., & Wild, J. J. (1998). *Financial statement analysis: Theory, application, and interpretation*. Irwin Professional Publishing.

Brigham, E.F, Ehrhardt M.C (2016). *Financial Management: Theory and Practice*. Cengage Learning

Daryanto, W. M, Dewanti, R.W, Farras, R. 2020. Financial Ratio Analysis of PT Unilever Indonesia Tbk to measure Financial Performance. *International Journal of Business, Economic and Law*, Vol 23, Issue 1 Dec.

GAPKI, 2024. Expecting Special Palm Oil Board from The Next Govt. <https://gapki.id/en/news/2024/02/12/feature-expecting-special-palm-oil-board-from-the-next-govt/>. Retrieved Nov 30, 2024.

Gillingham CPA, J. (2015). Financial Ratios & Analysis. *Accounting Play*, 28-155. <https://accountingplay.com/wp-content/uploads/2015/11/2015-11-1-FRA-Financial-Ratios-and-Analysis-John-Gillingham-2015-all-rights-reserved.pdf>

Hayes, A. (2020, September 10). *Asset Turnover Ratio*. Retrieved November 15, 2024 from Investopedia: <https://www.investopedia.com/terms/a/assetturnover.asp>

Koller, Tim., Goedhart, M, Wessels D. (2010). *Valuation: Measuring and Managing the Value of Companies*, John Willey and Sons

Live EO, 2023. Navigating EUDR Compliance for Palm Oil: A Guide. <https://www.live-EO.com/article/navigating-eudr-compliance-for-palm-oil-a-detailed-guide>. Retrieved 29 Nov 2024.

PT Smart Tbk (2024). Consolidated Financial Statements for The Years Ended 2023-2022. Moore

PT Smart Tbk (2023). Consolidated Financial Statements for The Years Ended 2022-2021. Moore.

PT Smart Tbk (2022). Consolidated Financial Statements for The Years Ended 2021-2020. Moore

PT Smart Tbk (2021). Consolidated Financial Statements for The Years Ended 2020-2019. Moore



10th International CEO Communication, Economics, Organization & Social Sciences Congress
Suarjana, I. (2016). Analisis Kerja Keuangan Ditinjau dari Rasio Likuiditas, Solvabilitas, Aktivitas, dan Profitabilitas pada PT Unilever Indonesia Tbk. *Jurnal of Economic and Tourism*, 82-86.

White, G., Sondhi, A.C., Fried, D. (2003). *The Analysis and Use of Financial Statements*. 3rd edition. John Willey and Sons



**10th International CEO Communication, Economics, Organization & Social Sciences Congress
Indonesia's Energy Future: Analysis of Financial Performance of
Pertamina Gas Negara (PGN)**

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ABSTRACT

Facing global economic conditions, such as slowdowns and fluctuations in commodity prices, especially natural gas, will affect companies in the natural gas sector. This research object is PT Pertamina Gas Negara (PGN), a subsidiary of Pertamina. Therefore, as a crucial company in Indonesia's natural gas sector, PGN ensures reliable energy transmission and distribution. Then, to stay sustainable and competitive, PGN must effectively manage its financial performance amidst these economic uncertainties. This research aims to analyze and describe PGN's financial performance by examining key metrics, including revenue, net profit, assets, and liabilities. A qualitative approach is employed, utilizing data from PGN's annual financial reports from the past five years, from 2019 to 2023. This approach highlights essential financial indicators to assess how well PGN has navigated challenges and maintained the stability of its financial performance. The findings from this research offer actionable insights for stakeholders to reinforce PGN's financial health and resilience. Additionally, these insights will help PGN enhance its competitive position in the energy sector while ensuring sustainable operations in the long term. However, as Indonesia's largest company in the transmission and distribution of natural gas, PGN's ability to adapt to the global economy is essential for maintaining its role in supporting the country's energy infrastructure and promoting national development.

Keywords: Financial Performance, Revenue, Net Profit, Asset, Liability

1. Introduction

The energy sector has an important role in supporting the economy and social life of a country (Bigioi & Bigioi, 2023). Energy also has a very important and strategic role in various sectors, such as social, economic, cultural, and political, as well as supporting the progress of development in the future and in meeting the needs of each individual (Adrian et al., 2023; Devaraja & Jagadeesha, 2021; Pimonenko et al., 2022). Then, the ongoing energy transformation affects how the energy sector operates and its impact on the environment, social, and economy. This condition encourages companies to adopt a more responsible and sustainable business framework (Coenen et al., 2021; Gatto, 2022; Huhta, 2022; Latapí et al., 2021; Resosudarmo et al., 2023).

In the energy sector, achieving sustainable performance is an important aspect (Bircea & Sardi, 2023; Wiczorek-Kosmala et al., 2021). Corporate transparency is also an integral part of sustainability (Makarenko et al., 2023). One method to evaluate a company's performance is through the analysis of financial statements. Financial statements reflect the company's activities because they contain information such as the amount of income, expenses, asset value, debts, and more (Nurfauzan et al., 2022; Yanto & Bin Amiruddin, 2022). The evaluation of financial statements aims to understand the company's risk through the analysis of the achievement of financial ratios (Oemar et al., 2020). Financial statement analysis also helps companies to recognize the risks and challenges they face, so that they can take the right steps to manage market dynamics and risk factors (Zhang, 2024). Analyzing a company's financial performance is crucial to assess the extent to which the company has achieved its goals (Chemosit & Atheru, 2021; Permana & Chandra, 2024).

Financial performance reflects the company's condition in using its resources to generate profits (Georgiana Noja et al., 2023; Sedovandara & Mahardika, 2023). Metrics such as profit, profitability, and financial stability are the main indicators in assessing financial performance (Elgayar et al., 2024). Profitability, for example, measures a company's ability to generate profits from sales, which is an important measure of financial health (Christophers, 2022; Fadillah et al., 2024; Samborski, 2022). In addition, financial health is also a measure of the company's ability to be able to pay off its obligations both in the short and long term (Shaik et al., 2023).

Based on the results of the study Mawaddah et al., (2022), the financial performance of PT Perusahaan Gas Negara Tbk after the acquisition has decreased in the liquidity, solvency, and profitability ratios compared to before the acquisition. However, during the covid-19 research by Mardawiyah et al., (2020) shows that PT Perusahaan Gas Negara Tbk has a healthy financial condition with a level A despite experiencing a global crisis. This research is important because there is a contradiction between the results of Mawaddah and Mardawiyah's research regarding the financial performance of PT Perusahaan Gas Negara Tbk (PGN). The decline in liquidity, solvency, and profitability ratios after the acquisition indicates significant challenges, while healthy financial conditions during the covid-19 pandemic with a level A rating indicate good financial resilience.

The urgency of this research lies in the need for a deep understanding of the dynamics of PGN's financial performance in the face of strategic changes and external challenges such as global crises. This analysis aims to provide a more holistic insight into PGN's financial health and sustainability, so as to assist the company in taking strategic steps to maintain or improve its performance in the future. Thus, this analysis is expected to provide important insights into financial health and sustainability in a dynamic context, namely for State Gas Companies (PGN).

2. Theoretical Framework

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Financial ratios are a very important analytical tool in the business world, used to evaluate and understand the financial performance of a company. By comparing various financial variables, these ratios provide deeper insights into a company's financial health and operational efficiency. In this context, financial ratios serve as indicators that help managers, investors, and other stakeholders in making better decisions. One of the key aspects of financial ratios is their ability to transform complex financial data into information that is easier to understand. Financial ratios are an important analytical tool for evaluating a company's financial performance. Some of the main ratios used in this study include liquidity ratio, activity ratio, solvency ratio, and profitability ratio, each of which provides an overview of various aspects of the company's financial condition. For example, the liquidity ratio measures a company's ability to meet its short-term obligations. Two ratios that are often used to assess liquidity are the current ratio and the cash ratio. The current ratio measures the ratio between a company's current assets and current liabilities, which reflects the extent to which a company can meet its short-term liabilities with easily liquidated assets. Meanwhile, the cash ratio provides a more conservative picture, because it only calculates the company's ability to meet short-term obligations with cash and cash equivalents owned. Then there is the activity ratio used to assess the efficiency of the company in managing its assets to generate revenue. One of the ratios used in this analysis is total assets turnover, which shows the extent to which a company utilizes its total assets to generate revenue. A higher ratio indicates that the company is more efficient in managing and utilizing the assets it owns. In addition, there is a solvency ratio that measures a company's ability to meet its long-term obligations. Furthermore, the ratio of total equity to total assets is one of the solvency indicators used in this study. This ratio measures the proportion of assets financed by a company's equity. The higher this ratio, the greater the equity contribution to the financing of the company's assets, which indicates a lower level of financial risk.

Another ratio, namely the profitability ratio, which is measured by Return on Equity (ROE), describes the company's ability to generate net profit from equity invested by shareholders. A high ROE indicates that the company is able to generate relatively large profits compared to the amount of equity invested, which reflects the effectiveness of the company's management in generating profits. These financial ratios provide comprehensive insights into the company's liquidity, operational efficiency, financing structure, and profitability. Through this ratio analysis, it can be evaluated to what extent the company, in this case PT Pertamina Gas Negara, manages resources and faces financial challenges in the period under review (Rosa, 2021). The relationship with the company's financial performance is very close. Financial ratios not only reflect the financial results that have been achieved, but also provide an indication of the potential growth and risks that the company may face in the future. Using these ratios, analysts can identify trends, compare a company's performance with competitors, and evaluate whether the company is on track to achieve its strategic goals.

Thus, financial ratios are essential in assessing a company's financial performance. By providing a clear picture of various aspects of finance, this ratio helps in more informed and strategic decision-making, and supports the company in achieving long-term success. The types of financial ratios used in this study include (Anggoro et al., 2020):

3. Method

This research uses a descriptive qualitative approach, namely by systematically explaining something (Sugiyono, 2019), and this study aims to analyze and describe the financial performance of PT Pertamina Gas Negara (PGN) by using financial ratios as the

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main measuring tool. This analysis covers various important aspects in evaluating a company's financial condition, namely liquidity ratio, activity ratio, solvency ratio, and profitability ratio. In terms of liquidity ratios, the analysis is carried out using the current ratio and cash ratio, which aim to assess the extent to which the company can meet its short-term obligations. Furthermore, in the activity ratio, the total assets turnover indicator is used to measure the company's efficiency in managing its assets to generate revenue. In the solvency aspect, the ratio of total equity to total assets is used to assess the company's ability to meet its long-term obligations by comparing equity and total company assets. Finally, the profitability ratio is measured through Return on Equity (ROE), which reflects how much a company can generate profits for shareholders.

The data used in this study came from the financial statements of PT Pertamina Gas Negara (PGN) for the period 2019 to 2023, which was then analyzed based on the guidelines set out in the Decree of the Minister of SOEs Number KEP 100/MBU/2002. Through this analysis, it is hoped that a clearer picture of PGN's financial performance over the past five years can be obtained. Thus, this research not only provides insight into the financial health of companies, but also contributes to the assessment of financial performance based on applicable standards in the SOE sector. In Table 1, the following is a weight related to the financial aspect of non-infrastructure SOEs.

Table 1 Indicators and Weights of Financial Aspects of Non-Infrastructure SOEs (Non-Infra)

Indicators	Weight Scores
ROE	20
ROI	15
Cash Ratio	5
Current Ratio	5
Collection Period	5
Inventory Turnover	5
Total Asset Turnover	5
Total Equity to Total Asset	10
Total WEIGHT	70

Source: The decree of Ministry of SOE No. KEP 100/MBU/2002

Based on the indicators above, this study will only focus on a few indicators as shown in table 2 below.

Table 2 Indicators and Weights of Financial Aspects of Non-Infrastructure SOEs (Non-Infra)

Indicators	Weight Scores
ROE	20
Cash Ratio	5
Current Ratio	5
Total Asset Turnover	5
Total Equity to Total Asset	10
Total Weight	45

Source: The decree of Ministry of SOE No. KEP 100/MBU/2002

The following is an explanation in the form of formulas and references in determining the score in each financial ratio used in this study.

3.1 Liquidity Ratio

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This ratio is used to measure a company's ability to meet its short-term obligations, which consists of:

- a. Current Ratio: The comparison between current assets and current liabilities.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} \times 100$$

Table 3 List of Current Ratio Assessment Score

Current Ratio = X (%)	Score
125 <= X	5
110 <= X < 125	4
100 <= X < 110	3
95 <= X < 100	2
90 <= X < 95	1
X < 90	0

Source: The decree of Ministry of SOE No. KEP 100/MBU/2002

- b. Cash Ratio: A ratio that shows the company's ability to meet its short-term obligations using cash or cash equivalents owned.

$$\text{Cash Ratio} = \frac{\text{Cash} + \text{Cash Equivalents}}{\text{Current Liabilities}} \times 100$$

Table 4 List of Cash Ratio Assessment Score

Cash Ratio = X (%)	Score
X >= 35	5
25 <= X < 35	4
15 <= X < 25	3
10 <= X < 15	2
5 <= X < 10	1
0 <= X	0

Source: The decree of Ministry of SOE No. KEP 100/MBU/2002

3.2 Activity Rate

- a. Total Assets Turnover: A ratio used to measure a company's efficiency in using assets to generate revenue.

$$\text{Total Assets Turnover} = \frac{\text{Revenue}}{\text{Capital Employed}} \times 100$$

Table 5 List of Total Asset Turnover Assessment Score

Total Asset Turnover = X (days)	Adjustment (days)	Score
120 < X	20 < X	5
105 < X ≤ 120	15 < X ≤ 20	4,5
90 < X ≤ 105	10 < X ≤ 15	4
75 < X ≤ 90	5 < X ≤ 10	3,5
60 < X ≤ 75	0 < X ≤ 5	3
40 < X ≤ 60	X ≤ 0	2,5
20 < X ≤ 40	X < 0	2
X ≤ 20	X < 0	1,5

Source: The decree of Ministry of SOE No. KEP 100/MBU/2002

3.3 Solvency Ratio

- a. Total Equity to Total Assets: The ratio used measures the proportion of assets funded by equity (not debt).

$$\text{Total Equity to Total Assets} = \frac{\text{Total Equity}}{\text{Total Assets}} \times 100$$

Table 6 List of Solvency Assessment Score

Total Equity to Total Asset (%) = X	Score
X < 0	0
0 ≤ X < 10	4
10 ≤ X < 20	6
20 ≤ X < 30	7,25
30 ≤ X < 40	10
40 ≤ X < 50	9
50 ≤ X < 60	8,5
60 ≤ X < 70	8
70 ≤ X < 80	7,5
80 ≤ X < 90	7
90 ≤ X < 100	6,5

Source: The decree of Ministry of SOE No. KEP 100/MBU/2002

3.4 Profitability Ratio

- a. Return on Equity (ROE): Measures net profit against total equity.

$$\text{Return on Equity (ROE)} = \frac{\text{Net Income}}{\text{Total Equity}} \times 100$$

ROE (%)	Score
15 < ROE	20
13 < ROE ≤ 15	18
11 < ROE ≤ 13	16
9,0 < ROE ≤ 11	14
7,9 < ROE ≤ 9	12
6,6 < ROE ≤ 7,9	10
5,3 < ROE ≤ 6,6	8,5
4,0 < ROE ≤ 5,3	7
2,5 < ROE ≤ 4,0	5,5
1,0 < ROE ≤ 2,5	4
0 < ROE ≤ 1	2
ROE < 0	0

Source: The decree of Ministry of SOE No. KEP 100/MBU/2002

Table 8 Criteria for level and category based on the Decree of the Ministry of SOE

Criteria	Level	Category
Total Weight > 95	AAA	Healthy
80 < Total Weight ≤ 95	AA	
65 < Total Weight ≤ 80	A	
50 < Total Weight ≤ 65	BBB	Less Healthy
40 < Total Weight ≤ 50	BB	
30 < Total Weight ≤ 40	B	
20 < Total Weight ≤ 30	CCC	Unhealthy
10 < Total Weight ≤ 20	CC	
Total Weight ≤ 10	C	

Source: The decree of Ministry of SOE No. KEP 100/MBU/2002

4. Findings and Discussion

4.1 Findings

Table 9 Summary of PGN's Annual Financial Statements for 2019-2023

Data	2019	2020	2021	2022	2023
Current Assets	2.208.551.841	2.005.785.786	2.191.174.530	2.212.365.073	1.892.425.055
Total Assets	7.373.713.156	7.533.986.395	7.510.948.902	7.194.859.982	6.599.238.469
Cash and Cash Equivalents	1.040.376.489	1.179.044.518	1.503.293.693	1.447.650.817	1.244.731.682
Short-Term Investments	186.360.050	0	0	0	0

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Inventories	70.797.779	68.893.975	54.752.577	59.592.739	70.980.682
Current Liabilities	1.123.361.297	1.183.155.336	880.909.800	992.569.575	1.462.417.579
Total Liabilities	4.139.412.275	4.578.547.540	4.226.024.344	3.753.089.344	3.058.835.090
Total Equity	3.234.300.881	2.955.438.855	3.284.924.558	3.441.770.638	3.540.403.379
Profitability	3.848.717.684	2.885.536.105	3.036.100.956	3.568.594.775	3.646.304.165
Profit Before Tax	279.902.491	175.355.545	467.938.895	542.704.261	523.887.009
Earning After Tax (EAT)	112.981.195	215.767.814	364.534.135	401.342.541	376.615.901

Table 10 Results of Financial Statement Calculation Data Based on PGN's Liquidity, Activity, Solvency, and Profitability Ratios for 2019-2023

No	Ratio		Year				
			2019	2020	2021	2022	2023
1	Liquidity	Current Ratio	197%	170%	249%	223%	129%
		Cash Ratio	109%	100%	171%	146%	85%
2	Activity	Total Assets Turnover	52%	38%	40%	50%	55%
3	Solvency	Total Equity to Total Assets	44%	39%	44%	48%	54%
4	Profitability	Return on Equity (ROE)	3%	7%	11%	12%	11%

Table 11 Assessment Score Results Based on PGN's Liquidity, Activity, Solvency, and Profitability Ratio in 2019-2023

No	Ratio		Year									
			2019		2020		2021		2022		2023	
			Ratio	Score	Ratio	Score	Ratio	Score	Ratio	Score	Ratio	Score
1	Liquidity	Current Ratio	197%	5	170%	5	249%	5	223%	5	129%	5
		Cash Ratio	109%	5	100%	5	171%	5	146%	5	85%	5
2	Activity	Total Assets Turnover	52%	3	38%	3,5	40%	3	50%	3	55%	3
3	Solvency	Total Equity to Total Assets	44%	9	39%	10	44%	9	48%	9	54%	8,5
4	Profitability	Return on Equity (ROE)	3%	5,5	7%	10	11%	14	12%	16	11%	14
Total Score			27,5		33,5		36		38		35,5	

4.2 Discussion

Based on the results of the study, it is known that the scores of each financial ratio used in this study are both in terms of liquidity ratio, activity, solvency, and profitability. In the analysis of the financial performance of PT Pertamina Gas Negara (PGN), financial ratios are an important tool to evaluate the financial health of the company. Based on the results of the analysis, we will discuss four main categories of ratios: liquidity, activity, solvency, and profitability, and relate them to the results of financial health tests based on the Decree of the Minister of SOEs Number KEP 100/MBU/2002.

4.2.1 Liquidity Ratio: measured through Current Ratio and Cash Ratio.

a. The Current Ratio shows the following values:

- 1) 2019: 197%
- 2) 2020: 170%
- 3) 2021: 249%

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4) 2022: 223%

5) 2023: 129%

The high Current Ratio in 2021 (249%) indicates that PGN has an excellent ability to meet its short-term obligations. However, a significant decline in 2023 is a concern, although it is still in the acceptable category. This shows that there are challenges in liquidity management, which need to be overcome to maintain the company's financial stability.

b. Cash Ratio shows the following values:

1) 2019: 109%

2) 2020: 100%

3) 2021: 171%

4) 2022: 146%

5) 2023: 85%

Although the Cash Ratio showed a decrease in 2023, a value above 100% in previous years indicates that PGN is able to meet its short-term obligations with available cash. This decrease needs to be observed, especially in the context of external challenges faced by companies, such as the global crisis discussed in the previous literature.

4.2.2 Activity Ratio: measured through Total Assets Turnover

a. Total Assets Turnover shows the following values:

1) 2019: 52%

2) 2020: 38%

3) 2021: 40%

4) 2022: 50%

5) 2023: 55%

The increase in Total Assets Turnover in 2023 (55%) shows that PGN is increasingly efficient in using its assets to generate revenue. This is in line with the urgency expressed in the introduction to this study, where operational efficiency is key in the face of changing market dynamics. This increase in efficiency also reflects management's efforts in optimizing the use of existing resources.

4.2.3 Solvency: measured through Total Equity to Total Assets:

a. Total Equity to Total Assets shows the following values:

1) 2019: 44%

2) 2020: 39%

3) 2021: 44%

4) 2022: 48%

5) 2023: 54%

The increase in the solvency ratio from 39% in 2020 to 54% in 2023 shows that PGN is increasingly relying on equity in financing its assets. This reduces debt risk and improves financial stability, which is crucial in the context of global economic uncertainty. Previous research has also shown that companies with a higher proportion of equity tend to be more resilient to economic shocks.

4.2.4 Profitability: measured through Return on Equity (ROE):

a. Return On Equity shows the following values:

1) 2019: 3%

2) 2020: 7%

3) 2021: 11%

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4) 2022: 12%

5) 2023: 11%

Although ROE experienced decrease in 2023, the value of 11% still shows that PGN is able to provide good returns for shareholders. The increase in ROE from 3% in 2019 to 12% in 2022 reflects the company's success in increasing its profitability, which is one of the main objectives in financial management. This is also in line with the literature that emphasizes the importance of profitability in maintaining the sustainability of the company.

Furthermore, a health level test has also been carried out for financial statements based on the guidance of the Decree of the Ministry of SOEs No. KEP 100/MBU/2002 as shown in Table 12 below.

Table 12 Results of the Health Level Test of Financial Statements Based on PGN's Liquidity, Activity, Solvency, and Profitability Ratios for 2019-2023

No.	Year	Total Score	Weighti for Non-Infra	Total Weight (%)	Criteria	Level	Category
1	2019	27,5	45	61,1	50 < Total Weight ≤ 65	BBB	Less healthy
2	2020	33,5	45	74,4	65 < Total Weight ≤ 80	A	Healthy
3	2021	36	45	80,0	65 < Total Weight ≤ 80	A	Healthy
4	2022	38	45	84,4	80 < Total Weight ≤ 95	AA	Healthy
5	2023	35,5	45	78,9	65 < Total Weight ≤ 80	A	Healthy

In 2019, based on health tests with several ratios used, PGN's financial performance was less healthy (BBB). Then starting from 2020 to 2023, PGN's financial performance was in the healthy category (A), which in 2022 was the peak of performance with the healthy category (AA) and a score of 84.4%. However, in 2023, the score decreased slightly to 78.9% (healthy category (A)).

5. Conclusions and Recommendations

Based on an analysis of PT Perusahaan Gas Negara's (PGN) financial performance from 2019 to 2023, the company shows improved stability and better financial management despite several fluctuations. The liquidity ratio (current ratio and cash ratio) is consistently at a healthy level, reflecting the company's ability to meet its short-term obligations. The solvency ratio (total equity to total assets) shows an upward trend from 44% (2019) to 54% (2023), indicating a reduction in dependence on debt and lower financial risk. The profitability ratio (ROE) also experienced a significant increase from 3% (2019) to a peak of 12% (2022), although it decreased slightly to 11% in 2023. However, the relatively low ratio of activities (total assets turnover), although it increased from 38% (2020) to 55% (2023), indicates that the efficiency of asset use still needs to be improved to optimize revenue. Overall, PGN has managed to achieve the "Healthy" category since 2020, with the best performance in 2022 in the "Healthy" (AA) category. Then, PT Pertamina Gas Negara is expected to maintain financial stability while increasing its competitiveness in facing global economic challenges and the need for energy transformation. Then, other researchers in the future can compare PGN's financial performance with other companies in the energy sector, both domestically and internationally, to provide a broader perspective.

6. References

Adrian, M., Purnomo, E. P., Enrici, A., & Khairunnisa, T. (2023). Energy transition towards renewable energy in Indonesia. *Heritage and Sustainable Development*, 5(1), 107–118. <https://doi.org/10.37868/hsd.v5i1.108>
 Anggoro, R. W., Kusumasari, L., & Miswanto, M. (2020). The Effectiveness Of Financial Ratio To Mitigate

10th International CEO Communication, Economics, Organization & Social Sciences Congress

- Information Complexity Of Financial Statement For Performance Evaluation. *International Journal of Advance Science and Technology*, 7(16), 166–175.
- Bigioi, A. D., & Bigioi, C. E. (2023). Governance and Performance in Romanian Energy Companies. *Energies*, 16(13), 1–22. <https://doi.org/10.3390/en16135041>
- Bircea, I., & Sardi, T. (2023). Analysis of the Financial Performance of Energy Companies in the Current Context in Romania. *Acta Marisiensis. Seria Oeconomica*, 17(1), 56–68. <https://doi.org/10.2478/amso-2023-0005>
- Chemosit, J., & Atheru, G. (2021). Financial Leverage and Performance of the Energy and Petroleum Sector Companies Listed in the Nairobi Securities Exchange. *International Journal of Current Aspects in Finance, Banking and Accounting*, 3(2), 113–128. <https://doi.org/10.35942/ijcfa.v3i2.208>
- Christophers, B. (2022). Fossilised Capital: Price and Profit in the Energy Transition. *New Political Economy*, 27(1), 146–159. <https://doi.org/10.1080/13563467.2021.1926957>
- Coenen, L., Hansen, T., Glasmeier, A., & Hassink, R. (2021). Regional foundations of energy transitions. *Cambridge Journal of Regions, Economy and Society*, 14(2), 219–233. <https://doi.org/10.1093/cjres/rsab010>
- Devaraja, T. S., & Jagadeesha, D. K. (2021). An Analysis Of Financial Performance And Investor's Experience Of Indian Renewable Energy Industry. *Indian Journal of Finance and Banking*, 5(1), 1–9. <https://doi.org/10.46281/ijfb.v5i1.947>
- Elgayar, A., Serag, S., & Metawa, N. (2024). Navigating Financial Performance of the MENA Region Energy Sector: The Interplay of Working Capital and Leverage. *International Journal of Economics and Financial Issues*, 14(2), 45–53. <https://doi.org/10.32479/ijefi.15877>
- Fadillah, I. R., Nadiyah, N., Rohmah, L., Haryadi, D., & Wahyudi, W. (2024). Profitability ratio analysis to assess the financial performance. *International Journal of Applied Finance and Business Studies*, 11(4), 964–969. <https://doi.org/10.35335/ijafibs.v11i4.243>
- Gatto, A. (2022). The energy futures we want: A research and policy agenda for energy transitions. *Energy Research & Social Science*, 89(January), 1–5. <https://doi.org/10.1016/j.erss.2022.102639>
- Georgiana Noja, G., Cristea, M., Gabriel Pirtea, M., Panait, M., Dracea, R. M., & Abrudan, D. (2023). Drivers of Firms' Financial Performance in the Energy Sector: A Comparative Approach between the Conventional and Renewable Energy Fields. *Engineering Economics*, 34(2), 205–222. <https://doi.org/10.5755/j01.ee.34.2.31274>
- Huhta, K. (2022). The contribution of energy law to the energy transition and energy research. *Global Environmental Change*, 73(December 2021), 1–5. <https://doi.org/10.1016/j.gloenvcha.2021.102454>
- Latapí, M., Jóhannsdóttir, L., & Davíðsdóttir, B. (2021). The energy company of the future: Drivers and characteristics for a responsible business framework. *Journal of Cleaner Production*, 288, 1–17. <https://doi.org/10.1016/j.jclepro.2020.125634>
- Makarenko, I., Brin, P., Belgibayeva, A., Orlov, I., & Oleksich, Z. (2023). Energy companies' transparency: Toward competitiveness and SDG 7 progress. *Problems and Perspectives in Management*, 21(2), 603–617. [https://doi.org/10.21511/ppm.21\(2\).2023.55](https://doi.org/10.21511/ppm.21(2).2023.55)
- Mardawiyah, W., Daniswara, D., Nugroho, R., & Zanaria, M. (2020). Measuring Financial Performance of PT. Perusahaan Gas Negara (Persero) Tbk During Covid-19 Crisis In Indonesia. *South East Asia Journal of Contemporary Business, Economics and Law*, 23(1), 260–274.
- Mawaddah, L., Lau, E. A., & Sriandanda, D. R. (2022). Analisis Kinerja Keuangan Pada PT Perusahaan Gas Negara Tbk Sebelum dan Sesudah Akuisisi. *Jurnal Exchall: Economic Challenge*, 4(2), 32–44. <https://jurnal.publikasi-untagcirebon.ac.id/index.php/exchall/article/view/292/188>
- Nurfauzan, M. I., Rengga Madya Pranata, & Wildan Army Abdillah. (2022). Analisis Kinerja Keuangan PT Perusahaan Gas Negara (Persero) Tbk. Periode 2016-2019. *Jurnal Riset Bisnis Dan Investasi*, 7(3), 117–124. <https://doi.org/10.35313/jrbi.v7i3.2640>
- Oemar, F., Tarihoran, D. V., Endri, E., & Handayani, S. (2020). Financial Performance Evaluation: Evidence of Metal and Mineral Mining Companies in Indonesia. *International Journal of Advanced Science and Technology*, 9(5), 12568–12580. <https://doi.org/10.2139/ssrn.3701076>
- Permana, R. M., & Chandra, S. (2024). The Comparative Analysis of The Financial Performance of PT Pertamina Geothermal Energy Tbk Before and After Initial Public Offering. *Indo-Fintech Intellectuals: Journal of Economics and Business*, 4(3), 884–890. <https://doi.org/10.54373/ifijeb.v4i3.1428>
- Pimonenko, T., Lyulyov, O., Samusevych, I., & Us, Y. (2022). National Energy Security: Financial Determinants. *Financial and Credit Activity Problems of Theory and Practice*, 2(43), 259–270. <https://doi.org/10.55643/fcaptop.2.43.2022.3733>
- Resosudarmo, B. P., Rezki, J. F., & Effendi, Y. (2023). Prospects of Energy Transition in Indonesia. *Bulletin of Indonesian Economic Studies*, 59(2), 149–177. <https://doi.org/10.1080/00074918.2023.2238336>
- Rosa, N. La. (2021). Analysing Financial Performance: Using Integrated Ratio Analysis. In *Analysing Financial Performance* (1st ed.). Routledge Taylor & Francis Group. <https://doi.org/10.4324/9781003092575>
- Samborski, A. (2022). The Energy Company Business Model and the European Green Deal. *Energies*, 15, 1–15.



10th International CEO Communication, Economics, Organization & Social Sciences Congress

<https://doi.org/https://doi.org/10.3390/en15114059>

- Sedovandara, D. F., & Mahardika, D. P. K. (2023). Financial Performance Determinant: Evidence On Energy And Mineral Sector. *Jurnal Akuntansi*, 27(2), 299–317. <https://doi.org/10.24912/ja.v27i2.1392>
- Shaik, A. R., Ali, A., & Alanazi, I. D. (2023). Working Capital and Financial Performance in the Energy Sector of Saudi Arabia: Moderating Role of Leverage. *International Journal of Energy Economics and Policy*, 13(3), 158–163. <https://doi.org/10.32479/ijeep.14254>
- Sugiyono, S. (2019). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Alfabeta.
- Wieczorek-Kosmala, M., Marquardt, D., & Kurpanik, J. (2021). Drivers of Sustainable Performance in European Energy Sector. *Energies*, 14(21), 1–17. <https://doi.org/10.3390/en14217055>
- Yanto, M., & Bin Amiruddin, A. (2022). Analisis Laporan Keuangan PT PGN Tbk Periode 2019-2020 Dengan Menggunakan Metode Rasio Profitabilitas. *Jurnal Manajerial Dan Bisnis Tanjungpinang*, 5(2), 60–67.
- Zhang, Y. (2024). A Financial Analysis and Valuation of Chevron Corporation. *Proceedings of the Decoupling Corporate Finance Implications of Firm Climate Action - ICEMGD*, 110(1), 172–179. <https://doi.org/10.54254/2754-1169/110/2024ED0125>



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Financial Performance Analysis and Evaluation of PT Japfa Comfeed
Indonesia Tbk During Period of 2017-2023

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ABSTRACT

PT Japfa Comfeed Indonesia Tbk is one of the largest and most integrated agri-food companies in Indonesia. In the first quarter of 2020, the COVID-19 pandemic hit Indonesia significantly. Therefore, the profitability of the company is up and down. The objective of this study is to examine the financial performance of PT Japfa Comfeed Indonesia Tbk during 2017-2023, through the COVID-19 pandemic period focusing on profitability ratios across various categories, including Animal Feed, Poultry Breeding, Commercial Farms, Poultry Processing, and Consumer Products, Aquaculture, and Trading and Others. A descriptive financial ratio will be used as a methodology.

Keywords: Financial Performance, Financial Ratios, Agri-food, Poultry.

1. INTRODUCTION

The only reliable way to assess a company's financial performance is through its financial statements, which provide information on its profitability, and capacity to meet its commitments, including paying dividends to shareholders. For investors, the numbers tell the financial health of the company and can be a powerful tool for comparing financials among several companies. Past performance showing how company has performed against competitors even though it can not predict future profits. While current trends indicate a company's future direction. The universal nature of financial statements simplifies the comparison of companies in different industries (Kline, 2007).

PT Japfa Comfeed Indonesia, Tbk is one of Indonesia's leading agri-food Companies, producing crucial animal protein for the country since 1975. With the line business focusing on Agriculture, Livestock, Fisheries, Industry, General Trading and Services, the company's business grew rapidly after listing its stock in 1989.

The COVID-19 pandemic, profoundly altered the economic landscape, causing supply chain disruptions, fluctuating commodity prices, and shifting consumer demand patterns. PT Japfa Comfeed Indonesia Tbk was also significantly impacted by this global challenges. As one of a largest agribusiness company, PT Japfa Comfeed Indonesia Tbk faced considerable challenges during the period of 2017 to 2023, including supply chain disruptions, fluctuating commodity prices, and shifting consumer demand.

This journal explores PT Japfa Comfeed Indonesia Tbk financial highlights, examining trends in profitability, efficiency and financial structure over the seven years period. Special attention is given to the impact of COVID-19, which not only tested PT Japfa Comfeed Indonesia Tbk resilience but also underscored how they respond with the strategic planning and operational adaptability in a volatile environment. The author attempts to offer insights into the company's financial situation and strategic responses to external issues by examining these factors.

2. LITERATURE REVIEW

Financial Statements

Financial information is crucial indicator of a company's worth. The value of a company is determined largely by its ability to earn profit. We want to know how the interpretation of the company's financial statements affect the value of the company. The value of a company is, after all, a reflection of the owner's wealth (Davidson, 2020). According to (Adi & Daryanto, 2021) the financial statement shows what management has done and a report that shows the accountability of the resource entrusted to the management.

Analysis of Financial Statements

Financial statement analysis aims to provide information for decision-makers such as company executives, shareholders, investors, about the condition of a company that is used in decision making (Ravinder & Anitha, 2013).

Financial Ratio Analysis

There is a key thing to remember before we dive into the ratios. The skill is termed "Ratio Analysis" and NOT "Ratio Calculation". How the doctor collect the symptoms is analogized as a ratio calculation while how the doctor analyse how all the symptoms fit together and then make a diagnosis and prognosis is analogized as ratio analysis. This is also how you should approach ratio analysis (Tracy, 2012). Financial ratios analysis is useful for estimating the

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 company's economic problems, the result of financial processes, current, and future financial conditions, and can serve as a reference for investors about current or future financial performance (Naufal, 2014).

3. RESEARCH METHOD

This research uses data analysis of PT Japfa Comfeed Indonesia Tbk financial statements, from 2017 to 2023 (Pre, in between and post Covid-19 pandemic) with a quantitative approach. The framework method is using Financial Ratio Analysis but it is limited by using profitability ratio, activity ratio and solvency ratio.

1. Profitability ratio

To measure the company's ability to generate profit relative to its sales, assets, and equity (Baltova, 2023).

- a. **Net profit margin** indicating an overall profitability of the company

$$\text{Net Profit Margin} = \frac{\text{Net Sales}}{\text{Revenue}}$$

- b. **Return on assets (ROA)** measures a company's after tax profit per dollar of assets held

$$\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}}$$

- c. **Return on equity (ROE)** reflects the percentage of net income compared to stockholders equity

$$\text{ROE} = \frac{\text{Net Income}}{\text{Shareholders' Equity}}$$

2. Activity Ratio

Activity ratio measure a firm's ability to leverage its assets to generate revenue (Baltova, 2024).

- a. **Asset turnover ratio** assesses how efficient a company using its assets to generate income.

$$\text{Asset Turnover Ratio} = \frac{\text{Sales Revenue}}{\text{Total Assets}}$$

- b. **Inventory turnover ratio** measures the efficiency of a company in the managing their inventory.

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Inventory}}$$

3. Solvency Ratio

Solvency ratios provide information regarding the relative amount of debt in the company's capital structure and the adequacy of earnings and cash flow to cover interest expenses and other fixed charges as they come due (Robinson, Henry, Pirie, & Broihahn, 2012).

a. **Debt to equity ratio** showing a company's total debts relate to its equity

$$\text{Debt/Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Shareholders' Equity}}$$

4. RESULT AND DISCUSSION

The data studied were collected from PT Japfa Comfeed Indonesia Tbk's annual financial highlights from 2017 to 2023 as previously noted.

1. Profitability Ratio

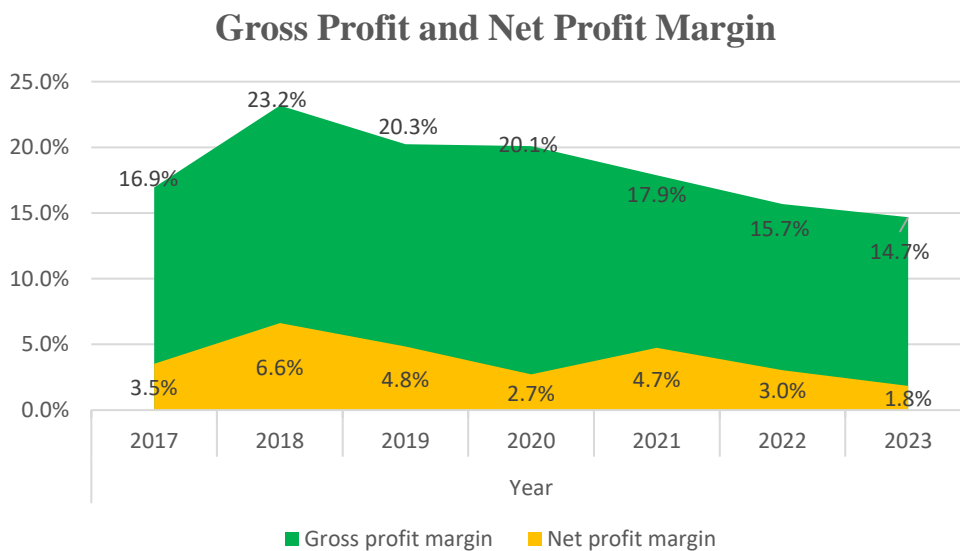


Figure 1. Profit Margin

Source : Annual Report PT Japfa Tbk 2017-2023

As the Figure 1 showed, the net profit margin (NPM) shows a declining trend over the 7 years period. Even though in overall the net profit margin declined by 1.7% within 2017 to 2023, in 2021 there was an increase by 2% compared to the previous years and almost reaching the same number with 2019. This indicates PT Japfa Comfeed Indonesia Tbk still can generating income during Covid-19 pandemic.

ROA and ROE

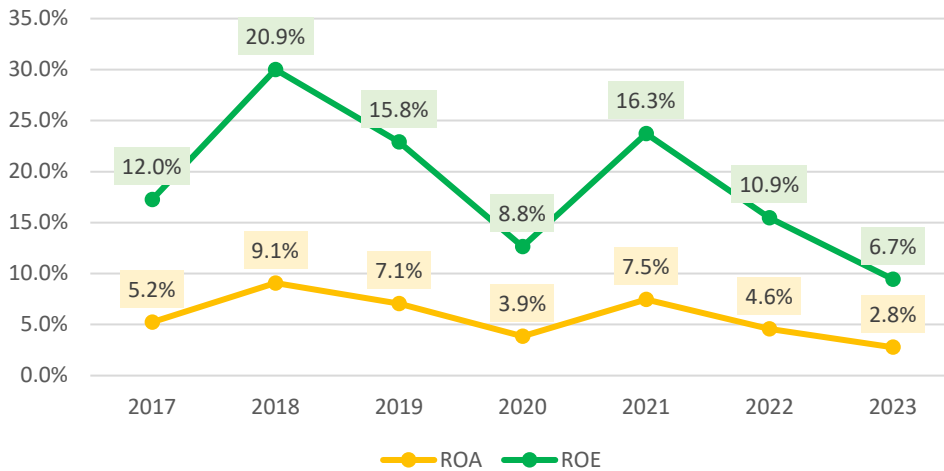


Figure 2. ROA and ROE

Source : Annual Report PT Japfa Tbk 2017-2023

Return on assets (ROA) ratio determines how efficiently a corporation can use its assets to create income. A high ROA means assets used effectively by the company to generating income. The ROA of PT Japfa Comfeed Indonesia Tbk is rated as good with the average of 5.7% from 2017 to 2023 as shown by Figure 2. This means that every \$100 of assets will generating \$5.7 in income. The ROA showing up and down trend with the peak point was in 2018 with 9.1% even though it dropped to 2.8% in 2023.

Return on equity (ROE) evaluating the investment returns or measure how the company uses equity capital to build the business. The figure 2 shows there were Equity increased from 2017 to 2023 but not followed with the income increase especially in 2023 which was the post Covid-19 time. The ROE of PT Japfa Comfeed Indonesia Tbk still rated as good over the 7 years period with the average of 13.1%.

2. Acitivity Ratio

Asset turnover ratio

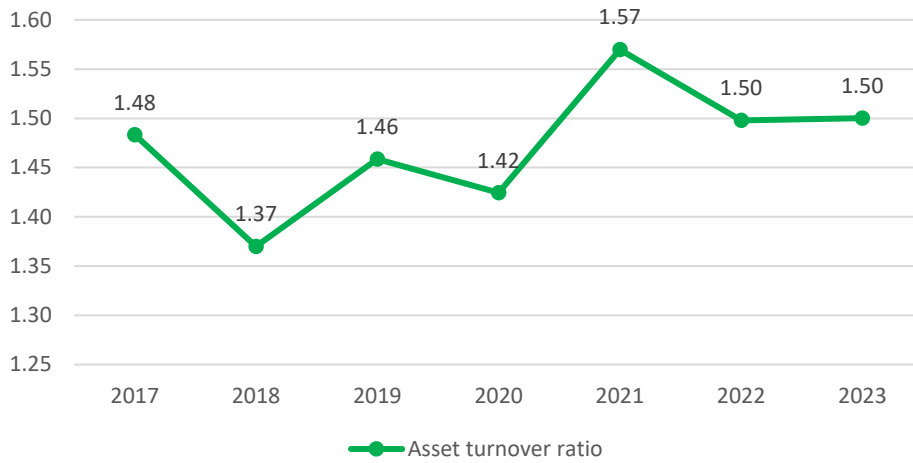


Figure 3. Asset Turnover Ratio

Source : Annual Report PT Japfa Tbk 2017-2023

A high asset turnover ratio means that the company operates efficiently. As figure 3 shown above, PT Japfa Comfeed Indonesia Tbk asset turnover ratio is 1.47 times from the 2017 to 2023 period. This means in average of seven years, \$1.47 revenue generated from every \$1 asset used.

Inventory turnover ratio

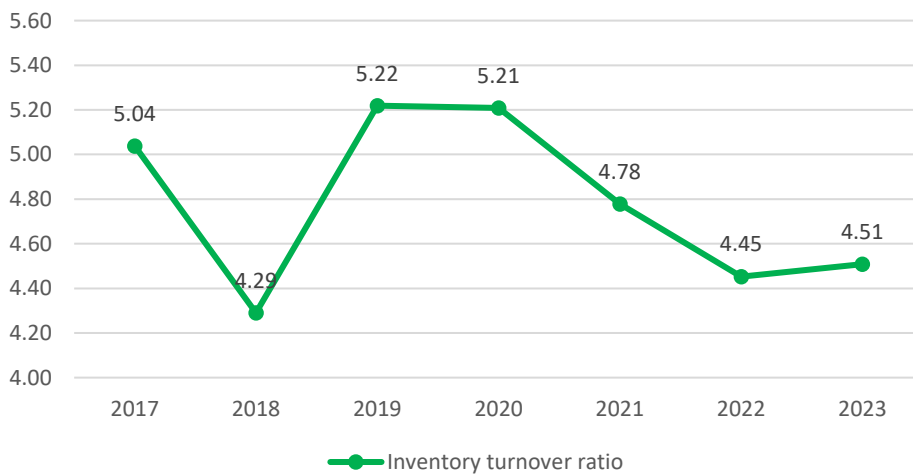


Figure 4. Inventory Turnover Ratio

Source : Annual Report PT Japfa Tbk 2017-2023

Inventory turnover ratio also known as stock turnover ratio is used to determine how inventory managed efficiently to generate sales. The higher inventory turnover ratio means that the

10th International CEO Communication, Economics, Organization & Social Sciences Congress company's sales and performance are increase. Figure 4 showing that with the average of 4.79 times inventory turnover ratio over seven years, PT Japfa Comfeed Indonesia Tbk showing moderate efficiency in managing inventory. While steady, these figure suggest room for improvement in streamlining inventory processes to enhance operational efficiency.

3. Solvency Ratio

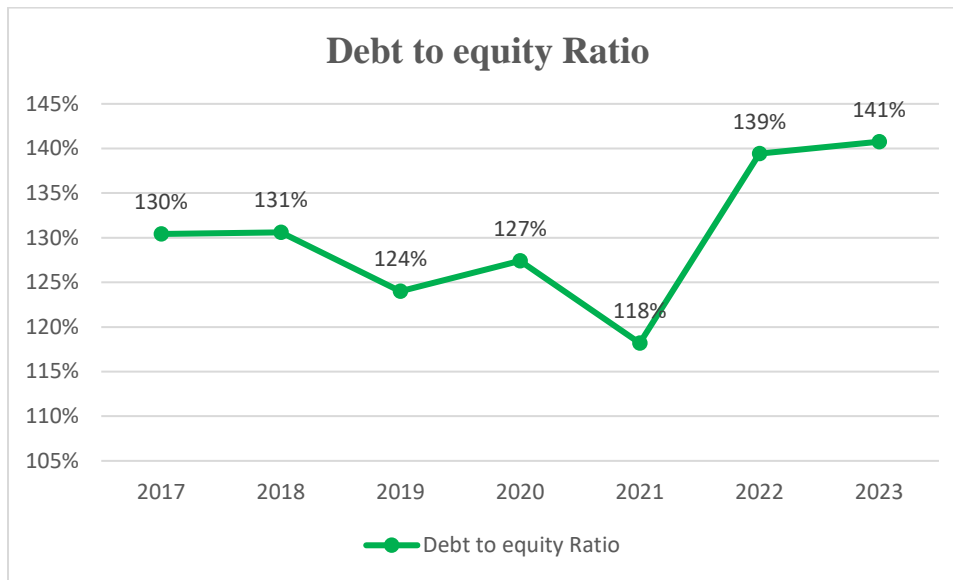


Figure 5. D/E Ratio

Source : Annual Report PT Japfa Tbk 2017-2023

Solvency ratios are essential indicators of a company's long term financial stability (Baltova, Solvency Ratios, 2023). The common analysis to measure it is using Debt to equity ratio (DER or D/E). To put it in another way, DER is used to determine the proportion of a company's assets that are supported by debt as opposed to equity. The figure 5 explained that average DER for PT Japfa Comfeed Indonesia Tbk in 2017 to 2023 period is 130%, which considered as moderate DER. Despite a severe fall in 2021, DER increase dramatically in 2022 reaching a high of 141% in 2023. This means of every \$1 equity invested the company has a debt of \$141. This also means that a higher reliance on liabilities relative to equity.

There are still some ratios that can be considered importance to the readers discretion. Thus, the other ratios in Table 1 are likewise provided by the author to explain more regarding the overall financial performance of PT Japfa Comfeed Indonesia Tbk.

Table 1. Overall Financial Ratios

RATIO	Year							Average
	2017	2018	2019	2020	2021	2022	2023	
Overall Performance Measures								
Price/Earning Ratio	15.9	11.5	10.2	18.5	9.9	10.6	14.8	13.0
Return on Asset (ROA)	5.2	9.8	7.1	3.9	7.5	4.6	2.8	5.8
Return on Invested Capital (ROIC)	6.9	13.1	10.0	5.0	9.9	6.4	4.0	7.9
Return on Equity (ROE)	12.04	20.93	15.83	8.78	16.26	10.92	6.68	13.1
Profitability Measures								
Profit Margin on Sales (GPM)	16.95	23.18	20.25	20.10	17.87	15.69	14.68	18.4
Net Profit Margin (NPM)	3.52	6.62	4.85	2.71	4.75	3.04	1.85	3.9
Earning per Share (EPS)	9,161	19,454	16,075	8,581	18,316	12,831	8,135	13,222
Cash Realization	0.7	0.9	1.0	4.1	0.3	1.0	2.5	1.5
Test of Investment Utilization								
Asset Turnover	1.5	1.4	1.5	1.4	1.6	1.5	1.5	1.5
Invested Capital Turnover	1.9	2.0	2.1	1.9	2.1	2.1	2.2	2.0
Equity Turnover (times)	3.4	3.2	3.3	3.2	3.4	3.6	3.6	3.4
Capital Intensity	4.5	4.3	3.9	3.3	3.9	3.9	3.8	3.9
Days Cash (days)	2.1	0.6	0.5	0.3	1.5	1.3	0.6	1.0
Days Receivable (days)	19	18	21	19	19	18	18	18.7
Days of Inventory (days)	72	85	70	70	76	82	81	76.7
Inventory Turnover (times)	5.0	4.3	5.2	5.2	4.8	4.5	4.5	4.8
Working Capital Turnover (times)	4.6	6.2	7.6	6.4	6.3	6.5	7.8	6.5
Current Ratio (Rasio Lancar)	2.35	1.80	1.66	1.96	2.00	1.81	1.61	1.9
Acid Tes Quick Ratio	1.32	0.89	0.90	1.01	0.91	0.82	0.71	0.9
Test of Financial Condition								
Financial Leverage Ratio (times)	2.30	2.31	2.24	2.27	2.18	2.39	2.41	2.3
Debt to Equity Ratio	1.3	1.3	1.2	1.3	1.2	1.4	1.4	1.3
Debt/Capitalization (%)	43	37	37	43	39	41	40	40.0
Times Interested Earned (times)	2.5	2.7	2.6	2.7	3.2	3.2	3.0	2.8
Cash Flow/Debit (%)	7	14	13	28	5	7	12	12.2
Test of Dividen Policy								
Dividen Yield (%)	6.31	8.70	9.84	5.39	10.12	9.42	6.78	8.1
Dividen Payout (%)	59.42	53.52	33.88	25.78	22.94	48.63	61.42	43.7

Source : Annual Report PT Japfa Tbk 2017-2023

5. CONCLUSION AND RECOMMENDATIONS

This research is prepared to analyse the financial condition for PT Japfa Comfeed Indonesia Tbk from year 2017 to 2023. During that period, there was a significant event, COVID-19, which changed everything, including the economic conditions, where the majority of businesses were financially impacted and experienced a decline in income. This situation also impacted to the PT Japfa Comfeed Indonesia Tbk financial health as they demonstrates resilience in managing margins, even during economic turbulence. Using key metric such the ROA and ROE also showing its ability to deliver consistent efficiency in asset utilization and solid returns to shareholders, although slightly lower in recent years due to increased equity and leverage. However from the DER it reflects above the competitors and moderate reliance on debt for expansion and operations, but it is within acceptable industry standards. In overall, PT Japfa Comfeed Indonesia Tbk showing its ability to adapt in the challenging period like COVID-19 with consistent profitability, efficient asset utilization, and balanced leverage.

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RECOMMENDATIONS

It is recommend for the company to gradually reduce the reliance on debt by funding growth with retained earnings or equity financing, focus on profitable growth and efficient asset utilization.

REFERENCES

- Adi, B. A., & Daryanto, W. M. (2021). Financial Performance Analysis of Food and Beverage Public Listed Companies for The Three Quarters Before and After The Covid-19 Pandemic in Indonesia. *South East Asia Journal of Contemporary Business, Economics and Law*, 12.
- Baltova, A. (2023, May 30). *Financial Analysis*. Retrieved from 365 Financial Analyst: <https://365financialanalyst.com/knowledge-hub/financial-analysis/profitability-ratios/>
- Baltova, A. (2023, June 1). *Solvency Ratios*. Retrieved from 365 Financial Analyst: <https://365financialanalyst.com/knowledge-hub/financial-analysis/solvency-ratios/>
- Baltova, A. (2024, Aug 7). *Activity Ratios*. Retrieved from 365 Financial Analyst: <https://365financialanalyst.com/knowledge-hub/financial-analysis/activity-ratios/>
- Fernando, J. (2024, March 6). *Financial Ratios*. Retrieved from Investopedia: <https://www.investopedia.com/terms/d/debtequityratio.asp>
- Kline, B. (2007). *How to Read and Understand Financial Statements when You Don't Know what You are Looking at*. Atlantic Publishing Company.
- Naufal, H. (2014). *Manajemen Keuangan: Berbasis Balanced Scorecard: Pendekatan Teori, Kasus, dan Riset Bisnis*. Bumi Aksara.
- PT Japfa Comfeed Indonesia Tbk. (2017). *Annual Report*. Jakarta: PT Japfa Comfeed Indonesia Tbk.
- PT Japfa Comfeed Indonesia Tbk. (2019). *Annual Report*. Jakarta: PT Japfa Comfeed Indonesia Tbk.
- PT Japfa Comfeed Indonesia Tbk. (2021). *Annual Report*. Jakarta: PT Japfa Comfeed Indonesia Tbk.
- PT Japfa Comfeed Indonesia Tbk. (2023). *Annual Report*. Jakarta: PT Japfa Comfeed Indonesia Tbk.
- Ravinder, A. a. (2013). Financial Analysis – A Study. *IOSR Journal of Economics and Finance*, 10.
- Robinson, T. R., Henry, E., Pirie, L. W., & Broihahn, M. A. (2012). *International Financial Statement Analysis*. John Wiley & Sons.
- Schmidt, J. (n.d.). *Asset Turnover Ratio*. Retrieved from Corporate Finance Institute: <https://corporatefinanceinstitute.com/resources/accounting/asset-turnover-ratio/>
- Tracy, A. (2012). *Ratio Analysis Fundamentals: How 17 Financial Ratios Can Allow You to Analyse Any Business on the Planet*. RatioAnalysis.net.
- Wallace Davidson, I. (2020). *Financial statement analysis: Basis for management advice*. John Wiley & Sons.



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E-Waste and Education: A Pathway to Sustainable Tech Consumption

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ABSTRACT

The accelerating advancement of digital technology introduces both convenience and significant environmental challenges, particularly in the form of electronic waste (e-waste). As devices become obsolete at an increasing rate, e-waste production has reached alarming levels worldwide, presenting unique risks due to hazardous components and inadequate recycling methods. Addressing these challenges demands urgent attention and a strategic educational approach to promote sustainability.

Keywords: E-waste sustainability, Environmental education, Digital device lifecycle, Hazardous waste management, Responsible consumption, and Tech sustainability initiatives

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Introduction

In an era defined by rapid technological advancement, electronic devices have become indispensable in everyday life, providing unprecedented convenience, communication, and connectivity. However, this progress also introduces a growing environmental crisis: electronic waste, or e-waste. Defined as discarded electronic devices, e-waste encompasses a variety of hazardous components, including heavy metals and toxic chemicals that, if improperly managed, can leach into soil and water, posing substantial risks to ecosystems and public health (Widmer et al., 2005). Fortie et. al. (2020) alert that the issue is striking, with the volume of global e-waste reaching over 53 million metric tons in 2019. This figure is projected to grow further due to increasing device consumption and shorter product lifespans.

While countries have adopted e-waste management practices, significant gaps remain in both recycling capacity and safe disposal methods. In many regions, e-waste is often disposed of in informal recycling centers where limited regulations contribute to environmental degradation and health hazards for local communities (Kiddee, Naidu, & Wong, 2013). This highlights the need for comprehensive strategies to mitigate the environmental impacts of e-waste, particularly as current recycling processes capture only a small fraction of this waste stream (Forti et al., 2020).

Education emerges as a venue for addressing the e-waste challenge by equipping students and future generations with the knowledge and tools to foster sustainable practices. Education for Sustainable Development (ESD) provides a framework for embedding environmental responsibility into academic curricula, empowering students to adopt mindful consumption habits and become advocates for sustainable solutions (UNESCO, 2017). Integrating topics such as responsible use and proper disposal methods into education can instill a sense of environmental stewardship, shaping behaviors that promote sustainability in technology's lifecycle (Chakraborty et al., 2019).

This research paper addresses the multifaceted challenges posed by e-waste and emphasizes the role of education in fostering sustainable practices. Divided into three main parts, the study begins with an examination of e-waste's environmental implications, outlining its types, hazardous components, and the impact of current management practices. The second part presents a global perspective, analyzing statistics that illustrate the scale of e-waste generation and identifying gaps in existing disposal and recycling systems. In the third part, we turn to the transformative role of education, exploring how curricula centered on sustainability can empower students to adopt responsible consumption habits and contribute to a culture of environmental stewardship.

By highlighting education's potential to shape future behaviors toward technology, this study advocates for integrating e-waste awareness into academic settings. The paper concludes with recommendations for educators, policymakers, and institutions to work collaboratively in building a sustainable future, where technology and environmental responsibility go hand in hand.

Methodology

This research paper adopts a secondary research approach, primarily utilizing an extensive literature review to explore the complex issue of e-waste management and the role of education in promoting sustainable practices. Secondary research is especially suitable for this study, given the availability of existing data, policy analyses, and academic literature on both e-waste challenges and educational frameworks designed to address environmental issues (Johnston,



10th International CEO Communication, Economics, Organization & Social Sciences Congress 2017). The integration of Education for Sustainable Development (ESD) into this analysis allows for a focused examination of how educational interventions can foster environmental responsibility and sustainable behavior among students and future generations.

Data Collection

Data was gathered from academic journals, governmental reports, and publications from reputable organizations, particularly focusing on sources that examine global and regional e-waste practices and educational strategies for sustainability. Key sources include *The Global E-Waste Monitor* (Forti et al., 2020; Baldé et al., 2015) and the *UNESCO Education for Sustainable Development Goals: Learning Objectives* (UNESCO, 2017), which provides guidance on integrating sustainability into education. The data sources selected represent a comprehensive array of insights on regulatory frameworks, technological limitations, socio-economic factors, and educational approaches, especially in regions facing significant e-waste challenges.

Literature Review Process

The literature review focused on two primary areas: (1) global e-waste management practices and challenges and (2) the role of Education for Sustainable Development in cultivating environmentally responsible behavior. Articles and reports were identified through targeted searches in databases like *ScienceDirect*, *SpringerLink*, and publications from UNESCO and the United Nations Environment Programme (UNEP). The search was limited to publications from 2000 onward to ensure contemporary relevance, particularly in terms of technological advancements and educational strategies.

The UNESCO (2017) report on ESD provided a foundational framework for analyzing how education can drive sustainable behaviors related to technology and e-waste. Studies exploring the integration of topics such as resource use, disposal methods, and circular economy principles into curricula were prioritized to understand how education can shape sustainable consumption and disposal habits (Leicht, Heiss, & Byun, 2018).

Analysis

Content analysis was used to synthesize themes, trends, and gaps in both e-waste management practices and educational approaches. Key themes identified include inadequate recycling infrastructure, limited public awareness, and the environmental impact of improper disposal. The role of education, particularly through ESD frameworks, was analyzed to determine its potential in promoting sustainability by equipping students with practical knowledge on responsible e-waste management and fostering an environmentally conscious mindset (Elo & Kyngäs, 2008).

Integrating Education for Sustainable Development

Education for Sustainable Development (ESD) provides a structured approach to embedding environmental stewardship in education, preparing students to engage responsibly with technology's lifecycle. By focusing on ESD's principles, this study assesses the potential of academic curricula to address e-waste challenges through a values-based and action-oriented approach (UNESCO, 2017). Integrating e-waste topics into education encourages students to become advocates for sustainable solutions, promoting behaviors such as mindful consumption, proper disposal methods, and support for recycling initiatives. By fostering these attitudes, education can help mitigate e-waste's environmental and health impacts over time, preparing future generations to contribute positively to sustainable practices (Nandan et al., 2023).

10th International CEO Communication, Economics, Organization & Social Sciences Congress Justification of Methodology

A secondary research and literature review methodology is well-suited for this study, as it allows for comprehensive coverage of both e-waste management issues and educational strategies. This approach consolidates diverse perspectives, enabling a holistic view of the e-waste challenge and the transformative potential of education in addressing it. As Snyder (2019) notes, literature reviews in sustainability research are valuable for highlighting established knowledge while also revealing areas for improvement and future focus.

This methodology section highlights the intersection of e-waste management and education, emphasizing the crucial role of ESD in instilling sustainable practices and values in students and preparing them to address future environmental challenges.

Defining E-Waste and Its Categories

Electronic waste, commonly known as e-waste, refers to discarded electrical or electronic devices, including all components, subassemblies, and consumables that are part of the product at the time of discarding. These devices contain valuable materials, such as gold and copper, but also hazardous substances like lead, mercury, and cadmium, making them both an economic resource and an environmental hazard (Forti et al., 2020). As the consumption of electronic devices continues to grow, so does the complexity of the e-waste landscape, necessitating a nuanced understanding of its categories to inform effective management and recycling practices (Omondi et al., 2022).

Categories of E-Waste

E-waste can be classified into several categories based on the type and function of the electronic device. These categories help to streamline recycling efforts by grouping similar items, often with comparable recycling or disposal requirements.

1. Large Household Appliances

This category includes large electronic devices commonly used in homes, such as refrigerators, washing machines, air conditioners, and ovens. These appliances contain a mix of valuable metals, including copper and aluminum, alongside hazardous components like refrigerants, which can contribute to ozone depletion if not handled properly (Kiddee, Naidu, & Wong, 2013).

- **Example:** Refrigerators, washing machines, and dryers.

2. Small Household Appliances

Small household appliances are smaller devices used in domestic settings, such as toasters, coffee makers, irons, and electric kettles. Though individually less hazardous than large appliances, their high turnover rate contributes significantly to the volume of e-waste, and they often end up in landfills rather than being recycled (Widmer et al., 2005).

- **Example:** Electric kettles, coffee makers, and hairdryers.

3. Information and Communication Technology (ICT) Equipment

ICT equipment includes devices such as computers, laptops, printers, mobile phones, and networking equipment. These items contain valuable metals like gold, silver, and

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palladium but also contain toxic elements, including lead and mercury. Due to frequent upgrades and product obsolescence, ICT devices contribute substantially to global e-waste levels (Forti et al., 2020).

- **Example:** Laptops, smartphones, and routers.

4. Consumer Electronics

Consumer electronics encompass devices primarily used for entertainment, such as televisions, audio systems, DVD players, and gaming consoles. Many of these products contain cathode ray tubes (CRTs) or liquid crystal displays (LCDs), which involve hazardous substances like cadmium and brominated flame retardants (Kiddee, Naidu, & Wong, 2013).

- **Example:** Televisions, DVD players, and gaming consoles.

5. Lighting Equipment

Lighting equipment includes items like fluorescent tubes, compact fluorescent lamps (CFLs), and LED lighting. These products often contain mercury and other toxic chemicals, posing specific disposal challenges due to the risk of contamination (Chakraborty et al., 2019).

- **Example:** Compact fluorescent lamps, LED bulbs, and fluorescent tubes.

6. Electrical and Electronic Tools

This category includes tools powered by electricity, such as drills, saws, and sewing machines. These tools may contain batteries, which present disposal hazards, as well as plastics and metals that are recyclable but challenging to separate (Widmer et al., 2005).

- **Example:** Power drills, sewing machines, and saws.

7. Toys, Leisure, and Sports Equipment

Electronic toys, fitness devices, and other recreational electronics are also significant contributors to e-waste. Items in this category often contain batteries, plastics, and other non-biodegradable materials, adding complexity to recycling and disposal processes (Grant et al., 2013).

- **Example:** Electronic toy cars, fitness trackers, and video game consoles.

8. Medical Devices

Medical devices, including monitoring and imaging equipment, generate unique types of e-waste. These devices often contain specialized components and may have strict regulatory guidelines for disposal due to potential biohazards (Grant et al., 2013).

- **Example:** MRI machines, patient monitors, and electronic thermometers.

Understanding these categories is crucial in addressing e-waste management, as each type presents unique challenges and opportunities for resource recovery. Recycling protocols must consider both the economic value and potential hazards associated with different categories to improve e-waste management outcomes effectively (Van Yken et al., 2021).

10th International CEO Communication, Economics, Organization & Social Sciences Congress The Impact of Current E-Waste Management Practices

Current e-waste management practices vary widely across the globe, influenced by regional regulations, economic factors, and available technology. However, there are widespread challenges in managing e-waste effectively, including inadequate recycling infrastructure, limited awareness, and improper disposal methods (Forti et al., 2020; & Zeng et al., 2017). These challenges have significant environmental and health impacts, as ineffective management practices can result in toxic substances contaminating ecosystems and communities (Robinson, 2009). In this section, we explore the effects of existing e-waste management practices and highlight critical issues within recycling and disposal processes.

1. Environmental Impact of Improper Disposal

In regions with limited e-waste regulations, e-waste often ends up in landfills or is incinerated, releasing hazardous substances into the environment. Toxic materials such as lead, mercury, and cadmium can leach into soil and groundwater, leading to long-term contamination. For instance, landfilling of e-waste can result in the contamination of water resources, negatively affecting biodiversity and agricultural productivity (Kiddee, Naidu, & Wong, 2013). Incineration, another common disposal method, releases toxic fumes into the air, contributing to air pollution and climate change (Widmer et al., 2005).

- **Example:** In countries like Ghana and Nigeria, informal e-waste dumps have developed, where devices are dismantled and burned for scrap recovery, leading to significant environmental and health risks for local populations (Amoyaw-Osei et al., 2011).

2. Health Hazards in Informal Recycling Centers

In many developing countries, informal recycling sectors handle the bulk of e-waste, often without proper safety measures. Workers, including children, are frequently exposed to toxic chemicals as they dismantle electronics by hand or use rudimentary tools to extract valuable materials. This exposure leads to severe health issues, including respiratory problems, skin conditions, and even long-term neurological effects (Issah et al., 2022). According to Grant et al. (2013), prolonged exposure to toxic substances in e-waste recycling has been linked to an increased risk of cancers, immune system disorders, and developmental issues in children.

- **Example:** In Guiyu, China, one of the world's largest e-waste hubs, informal recycling practices have led to widespread lead contamination, with local children showing elevated blood lead levels (Zeng et al., 2013).

3. Inefficiency in Resource Recovery

Formal recycling facilities in developed regions face their own challenges, particularly in resource recovery efficiency. Complex device designs make it difficult to extract valuable materials like gold, silver, and palladium. As a result, recycling facilities may only reclaim a small percentage of the valuable metals present in e-waste, leaving significant potential resources untapped (Zueva et al., 2024). The Global E-Waste Monitor (2020) reports that only 17.4% of global e-waste is formally collected and recycled, with the remaining portion either discarded improperly or handled through informal channels. This inefficiency represents both a lost economic opportunity and a strain on raw material resources (Forti et al., 2020).

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4. Regulatory and Policy Gaps

Although many countries have enacted legislation to address e-waste, implementation and enforcement are inconsistent. Inadequate regulation allows the continued export of e-waste from developed to developing countries, where regulations may be weaker. The Basel Convention, which aims to control the transboundary movement of hazardous wastes, is often circumvented, resulting in the continued flow of e-waste into regions with limited capacity for safe processing (Secretariat of the Basel Convention, 2011). This practice exacerbates environmental degradation in developing regions, undermining the potential benefits of international regulations (Abalansa et al., 2021).

- **Example:** Despite the Basel Convention, significant amounts of e-waste from North America and Europe are illegally exported to West Africa, where weak enforcement mechanisms allow these toxic materials to be processed in unsafe conditions (Schluep et al., 2009).

5. Economic Implications of Poor E-Waste Management

Poor e-waste management not only impacts the environment and human health but also has economic consequences. Inefficient recycling practices and resource recovery methods lead to the loss of valuable materials that could be reused in new products, increasing the demand for virgin resources. This inefficiency drives up production costs for electronics manufacturers and raises the overall environmental footprint of the tech industry (Baldé et al., 2015). Effective e-waste management practices that recover valuable metals could reduce the industry's dependency on raw materials, promoting a circular economy that reduces waste and conserves resources (Forti et al., 2020).

A Global Perspective on E-Waste Generation and Management

E-waste, or Waste Electrical and Electronic Equipment (WEEE), is one of the fastest-growing waste streams globally, driven by rapid technological advancements, consumer demand, and short product lifecycles. As technology evolves, so does the volume of e-waste, posing significant environmental, health, and logistical challenges (United Nations University, 2020). This section analyzes statistics that underscore the scale of global e-waste generation, highlighting critical gaps in disposal and recycling systems that hinder effective management and sustainability.

Scale of E-Waste Generation

The *Global E-Waste Monitor 2020* reported that in 2019, the world generated approximately 53.6 million metric tons of e-waste, a figure projected to reach 74.7 million metric tons by 2030 (Forti et al., 2020). This growth, estimated at an annual rate of 3-4%, is attributed to rising consumer electronics usage, shorter product lifespans, and limited repair options. Asia accounts for nearly 24.9 million metric tons, the highest regional contribution, while Europe and the Americas contribute approximately 12 million and 13 million metric tons respectively. Africa and Oceania, while generating comparatively lower volumes, still face unique challenges due to limited recycling infrastructure and informal handling practices (Baldé et al., 2015; Forti et al., 2020).

The disparity in e-waste generation across regions highlights both economic and regulatory challenges. High-income countries produce more e-waste per capita but generally have established systems for collection and processing. Low- and middle-income countries, while



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Gaps in Disposal and Recycling Systems

Despite the scale of e-waste, only 17.4% of global e-waste was documented as collected and recycled in 2019, with the rest either informally recycled, dumped, or incinerated (Forti et al., 2020). This low recycling rate reveals critical gaps in global and regional disposal systems:

- 1. Inadequate Infrastructure:** Many developing countries lack the infrastructure required for efficient e-waste collection and recycling. Without formal recycling facilities, much e-waste is processed informally, often under hazardous conditions. This is particularly evident in countries such as Ghana and Nigeria, where unregulated e-waste handling exposes workers to toxic substances like lead, mercury, and cadmium (Amoyaw-Osei et al., 2011).
- 2. Regulatory Disparities:** Effective e-waste management is often hampered by inconsistent or inadequate regulations. While the European Union's Waste Electrical and Electronic Equipment (WEEE) Directive has established comprehensive guidelines for e-waste recycling, other regions lack such robust frameworks. This leads to cross-border e-waste shipments to countries with minimal enforcement, allowing for informal and often unsafe recycling (Secretariat of the Basel Convention, 2011).
- 3. Lack of Consumer Awareness:** Public awareness regarding e-waste disposal remains low in many regions, affecting recycling rates. Many consumers are unaware of e-waste drop-off points or lack knowledge of proper disposal methods. This results in devices being discarded as household waste or stockpiled, contributing to waste management challenges (UNEP, 2019).
- 4. Economic Barriers to Recycling:** The cost-intensive nature of formal recycling systems makes it difficult for many developing countries to establish and maintain e-waste recycling facilities. Additionally, the economic incentive structure often favors informal recycling methods, which may recover valuable metals but also result in the release of hazardous substances due to lack of proper technology and safeguards (Zeng et al., 2017).

Environmental and Health Implications

The gaps in e-waste disposal and recycling systems have severe environmental and health implications. Improper disposal methods release harmful chemicals and heavy metals into the environment, contaminating soil, water, and air. Informal recycling processes, which involve burning or acid stripping to extract metals, expose workers and nearby communities to toxic fumes and residues. In Ghana's Agbogbloshie, one of the world's largest e-waste sites, studies have documented elevated levels of lead and other toxic metals, contributing to serious health risks among workers and local residents (Prakash et al., 2010).

The Role of Global Cooperation and Policy Development

Addressing the scale and complexity of e-waste requires coordinated global efforts. Initiatives like the Basel Convention, which restricts transboundary movements of hazardous waste, have helped raise awareness about e-waste flows but face challenges with enforcement and loopholes in developing regions (Secretariat of the Basel Convention, 2011). Collaborative efforts are essential for sharing technological resources, establishing global recycling standards, and creating incentives for sustainable e-waste management practices (Green.org, 2024).



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By identifying and addressing these critical gaps, the global community can work toward more sustainable and equitable e-waste management practices, promoting environmental protection and public health.

The Transformative Role of Education in Promoting Sustainable Practices

Education is pivotal in addressing global sustainability challenges, including the pressing issue of e-waste management. By embedding sustainability into educational curricula, educators can empower students to adopt responsible consumption habits, practice mindful disposal, and contribute to a broader culture of environmental stewardship (UNESCO, 2017). This section explores the potential of education, particularly through Education for Sustainable Development (ESD), to transform students into advocates for sustainability by instilling environmental awareness and responsible practices.

Integrating Sustainability into Curricula

Education for Sustainable Development (ESD) provides a structured framework that supports the integration of environmental responsibility into academic curricula. The UNESCO *Education for Sustainable Development Goals: Learning Objectives* (2017) outlines ESD's key principles, emphasizing a shift from passive knowledge acquisition to active, values-based learning. ESD encourages educators to foster skills, attitudes, and knowledge that enable students to think critically, understand the impact of their choices, and consider long-term environmental implications (UNESCO, 2017).

By including sustainability topics such as the circular economy, e-waste management, and resource conservation in curricula, educators can prepare students to make informed decisions and understand the environmental impact of technology throughout its lifecycle. Studies indicate that integrating sustainability education into classrooms promotes pro-environmental behaviors, as students become more aware of global ecological challenges and empowered to take action (Leicht, Heiss, & Byun, 2018).

Promoting Responsible Consumption Habits

Sustainability-focused curricula can foster a deeper understanding of responsible consumption, a critical step in reducing e-waste. Responsible consumption involves a range of behaviors, from extending the life of products through repair and reuse to supporting companies with sustainable practices. By learning about the environmental and social impacts of electronic waste, students are better equipped to make mindful purchasing decisions, avoid unnecessary upgrades, and understand the importance of proper disposal (Barth et al., 2014).

The influence of education on responsible consumption is well-supported by research. Studies show that sustainability education cultivates skills for evaluating product lifecycles, enhancing students' ability to make eco-friendly choices and reduce waste (Barth et al., 2014). Embedding these concepts in science, technology, and social studies courses gives students practical insights into their roles as consumers and the lasting environmental impact of their choices (Wals & Corcoran, 2006).

Fostering Environmental Stewardship

Environmental stewardship is a core outcome of effective sustainability education. ESD encourages students to adopt a stewardship mindset by highlighting personal and community responsibility for environmental preservation. Education can transform students into advocates



10th International CEO Communication, Economics, Organization & Social Sciences Congress who actively participate in sustainable practices, such as e-waste recycling, local environmental campaigns, and advocating for policies that support sustainable development. Programs that encourage project-based learning, such as community clean-ups or recycling initiatives, have proven effective in fostering a sense of environmental responsibility and agency among students (Tilbury, 2011).

Schools that have implemented ESD-centered curricula report positive shifts in students' attitudes toward the environment and community. Participatory learning approaches, such as discussions, field trips, and hands-on projects, enhance students' emotional connection to nature and solidify their role as stewards of the planet (Sterling, 2014). Moreover, students who actively participate in sustainability-focused initiatives are more likely to influence their families and communities, creating a ripple effect that extends beyond the classroom (Evans et al., 2017).

Building a Culture of Environmental Stewardship through E-Waste Education

Given the significant environmental risks posed by improper e-waste disposal, education is instrumental in building a culture of e-waste literacy. Topics covering the safe disposal of electronics, resource recovery, and hazardous waste awareness can be introduced at various educational levels. For instance, high school programs that incorporate e-waste management and recycling into environmental science curricula prepare students to handle e-waste responsibly and advocate for proper disposal methods within their communities (UNEP, 2019).

Several countries are already making strides in this direction. For example, Japan and South Korea have introduced e-waste education modules that teach students about resource scarcity, waste management, and the economic and environmental value of recycling electronics. This approach not only reduces e-waste generation but also nurtures a generation that recognizes and values sustainable practices (UNEP, 2019).

Through well-designed curricula and participatory learning opportunities, education can play a transformative role in shaping responsible, environmentally conscious citizens. By empowering students with the knowledge and tools to address e-waste and other sustainability challenges, education fosters a culture of stewardship that supports the broader goals of environmental sustainability (UNESCO, 2014).

Global Approaches to Embedding E-Waste Education in School Curricula

Several countries worldwide have incorporated e-waste education into their curricula to promote sustainable practices, with notable initiatives in New Zealand, India, Kenya, and Europe. These programs aim to raise awareness about the environmental impacts of electronic waste and equip students with the knowledge to manage e-waste responsibly.

1. **New Zealand:** New Zealand's education system has embraced environmental sustainability through a variety of initiatives that focus on reducing waste, recycling, and promoting responsible consumption. Although specific e-waste management curricula are emerging, schools have integrated broader environmental education initiatives that encourage students to consider the lifecycle of electronic products and adopt responsible disposal practices. The focus is on shaping responsible citizens who understand the long-term environmental impacts of their actions, including e-waste management. The Ministry of Education in New Zealand has developed resources for



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schools to incorporate sustainability themes, including e-waste, into subjects such as science and social studies (Ministry of Education, 2017).

2. **India:** India's **Zero Waste School Initiative** promotes environmental literacy through curricula that emphasize waste management, recycling, and sustainability. Schools are increasingly focusing on e-waste, with student-led projects that tackle the challenges of electronic waste. This initiative has not only encouraged responsible e-waste management but also fostered a culture of sustainability among students and their families. Indian schools have successfully integrated sustainability into subjects like environmental science, allowing students to take an active role in reducing waste in their communities. Studies have shown that this approach has positively influenced students' attitudes towards waste management, with many students advocating for better disposal and recycling practices (Ongondo, Williams, & Cherrett, 2011).
3. **Kenya:** In Kenya, environmental education programs, including those focused on e-waste, are gaining momentum. Schools incorporate topics like safe disposal and resource recovery in subjects such as geography and science. The country faces significant challenges due to informal e-waste recycling practices, but educational programs are beginning to address these issues by instilling knowledge about proper e-waste disposal and its environmental impact. While infrastructure remains a challenge, the educational push has contributed to greater awareness about the risks of improper disposal and the benefits of sustainable practices (UNEP, 2019).
4. **European Union:** The **Waste Electrical and Electronic Equipment (WEEE)** Directive, which was established by the European Union, has significantly influenced e-waste education across the region. The directive mandates that EU countries promote awareness and education about e-waste and its management. Countries like Switzerland, Germany, and the Netherlands have developed comprehensive school-based programs that teach students about e-waste recycling, responsible consumption, and the importance of sustainable practices in technology. These initiatives have contributed to higher recycling rates and better consumer understanding of the environmental impact of e-waste (European Commission, 2003). Schools across Europe use curricula that engage students in projects related to reducing, reusing, and recycling e-waste.

These global efforts highlight the transformative potential of education in fostering a culture of environmental stewardship. By embedding e-waste management and sustainability into school curricula, these countries are equipping students with the knowledge and tools to address one of the most pressing environmental challenges of our time. Such initiatives not only promote responsible consumption and disposal but also cultivate behaviors that can lead to broader societal change (UNESCO, 2017 & Sterling, 2014).

Research Findings

To build a sustainable future where technology and environmental responsibility coexist, research findings suggest that collaboration between educators, policymakers, and institutions is crucial.

1. **Embedding Sustainability in Education:** Studies show that integrating sustainability and environmental responsibility into curricula enhances students' awareness of global challenges, including e-waste management. As students learn about the environmental impact of technology, they become more responsible consumers and advocates for sustainable solutions (Tilbury, 2011; UNESCO, 2017).



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2. **Promoting Systemic Learning:** Research highlights that sustainability requires a systemic approach, where environmental responsibility is not just a separate subject but a core theme in all disciplines (Sterling, 2014). For example, science, technology, and social studies courses should address the lifecycle of products, including e-waste, fostering a deeper understanding of responsible consumption and disposal (Smith & Rees, 2017).
3. **Policy Integration for E-Waste Management:** Effective e-waste management is contingent upon the creation of supportive policies that incentivize both educational institutions and businesses to adopt sustainable practices. The European Union's WEEE Directive, for instance, emphasizes the importance of education in reducing e-waste through recycling and responsible disposal methods (European Commission, 2003).
4. **Building Partnerships:** Research underscores the importance of partnerships between governments, educators, and the private sector to build infrastructures for e-waste recycling and create educational programs that engage students in sustainable technology use (Ongondo et al., 2011; UNEP, 2019).

Recommendations

The following are key recommendations to assist in building a sustainable future where technology and environmental responsibility coexist through the collaboration among educators, policymakers, and institutional leaders working hand in hand to achieve this common goal.

1. **Curricular Reforms:** Policymakers and educators should collaborate to integrate e-waste education into the national curriculum at all levels. This could include topics on reducing, reusing, and recycling electronics, as well as broader principles of sustainable development (Tilbury, 2011). By embedding these concepts into core subjects, students will gain practical insights into their roles as informed consumers (ERI, 2023).
2. **Experiential Learning Opportunities:** Institutions should provide hands-on learning experiences where students can engage in e-waste recycling projects and sustainability initiatives. This type of participatory learning not only deepens understanding but also empowers students to lead environmental initiatives within their communities (Sterling, 2014).
3. **Public Awareness Campaigns:** Policymakers should invest in national public awareness campaigns that focus on e-waste and its environmental impact, leveraging schools and universities as platforms to disseminate knowledge (UNEP, 2019). These campaigns can encourage students to practice responsible consumption and disposal and influence the behavior of their families and communities (Debrah et al., 2021).
4. **Collaboration with Industry:** Educational institutions should work with the tech industry to create programs that focus on responsible e-waste disposal and the development of eco-friendly electronics. Collaboration can also lead to research and development of new technologies that reduce the environmental impact of electronics, thus promoting a circular economy (European Commission, 2003).
5. **Policy and Infrastructure Support:** Governments should ensure that policies are in place to support e-waste recycling and disposal programs, while also providing funding for educational institutions to implement sustainability-focused curricula. Policies



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Conclusion

In conclusion, addressing the challenges of e-waste management requires a multifaceted approach, with education playing a pivotal role in fostering a culture of environmental stewardship. By embedding sustainability-focused curricula and promoting responsible consumption and disposal practices, educators and policymakers can equip students with the necessary knowledge and skills to address the growing issue of e-waste.

Collaborative efforts at the institutional, governmental, and societal levels are essential for achieving a sustainable future, where technology and environmental responsibility go hand in hand. Through these initiatives, we can empower future generations to lead the charge in building a more sustainable world.

References

- Abalansa, S.; El Mahrad, B.; Icely, J.; & Newton, A. (2021). Electronic Waste, an Environmental Problem Exported to Developing Countries: The GOOD, the BAD and the UGLY. *Sustainability*, 13(9), 5302; <https://doi.org/10.3390/su13095302>
- Amoyaw-Osei, Y., Agyekum, O. O., Pwamang, J. A., Mueller, E., Fasko, R., & Schluep, M. (2011). *Ghana e-Waste Country Assessment: SBC e-Waste Africa Project*. Environmental Protection Agency (EPA) Ghana & Secretariat of the Basel Convention.
- Baldé, C. P., Forti, V., Gray, V., Kuehr, R., & Stegmann, P. (2015). *The Global E-Waste Monitor 2014: Quantities, Flows and the Circular Economy Potential*. United Nations University (UNU), International Telecommunication Union (ITU), and International Solid Waste Association (ISWA).
- Barth, M., Godemann, J., Rieckmann, M., & Stoltenberg, U. (2014). "Developing key competencies for sustainable development in higher education." *International Journal of Sustainability in Higher Education*, 8(4), 416–430.
- Chakraborty, P., Selvaraj, S., Nakamura, M., & Prithiviraj, M. (2019). E-Waste management and education. *Environmental Pollution*, 253, 113-118.
- Debrah, J.K.; Vidal, D.G.; & Dinis, M.A. P. (2021). Raising Awareness on Solid Waste Management through Formal Education for Sustainability: A Developing Countries Evidence Review. *Recycling*, 6(1), 6; <https://doi.org/10.3390/recycling6010006>
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115.
- ERI. (2023). Educating the Next Generation: The Importance of E-Waste Awareness in Schools. Available at <https://eridirect.com/blog/2023/06/educating-the-next-generation-the-importance-of-e-waste-awareness-in-schools/>
- European Commission. (2003). Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE). *Official Journal of the European Union*, L 37/24–L 37/38. Available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32002L0096>
- Evans, N., Stevenson, R. B., Lasen, M., Ferreira, J.-A., & Davis, J. (2017). Approaches to embedding sustainability in teacher education: A synthesis of the literature. *Teaching and Teacher Education*, 63, 405–417.
- Forti, V., Balde, C. P., Kuehr, R., & Bel, G. (2020). *The Global E-Waste Monitor 2020: Quantities, flows, and the circular economy potential*. United Nations University, International Telecommunication Union, and International Solid Waste Association.
- Grant, K., Goldizen, F. C., Sly, P. D., Brune, M. N., Neira, M., van den Berg, M., & Norman, R. E. (2013). Health consequences of exposure to e-waste: a systematic review. *Environmental Health Perspectives*, 121(9), 994-1001.
- Green.org. (2024). *The Future of Waste Management: Challenges and Solutions*. Available at <https://green.org/2024/01/30/the-future-of-waste-management-challenges-and-solutions/>

- 10th International CEO Communication, Economics, Organization & Social Sciences Congress**
- Issah, I.; Arko-Mensah, J.; Agyekum, T.P.; Dwomoh, D.; & Fobil, J.N. (2022). Health Risks Associated with Informal Electronic Waste Recycling in Africa: A Systematic Review. *International Journal of Environmental Research and Public Health*, 19(21), 14278; <https://doi.org/10.3390/ijerph192114278>
- Johnston, M. P. (2017). Secondary data analysis: A method of which the time has come. *Qualitative and Quantitative Methods in Libraries*, 3(3), 619–626.
- Kiddee, P., Naidu, R., & Wong, M. H. (2013). Electronic waste recycling: Challenges and opportunities. *Waste Management*, 33(11), 250-254.
- Leicht, A., Heiss, J., & Byun, W. J. (2018). *Issues and trends in Education for Sustainable Development*. UNESCO Publishing.
- Ministry of Education. (2017). *Education for Sustainability: Teaching and Learning for a Sustainable Future*. New Zealand Ministry of Education.
- Nandan, A.; Suresh, A.C.; Saole, P. Jeevanasai, S.A.; Chandrasekaran, R.; Meili, L.; Azelee, N.I.W.; & Selvasembian, R. (2023). An Integrated Approach for Electronic Waste Management—Overview of Sources of Generation, Toxicological Effects, Assessment, Governance, and Mitigation Approaches. *Sustainability*, 15(24), 16946; <https://doi.org/10.3390/su152416946>
- Omondi, E.A.; Ndiba, P.K.; & Koech, G.C. (2022). Complexity of E-Waste and its Management Challenges in Developing Countries – A Review. *International Journal of Environmental Sciences & Natural Resources*, 31(2), 01-017. DOI: 10.19080/IJESNR.2022.31.556309
- Ongondo, F.O., Williams, I.D., & Cherrett, T.J. (2011). How are WEEE doing in developing countries? *Waste Management & Research*, 29(10), 1055-1061.
- Prakash, S., Manhart, A., Amoyaw-Osei, Y., & Agyekum, O. O. (2010). *Assessment of e-waste flows in Ghana and economic feasibility of e-waste treatment facilities*. Freiburg, Germany: Öko-Institut e.V.
- Robinson, B. H. (2009). E-waste: An assessment of global production and environmental impacts. *Science of The Total Environment*, 408(2), 183–191.
- Schluep, M., Hagelueken, C., Kuehr, R., Magalini, F., Maurer, C., Meskers, C., & Mueller, E. (2009). *A global assessment of e-waste management: Review of current legislation, regulations, and policies*. Basel Action Network.
- Secretariat of the Basel Convention. (2011). *Where are WEEE (Waste Electrical and Electronic Equipment) in Africa?* Secretariat of the Basel Convention, United Nations Environment Programme (UNEP).
- Smith, R., & Rees, A. (2017). *Education and the Circular Economy: E-Waste in New Zealand Schools*. Available at <https://www.nzcer.org.nz/research/publications/environmental-education-new-zealand-schools-research-current-practice-and-futu>
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339.
- Sterling, S. (2014). *Higher education, sustainability, and the role of systemic learning*. In *Sustainable Education Revisited* (pp. 89–107). Totnes, UK: Schumacher College.
- Tilbury, D. (2011). *Education for Sustainable Development: An Expert Review of Processes and Learning*. Paris: UNESCO Education Sector.
- United Nations University (UNU). (2020). *Global E-Waste Surging: Up 21% in 5 Years*. Available at <https://unu.edu/press-release/global-e-waste-surging-21-5-years>
- UNEP. (2019). *A New Circular Vision for Electronics: Time for a Global Reboot*. United Nations Environment Programme (UNEP).
- UNESCO. (2017). *Education for Sustainable Development Goals: Learning Objectives*. United Nations Educational, Scientific, and Cultural Organization.
- UNESCO. (2014). *Shaping the Future We Want: UN Decade of Education for Sustainable Development (2005–2014) Final Report*. Paris: UNESCO.
- Van Yken, J.; Boxall, N.J.; Cheng, K.Y.; Nikoloski, A.N.; Moheimani, N.R.; & Kaksonen, A.H. (2021). E-Waste Recycling and Resource Recovery: A Review on Technologies, Barriers and Enablers with a Focus on Oceania. *Metals*, 11, 1313, 1-40. <https://doi.org/10.3390/met11081313> Available at [file:///C:/Users/10435/Downloads/E-Waste Recycling and Resource Recovery A Review o.pdf](file:///C:/Users/10435/Downloads/E-Waste%20Recycling%20and%20Resource%20Recovery%20A%20Review%20o.pdf)
- Wals, A. E. J., & Corcoran, P. B. (2006). *Sustainability as an Outcome of Transformative Learning*. In J. Holmberg & B. E. Samuelsson (Eds.), *Drivers and Barriers for Implementing Sustainable Development in Higher Education* (pp. 103–112). Paris: UNESCO.
- Widmer, R., Oswald-Krapf, H., Sinha-Khetriwal, D., Schnellmann, M., & Böni, H. (2005). Electronic waste: An emerging concern in today's environment. *Environmental Impact Assessment Review*, 25(5), 436-458.
- Zeng, X., Yang, C., Chiang, J. F., & Li, J. (2017). Innovating e-waste management: From device disassembly to resource recovery. *Science of The Total Environment*, 575, 1–7.
- Zeng, X., Xu, X., Boezen, H. M., & Huo, X. (2013). Children with health impairments by heavy metals in an e-waste recycling area. *Chemosphere*, 93(6), 961-966.



10th International CEO Communication, Economics, Organization & Social Sciences Congress
Zueva,S.; Ippolito, N.M.; Passadoro, M.; Romano, P.; Ferella, F.; & Veglio, F. (2024). Selective Recovery of Gold from E-Waste Recycling Plants' Waste Fractions: Waste-to-Resource Transition. *Minerals*, 14(5), 518; <https://doi.org/10.3390/min14050518>



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**Financial Performance Analysis of PT Chandra Asri Petrochemical Tbk
Indonesia with *Common Size Method* for Period Year 2017-2023 and the
Effect of COVID-19 Pandemic**

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ABSTRACT

PT. Chandra Asri Petrochemical Tbk. now transformed into PT. Chandra Asri Pacific Tbk. is Indonesia's leading chemical and infrastructure solution company supporting Indonesia economic growth. This study using Common Size Method, the method uses one line item on the statement as an base against which to evaluate all items in the same statement. It compares information within a current accounting period. The formula for calculating the common size percentage is $(\text{Comparison Amount}/\text{Base Amount}) * 100$. The design of this research is quantitative research. The data source used is secondary data in the form of balance sheets and profit and loss from 2017-2023. This period is particularly significant as it encompasses the onset of the Covid-19 pandemic, a condition that impacted finance performance. By analyzing these finance metrics this study aims to elucidate the effects of the pandemic on PT. Chandra Asri financial health and with Common Size Method can be used to assess Finance Performance to determine the health level of the company, evaluate and analyze how the company's finance report, so the advantage and the disadvantage of final result can be known. In general, PT. Chandra Asri Petrochemical Tbk. can maintained the finance performance during COVID-19 by able to report a growth in sales volume, an improved Net Profit in 2020 also in 2021, in which are better than pre-COVID 19. On the other hand, global geopolitical dynamics, specifically the outbreak of war impacted on economic condition. The rise in crude oil price had significant influence on Chandra Asri as the cost of raw materials for production.

Keywords: Petrochemical, Financial Performance, Common Size Method, Covid-19

1. INTRODUCTION

PT. Chandra Asri Petrochemical Tbk (CAP). is Indonesia's provider of chemical and infrastructure solution supporting country's economic growth. In period 2017-2023 PT. Chandra Asri Petrochemical Tbk. dealing with the effect pandemic COVID-19, Merger in 2020 (PT. Chandra Asri Petrochemical Tbk., 2020) and 2021 (PT. Chandra Asri Petrochemical Tbk., 2021) and in 2024 announce the new Company's named PT. Candra Asri Pacific Tbk. (Chandra Asri Group) (PT. Chandra Asri Petrochemical Tbk, 2024). The limitation of this research is analyzing the Financial Performance using *Common Size Method* and the Effect of COVID-19.

As state in "World Global Economic Outlook" from International Monetary Fund's (IMF) October 2023 edition, in the beginning of 2023 condition of global economic started strong but slowed down in the second quarter. China's market share in global petrochemical sales was unstable caused by the regain from the Covid-19 pandemic, their economic condition has not yet returned to normal. It was followed by geopolitical such as the conflict can have an impact on the petrochemical raw material especially and economic dynamics globally (PT. Chandra Asri Petrochemical Tbk., 2023).

Financial reports will help with decision making and company management. The finance performance of a company shows its monetary condition. Finance performance, according to (Kasmir, 2019) can be defined as the result of various actions that have been taken to achieve company success. Quantitative method used in this research. The data filling for 2017-2023 period. By using *Common Size Method*, we elaborate statement of financial position and income statement (Rolizda & Sukiyarningsih, 2023). This method has been used to be a framework to developed a hypothesis in several research about company finance performance, among them (Mulkhadimah, Salsabil, & Miranti, 2021), (Fionalita, 2020), (Fitriyani & Zulkarnain, 2020), (Pratiwi & Hidayati, 2018) and (Zuhri, Sutriyono, & Samsu, 2019). The most recent research, using *Common Size* analysis to evaluate finance performance, shown an increase and variation in the company's finance, with several factors indicated.

2. LITERATURE REVIEW

2.1. Petrochemical Industry in Indonesia

In Indonesian's Law on UU No. 3 Tahun 2014 about industrialization, one of the ten priorities in industrialization is petrochemical industries. From upstream and downstream of crude oil based industry it categorized as a middle industry (Fauzan, 2023).

2.2. Chandra Asri Petrochemical

Chandra Asri is Indonesia's top of chemical and infrastructure company, founded in 1992. Operated in Indonesia only Naphtha Cracker, Butadiene, MTBE, Styrene Monomer and Butane-1 plant. A second petrochemical complex, PT. Chandra Asri Perkasa (CAP2) also build to served domestic demand of petrochemical products and ease the country's import burden. Not only to maintain the market, this expansion also contributing to Indonesia's economic growth and improving its trade balance (PT. Chandra Asri Petrochemical Tbk., Chandra Asri Group at a Glance, 2024)

2.3. Finance Performance and *Common Size Method*

Financial performance describe how a company earn revenues and effectively manages its assets, liabilities, and other financial indicator of its stakeholders and stockholders (Kenton, 2024).

Many financial managers tool like *Common Size Analysis* can be used to learn more about company's finance statement, give simple way to evaluate financial statement, make

10th International CEO Communication, Economics, Organization & Social Sciences Congress comparison, either to other organization or to previous financial statement (Indeed Editorial Team, 2024).

The formula for calculating the *common size* percentage is (Puji Suryani, Zysman, Akhyar, Sinta, & Ilham, 2023):

$$\text{Balance Sheet} : (\text{Components in Balance sheet/Total Assets or Liabilities}) \times 100\%$$

$$\text{Profit and Loss: (Component in Profit and Lost/Total Net Sales)} \times 100\%$$

2.4. COVID-19 in Indonesia

In the beginning of 2020, COVID-19 is a global health emergency announced by World Health Organization (WHO). The Indonesian Government also responded to the threat of COVID-19 after its emergence. In March 2020, the first cases identified in Indonesia. Large-scale Social Restriction (PSBB) under Government Regulation No. 21/2020 implemented by the Government, posing a significant risk to the country's economic stability (Dewi, 2023). The growth of the world economy fell by 2.8%, or 6% from previous quarter (Carrillo-Larco & Castillo Cara, 2020). The nation's economic growth dropped by 5.32% in the second quarter of 2020, according to the World Bank (Samudra & Setyonaluri, 2020).

3. RESEARCH METHOD

The research method adopted a quantitative descriptive method and using secondary data by Balance Sheets and Profit and Loss which has been audited and published in public. *Common Size* used to data analysis method by reviewing the company's Balance Sheets and Profit and Loss from 2017-2023. Data can be access from the Company's Website.

4. RESULT AND DISCUSSION

The summarize and *Common Size* Calculation of Balance Sheet:

Table 1. Balance Sheet PT. Chandra Asri Petrochemical Tbk.(in Thousand US\$):

ITEM	2023	2022	2021	2020	2019	2018	2017
Assets							
Total current assets	2.837.420	2.281.544	2.926.390	1.502.145	1.389.124	1.395.717	1.428.986
Total non-current assets	2.777.032	2.648.327	2.066.670	2.091.602	2.062.087	1.777.769	1.558.318
Total assets	5.614.452	4.929.871	4.993.060	3.593.747	3.451.211	3.173.486	2.987.304
Liabilities and Equity							
Total current liabilities	817.322	607.683	931.799	863.813	783.962	680.250	587.174
Total non-current liabilities	1.803.230	1.513.082	1.133.596	918.506	906.257	723.159	731.308
Total liabilities	2.620.552	2.120.765	2.065.395	1.782.319	1.690.219	1.403.409	1.318.482
Total equity	2.993.900	2.809.106	2.927.665	1.811.428	1.755.540	1.770.077	1.668.822
Total liabilities and equity	5.614.452	4.929.871	4.993.060	3.593.747	3.445.759	3.173.486	2.987.304

Source: PT. Chandra Asri Petrochemical Tbk. Annual Report

Based on the data provided, the result of calculating using *common size* are as Table 2.:

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 Table 2. *Common Size* on the Balance Sheet PT. Chandra Asri Petrochemical Tbk.

ITEM	2023	2022	2021	2020	2019	2018	2017
Assets							
Total current assets	50.54%	46.28%	58.61%	41.80%	40.25%	43.98%	47.84%
Total non-current assets	49.46%	53.72%	41.39%	58.20%	59.75%	56.02%	52.16%
Total assets							
Liabilities and Equity							
Total current liabilities	14.56%	12.33%	18.66%	24.04%	22.75%	21.44%	19.66%
Total non-current liabilities	32.12%	30.69%	22.70%	25.56%	26.30%	22.79%	24.48%
Total liabilities	46.68%	43.02%	41.37%	49.60%	49.05%	44.22%	44.14%
Total equity	53.32%	56.98%	58.63%	50.40%	50.95%	55.78%	55.86%

Source: Author Analysis from PT. Chandra Asri Petrochemical Tbk.

Value of *Common Size* calculation of Current Assets in 2018 decreased to 43.98% from 47.84% in 2017 due to a reduction in Cash and Cash Equivalents and Account Receivable, which was offset by increases in Inventories, Prepaid Taxes, Advances and Prepaid Expenses. Non-Current Assets in 2018 representing 56.02% of Total Asset as a result of Company's expansion, balance out by investment in associate and claims for tax refund. Total Liabilities 44.22% in 2018 compared 44.1% in 2017 indicating an increase in bonds payable, business activity and profitability, coupled with a decreased in Bank Loan payment. Current Liabilities representing 48.7% of Total Liabilities caused by an increase in AR related in raw material's purchased and fixed assets. Non-Current Liabilities representing 51.3% of Total Liabilities and decreased to 22.79% from 2017 mainly due to decrease in bank loan. The decline of Long Term Liabilities of bank loans due to principal repayments, including to reduce outstanding debt by voluntary prepayment. The rise of Long-term Liabilities from bonds payable is used to fund the company's expansion project and partly reduce its long-term debt. Total Equity reflecting the additional of 2018 Comprehensive income and subtraction for the Company's dividends.

In 2019, both of Current Assets and Non-Current Assets showed similar trends to those in 2018. Non-Current Liabilities representing 53.5% of Total Liabilities and increased compared to 2018 caused by new charge Drawdown and Bonds Payable. Total Equity reflecting the additional of 2019 Comprehensive Income and deduction for the Company's dividends.

In 2020, Assets increased compared to 2019, reflecting higher business activity driven by an increased the rate of production and the building of Assets in 2019. Current Assets representing 42% of Total Assets and increased compared 2019 caused Cash and Cash Equivalent incline equal with decline of Trade AR, Inventories, Prepaid Expenses, Restricted Cash, Prepaid Taxes, Advances. Non-Current Assets representing 58% of Total Assets, slightly down opposed to the previous year, but Non-Current Assets grew in 2020 compared in previous year driven by a rise in Company's expansion activity effected to Derivative Financial Assets and Claim for Tax Refund, increased in Property, plant and equipment, right-of-use assets. The increase of Trade Account Payable and other Account Payable related to purchase of raw materials and fixed assets and increase in Bonds Payable caused Total Liabilities increased to 49.60% from 49.05% in 2019. Non-Current Liabilities is 52% from Total Liabilities and incline compared to 2019 mainly due to the Long Term Financing and Issuance of New Bonds netted Tax Liabilities and Long Term Loan. Total equity reflecting the additional of 2020 Comprehensive income and deduction for the RPU's dividends.

In 2021, Current Assets higher than Non-Current Asset during the 2017-2021 period. Current Assets reached 58.6% of Total Assets resulted in higher Cash and Cash Equivalent by to the successful rights issue process. The increased compared in 2020 was produced by an incline in Cash and Cash Equivalent, time deposits, trade Account Receivable offset by a decrease in

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 prepaid taxes. Non-Current Asset decrease to 41.39% from 58.20% in 2020 due to a decrease in property, plant and equipment, tax refund claimed. Both Total Current Liabilities and Non-Current Liabilities increased in amount but in *Common Size* calculation decreased compared 2020 because the denominator value was higher. The Total Liabilities increased compared to 2020 reflects an increase in trade account payable, profitability couple with an increase in bank loans support the company's strategy to sustain financial resilience and for refinancing plans by repaying bonds payable. Total Equity increase in amount but decrease in *common size* calculating because the denominator value was higher. The increase of Equity by the additional of the 2021 comprehensive income offset by dividend and the success of the rights issue process.

In 2022, Asset decrease of 1.72% matched in year before in line with a decrease in Current Assets to 46.28% from 58.61% in 2021, while Non-Current Assets increased to 53.72% from 41.39% in 2021. Current Assets decrease caused by the decline in cash, time deposit, trade receivables and inventory and Non-Current Assets increased in derivative assets. Current Liabilities in 2022 decrease to 12.33% from 18.66% in 2021 due to decline in trade payable as there are higher payments at the end of year compared in 2021 and Non-Current Liabilities representing 71.35% of Total Liabilities and increase to 30.69% from 22.70% in 2021 caused by higher drawdown of bank loans and issuance of bonds as well as incline in Derivative Liabilities. Total Equity of company lower to 56.89% from 58.63% in 2021 caused by ongoing year's comprehensives loss along with dividends distribution.

In 2023, Current Assets accounted 50.54% an increased compared to 2022. This is contributed by acquiring asset of PT. Krakatau Chandra Energi during the accounting year 2023 (PT Chandra Asri Petrochemical Tbk., 2023). Total Non-Current Assets 49.46% in 2023, decreased from 53.72% in 2022 however the actual amount of Non-Current Assets increased in 2023 due to higher Fixed Assets, Goodwill netted off, Investment properties, Investment in associates. Total Liabilities increased 46.68% in 2023 from 43.02% in 2022 because of bank loan and bonds payable increased inline with deferred tax liabilities and derivative financial liabilities decline. Current Liabilities grew due to higher Trade Payable, Customer Advances, Accrued Expenses and Short-term Bank Load partially offset by reduction in the current maturities of Bonds Payable. Non-Current Liabilities increased to 32.12% from 30.69% in 2022 caused by raise in Bonds Payable, Bank Loans, and Employee Benefit Obligation, offset with Derivative Financial Liabilities decreased. Total Equity increase in amount but decrease in *common size* calculating because the denominator value was higher. Equity's incretion caused by non-controlling interests of CDI and its subsidiaries increased netted with payment of cash dividend inline with the current year's comprehensive loss.

The summarize and *Common Size* Calculation of Profit and Loss:

Table 3. Profit and Loss PT. Chandra Asri Petrochemical Tbk. (in Thousand US\$):

ITEM	2023	2022	2021	2020	2019	2018	2017
Revenue	2.159.932	2.384.591	2.580.425	1.806.444	1.880.989	2.543.219	2.418.509
Cost of Revenue	2.078.102	2.395.545	2.235.404	1.641.322	1.709.877	2.152.729	1.873.505
Gross Profit (Loss)	81.830 -	10.954	345.021	165.122	171.112	390.490	545.004
Profit (Loss) before Income tax	- 54.564 -	176.475	202.215	28.839	38.775	254.097	424.602
Net Profit (Loss)	- 31.547 -	149.399	152.004	51.542	23.647	182.316	319.154

Source: PT. Chandra Asri Petrochemical Tbk. Annual Report

The *common size* result from Profit and Lost are as Table 4:

Table 4. *Common Size* on the Profit and Loss PT. Chandra Asri Petrochemical Tbk

ITEM	2023	2022	2021	2020	2019	2018	2017
Revenue							
Cost of Revenue	96.21%	100.46%	86.63%	90.86%	90.90%	84.65%	77.47%
Gross Profit (Loss)	3.79%	-0.46%	13.37%	9.14%	9.10%	15.35%	22.53%
Profit (Loss) before Income tax	-2.53%	-7.40%	7.84%	1.60%	2.06%	9.99%	17.56%
Net Profit (Loss)	-1.46%	-6.27%	5.89%	2.85%	1.26%	7.17%	13.20%

Source: Author Analysis from PT. Chandra Asri Petrochemical Tbk.

Cost of revenue 77.47% in 2017, 84.65% in 2018, 90.90% in 2019, 90.86% in 202, 86.63% in 2021, 100.46% in 2022, and 96.21% in 2023. Cost of Revenue mainly consist of direct labor and plant overheads, raw materials utilized in production prosses, such as Naphtha, Propylene and Benzene. Cost of revenue in 2018 higher than 2017 mainly due to the increased cost of primary raw material, Brent crude price. In 2019, cost of revenue in *common size* calculating increase from 2018 means the amount of Cost of revenue in 2019 decreased and Revenue in 2019 as the denominator decreased. Cost of Revenues decline due to amount of Naphtha consumption decreased, and the activity of Turnaround Maintenance in Q3 of 2019 impacted the Revenue in 2019. Cost of Revenues in 2020 showed similar trends to those in 2019. Lower consumption of primary raw material and effect of COVID-19 pandemic mainly affected this decline. In 2021, cost of revenue in *common size* calculating decreased means amount of Cost of revenue in 2021 increased and Revenue in 2021 as the denominator increased. A higher average prices of raw material impacted the incretion. In 2022, Cost of Revenue increased over to Revenue, caused by the incline in the raw material price and Brent crude oil price. In 2023, Cost of Revenue decrease compared in 2022. The decreased is mainly due to lower raw material price.

Gross Profit 22.53% in 2017, 15.35% in 2018, 9.10% in 2019, 9.14% in 2020, 13.37% in 2021, Gross Profit (Loss) -0.46% in 2022 and Gross Profit 3.79% in 2023. Gross Profit in 2018 decreased to 15.35% from 22.53% in 2017 reflecting the impact of lower production couple product margin reduction, in line with the combination of the industry down cycle and high crude price. In 2019, Gross Profit decrease to 9.10% impacted of lower production margin and the Turnaround Maintenance in Q3 of 2019. Gross Profit in 2020 showed similar percentage to those in 2019 caused by lower production, declining crude price product margin, in line with reduced demand due to COVID-19 pandemic and industry down cycle. In 2021, although the Cost of Revenues increased, the Company's performance capable of offsetting it. In 2022, Gross Profit (Loss) to -0.46% fall down from 13.37% in 2021 due to an increase in raw material price. In 2023, Company's Gross Profit increased by 3,79% due to the Revenue in FY 2023 that can cover Cost of Revenues.

Profit before tax 17.56% in 2017, 9.99% in 2018, 2.06% in 2019, 1.6% in 2020, 7.84% in 2021, Profit (Loss) before tax -7.40% in 2022 and Profit (Loss) before tax -2.53% in 2023. Net Profit 13.20% in 2017, 7.17% in 2018, 1.26% in 2019, 2.85% in 2020, 5.89% in 2021, Net Profit (Loss) -6.27% in 2022, Net Profit (Loss) -1.46% in 2023. Net Profit in 2018 decreased to 7.17% from 13.20% in 2017 in line with the decline in Gross Profit, Profit before tax and Income Tax Benefit inline with Net Profit for the Year Attributable to Owners of the Parent Entity. In 2019, Net Profit decreased to 1.26% showed similar trends to those in 2018. In 2020, Net Profit 2.85% from 1.26% in 2019 due to Revenue and Gross Profit decreased offset by Cost of Revenue reduced, Other Income and Income Tax Benefits (Expense) increased (effected by decline of tax rate from 25% in 2019 to 22% in 2020) caused Net Profit increased. In 2021, Net Profit significant increased to 7.84% from 1.6% in 2020 due to an increase of Revenue (mainly driven by the increased average selling price of all products) although made Tax Expense increased.

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In spite of the Cost of Revenue increased, the Company's performance can cover it, as the end of Gross Profit increased. In 2022, Net Profit (Loss) downfall to -6.27%, due to an increase in raw material price, the Company posted a Gross Loss although the Company able to compensate for an increase in Cost of Revenue with an increase in Sales Value. In 2023, Net Profit (Loss) increased to -1,46% from -6.27% in 2022. Although the Revenue less than in 2022, the Company's Cost of Revenue decreased due to lower raw material prices with the result Gross Profit increased. (Loss) Profit Before Tax and Net Profit (Loss) still recorded a loss in 2023, but it was improvement compared in 2022.

5. CONCLUSION AND RECOMMENDATIONS

CONCLUSION

This research is to assess and evaluate Company's Finance Performance by *Common Size* Method by observed the company's Balance Sheets and Profit and Loss in 2017-2023. The conclusion are:

1. Total Asset's trendline increase contribute by Group acquisition activity (PT Chandra Asri Petrochemical Tbk., 2023), the successful right issue process (PT. Chandra Asri Petrochemical Tbk., 2021), increased in production rate as well as the construction of asset.
2. Total Liabilities' trendline increase reflecting an increase in Account Payable due to Business activity, increase in Bonds Payable, Bank Loan, with liabilities represents to a Debt to Capitalization ratio increased offset by increase in Total Equity. The receivables turnover rate's trendline decline.
3. Revenues' trendline decline due to the sales volume, selling price and demand fluctuation
4. Gross Profit (Loss) and Net Profit (Loss) also decreased following by Revenue, Cost if Revenue, Operating (Expenses) Income and Income Tax Benefit (Expenses).
5. In general, PT. Chandra Asri Petrochemical Tbk. can maintained the finance performance during COVID-19 by able to report a growth in sales volume, an improved Net Profit in 2020 also in 2021, in which are better than pre-COVID 19.
6. Startup new Butadiene Plant (B1) and Methyl Tert-butyl Ether (MTEB) Plant in 2020, doing Mergers in 2020 (PT. Chandra Asri Petrochemical Tbk., 2020) and in 2021 (PT. Chandra Asri Petrochemical Tbk., 2021), Acquisitions (PT Chandra Asri Petrochemical Tbk., 2023) and still got Proper Award from the Government.

On the other hand, global geopolitical dynamics, specifically the outbreak of war impacted on economic condition. The rise in crude oil price had significant influence on Chandra Asri as the cost of raw materials for production dramatically increased. Meanwhile, the selling price of due to high in Cost of Revenue and Revenue in 2022 and getting better in 2023.

RECOMMENDATIONS

The industry are highly influenced by global factor, particularly fluctuation in crude oil price, raw material price and supply and demand condition. These challenges can pass by proactive address these challenge by adaptable in operation, strategic decision making and follow up the strategic priority. Efficient and optimize operational rates, manage working capital, cost-saving strategy, focus on production and sale of high value added product, expand supply and demand.

REFERENCES

Carrillo-Larco, M. R., & Castillo Cara, M. (2020). Using country-level variables to classify countries according to the number of confirmed COVID-19 cases: An unsupervised machine learning approach. *Wellcome Open Research*, 5, 1-22. Retrieved from <https://doi.org/10.12688/wellcomeopenres.15819.3>

- 10th International CEO Communication, Economics, Organization & Social Sciences Congress**
- Dewi, S. S. (2023). Financial Performance Measurement and Analysis of Maritime and Logistic Company, PT. Samudera Indonesia, Tbk Before and During Covid-19 Pandemic.
- Fauzan, A. (2023). Financial Ratio Measurement and Analysis of PT Chandra Asri Petrochemical Tbk. After Completing its Expansion Butadiene Plan in 2018 and The Effect of COVID-19 Pandemic for Periode Year of 2019 - 2022.
- Fionalita, S. (2020). Analisis Common Size Laporan Rugi Laba pada Bank BNI Periode 2017-2019. *Jurnal Akuntansi*, 1-13. Retrieved from <http://eprints.uad.ac.id/id/eprint/20917>
- Fitriyani, I. T., & Zulkarnain, Z. (2020). Analisis Common Size dan Rasio Keuangan Perusahaan Sektor Industri Barang Konsumsi di BEI. *Widya Akuntansi dan Keuangan*, 2(2), 32-46. Retrieved from <https://doi.org/10.32795/widyaakuntansi.v2i2.850>
- Indeed Editorial Team. (2024, August 16). *Common Size Analysis: Formula, Types and Main Benefits*. Retrieved from Indeed Website: <https://www.indeed.com/career-advice/career-development/common-size-analysis>
- Kasmir. (2019). *Analisis Laporan Keuangan (12th ed.)*. PT. Raja Grafindo Persada.
- Kenton, W. (2024, June 19). *Understanding Financial Performance*. Retrieved from Investopedia Website: <https://www.investopedia.com/terms/f/financialperformance.asp#:~:text=The%20financial%20performance%20identifies%20how,should%20be%20taken%20in%20aggregate.>
- Mulhadimah, A., Salsabil, P., & Miranti, T. A. (2021). Analisis Common Size Untuk Menilai Kinerja Pada Laporan Keuangan PT. J RESOURCES ASIA PASIFIK Tahun 2016-2019. 5(2). Retrieved from <https://doi.org/10.31004/jptam.v5i2.1432>
- Pratiwi, N. R., & Hidayati, C. (2018). Analisa Rasio Keuangan dan Common Size Dalam Pengukur Kinerja Keuangan Pada Perusahaan Otomotif dan Komponen Tahun 2009-2013 (Yang Terdaftar di Bursa Efek Indonesia). *JEA17: Jurnal Ekonomi Akuntansi*, 3(02), 67-79. Retrieved from <https://doi.org/10.30996/jea17.v3i02.3182>
- PT Chandra Asri Petrochemical Tbk. (2023). *Reporting on Affiliated Transaction and Information Disclosure in relation with Shares Acquisition*. Retrieved from PT Chandra Asri Petrochemical Tbk. Website: https://chandra-asri.com/en/investor/publication?category_id=8&page=12
- PT. Chandra Asri Petrochemical Tbk. (2020). *Public Announcement*. Retrieved from PT. Chandra Asri Petrochemical Tbk. Website: [https://www.chandra-asri.com/investor-relations/public-announcements?key words= merger](https://www.chandra-asri.com/investor-relations/public-announcements?key%20words=merger)
- PT. Chandra Asri Petrochemical Tbk. (2024). *PT Chandra Asri Petrochemical Tbk Officially Transformed into PT Chandra Asri Pacific Tbk*. Retrieved from PT. Chandra Asri Petrochemical Tbk Website: https://www.chandra-asri.com/files/attachments/press_releases/2024/Press%20Release%20-%20PT%20Chandra%20Asri%20Petrochemical%20Tbk%20Officially%20Transformed%20Into%20PT%20Chandra%20Asri%20Pacific%20Tbk.pdf
- PT. Chandra Asri Petrochemical Tbk. (2017). *Annual Reports*. PT. Chandra Asri Petrochemical Tbk. Retrieved from PT. Chandra Asri Petrochemical Tbk. Website: <https://www.chandra-asri.com/investor-relations/reports/annual-reports>
- PT. Chandra Asri Petrochemical Tbk. (2017). *Financial Report*. PT. Chandra Asri Petrochemical Tbk. Retrieved from PT. Chandra Asri Petrochemical, Tbk.: <https://www.chandra-asri.com/investor-relations/reports/financial-reports>
- PT. Chandra Asri Petrochemical Tbk. (2018). *Annual Reports*. PT. Chandra Asri Petrochemical Tbk. Retrieved from <https://www.chandra-asri.com/investor-relations/reports/annual-reports>
- PT. Chandra Asri Petrochemical Tbk. (2018). *Financial Report*. PT. Chandra Asri Petrochemical Tbk. Retrieved from <https://www.chandra-asri.com/investor-relations/reports/financial-reports>
- PT. Chandra Asri Petrochemical Tbk. (2019). *Annual Reports*. PT. Chandra Asri Petrochemical Tbk. Retrieved from <https://www.chandra-asri.com/investor-relations/reports/annual-reports>
- PT. Chandra Asri Petrochemical Tbk. (2019). *Financial Report*. PT. Chandra Asri Petrochemical Tbk. Retrieved from <https://www.chandra-asri.com/investor-relations/reports/financial-reports>
- PT. Chandra Asri Petrochemical Tbk. (2020). *Annual Reports*. PT. Chandra Asri Petrochemical Tbk. Retrieved from <https://www.chandra-asri.com/investor-relations/reports/annual-reports>
- PT. Chandra Asri Petrochemical Tbk. (2020). *Disclosure of Information - Affiliated Transaction & Result of Business Merger*. Retrieved from PT Chandra Asri Petrochemical Tbk. Website: https://chandra-asri.com/en/investor/publication?category_id=8&page=34
- PT. Chandra Asri Petrochemical Tbk. (2020). *Financial Report*. PT. Chandra Asri Petrochemical Tbk. Retrieved from <https://www.chandra-asri.com/investor-relations/reports/financial-reports>
- PT. Chandra Asri Petrochemical Tbk. (2021). *Additional Information to Abridge of Merger Plan of CAP and SMI*. Retrieved from PT. Chandra Asri Petrochemical Tbk. Website: https://chandra-asri.com/en/investor/publication?category_id=8&page=28



10th International CEO Communication, Economics, Organization & Social Sciences Congress

- PT. Chandra Asri Petrochemical Tbk. (2021). *Annual Reports*. PT. Chandra Asri Petrochemical Tbk. Retrieved from <https://www.chandra-asri.com/investor-relations/reports/annual-reports>
- PT. Chandra Asri Petrochemical Tbk. (2021). *Financial Report*. PT. Chandra Asri Petrochemical Tbk. Retrieved from <https://www.chandra-asri.com/investor-relations/reports/financial-reports>
- PT. Chandra Asri Petrochemical Tbk. (2022). *Annual Reports*. PT. Chandra Asri Petrochemical Tbk. Retrieved from <https://www.chandra-asri.com/investor-relations/reports/annual-reports>
- PT. Chandra Asri Petrochemical Tbk. (2022). *Financial Report*. PT. Chandra Asri Petrochemical Tbk. Retrieved from <https://www.chandra-asri.com/investor-relations/reports/financial-reports>
- PT. Chandra Asri Petrochemical Tbk. (2023). *Annual Reports*. PT. Chandra Asri Petrochemical Tbk. Retrieved from <https://www.chandra-asri.com/investor-relations/reports/annual-reports>
- PT. Chandra Asri Petrochemical Tbk. (2023). *Financial Report*. PT. Chandra Asri Petrochemical Tbk. Retrieved from <https://www.chandra-asri.com/investor-relations/reports/financial-reports>
- PT. Chandra Asri Petrochemical Tbk. (2024). *Chandra Asri Group at a Glance*. Retrieved from PT. Chandra Asri Petrochemical Tbk Website: <https://www.chandra-asri.com/about/chandra-asri-at-a-glance>
- Puji Suryani, S., Zysman, J., Akhyar, C., Sinta, I., & Ilham, R. N. (2023). ANALYSIS OF COMMON SIZE PT. SEMEN INDONESIA (PERSERO) Tbk. *Journal of Accounting Research, Utility Finance and Digital Assets*, 1(3), 188-194. Retrieved from <https://doi.org/10.54443/jaruda.v1i3.27>
- Rolizda, M., & Sukiyarningsih, T. W. (2023). Penilaian Kinerja Keuangan Emiten Melalui Analisis Common Size: Studi Kasus Pada PT Chandra Asri Petrochemical Tbk. *Sumber Artikel Akuntansi Auditing Dan Keuangan Vokasi*, 7(1), 51-61. Retrieved from <https://doi.org/10.31092/subs.v7i1.2014>
- Samudra, R. R., & Setyonaluri, D. (2020). *Inequitable Impact of Covid-19 in Indonesia: Evidence and Policy*. UI, FEB. Lembaga Demografi. Retrieved from <http://bit.ly/COVIDInequitable>
- Sugiyono. (2017).
- Zuhri, H. M., Sutriyono, G., & Samsu, N. (2019). Analisis Common-Size untuk Menilai Kinerja Keuangan Perusahaan pada PT. Indosat, Tbk dan PT. Telekomunikasi Indonesia, Tbk (Tahun 2014-2016). *Jurnal Ilmiah Mahasiswa Ekonomi*, 1(2), 243. Retrieved from <https://doi.org/10.30737/jimek.v1i2.313>



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Financial Resilience and Growth: An Analysis of PT XL Axiata Tbk's
Performance Before and During the COVID-19 Pandemic

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ABSTRACT

XL Axiata was founded in October 1989. It initially operated under the name PT Grahame Metropolitan Lestari before rebranding to PT Excelcomindo Pratama. The company later became known as PT XL Axiata Tbk and has grown to be one of the leading telecommunications providers in Indonesia. PT XL Axiata Tbk facing many issues during and before covid 19 pandemic, using Du Pont as an analytical based line to assess in financial health. The DuPont analysis method was used as an analytical framework to assess the financial health of PT XL Axiata Tbk by breaking down Return on Equity (ROE) into its key components: profitability, efficiency, and leverage. This approach helps identify how well the company generates profit from its equity, providing a clearer view of the factors contributing to financial performance. The results indicate that financial performance experienced a notable decline in 2018 due to increased operating expenses, primarily from rising depreciation costs. However, the company's financial metrics gradually improved in subsequent years, with performance during the pandemic period showing marked improvement, even surpassing pre-pandemic levels. Further comparisons with market averages reveal that PT XL Axiata Tbk's performance deviated from industry norms in certain periods, signaling areas for strategic improvement and realignment. This comprehensive analysis offers a better understanding of the company's financial health and provides insights into potential strategies for sustaining growth and maintaining competitive advantage as it navigates future challenges and opportunities.

Keywords: XL Axiata financial performance, Net Profit Margin, Asset Turnover (ATO), Operation Expenses and Profitability

1. Introduction

A. Background

The COVID-19 pandemic has significantly impacted businesses across the globe, with the telecommunication sector facing both challenges and opportunities during this unprecedented period. PT XL Axiata Tbk, one of Indonesia's leading telecommunication providers, has navigated through this period by adapting its financial and operational strategies to address shifting consumer behavior and the economic disruptions caused by the pandemic. (International Finance Corporation, 2020)

Before the pandemic, from 2016 to 2019 (PT. XL Axiata, 2020), PT XL Axiata experienced steady growth in revenue and profitability, driven by increasing demand for digital connectivity and the company's strategic investments in network infrastructure, including the early stages of 5G readiness. However, the pandemic, which began to affect Indonesia in early 2020, introduced new dynamics:

- **Increased demand for data services:** Remote work, online education, and digital communication surged, boosting revenue opportunities in the data segment.
- **Operational and cost pressures:** The economic slowdown, coupled with mobility restrictions, affected operational efficiency and increased costs for maintaining uninterrupted services.
- **Strategic capital allocation:** The company had to balance ongoing investments in 5G infrastructure with the financial challenges brought by the pandemic.

B. Problem statement

The telecommunications industry in Indonesia, led by providers like PT XL Axiata Tbk, has faced significant challenges before and during the COVID-19 pandemic. (PT. XL Axiata, 2020)

Before the pandemic (2016–2019) (PT. XL Axiata, 2020), the industry grappled with intense competition, price wars, and high capital expenditures for infrastructure development, including early investments in 5G technology. While revenue growth was steady, profitability was constrained by increasing operational costs and market saturation.

During the pandemic (2020), the industry experienced a surge in data demand due to remote work, online education, and entertainment needs. However, PT XL Axiata faced increased operational pressures, higher infrastructure maintenance costs, and financial constraints. Balancing short-term financial resilience with long-term strategic goals, such as 5G deployment, posed additional challenges.

C. Scope

This journal focuses on evaluating the financial performance of PT XL Axiata Tbk during two critical periods: before the COVID-19 pandemic (2016–2019) and during the pandemic (2020), utilizing the DuPont analysis framework. The analysis is based on financial data extracted from the provided file, emphasizing key performance metrics such as profitability, operational efficiency, and financial

leverage. The study aims to assess how the company navigated the financial challenges of the pandemic while maintaining its strategic focus on long-term initiatives like 5G deployment.

Key areas of focus include:

- Return on Equity (ROE) and its components:
- Net Profit Margin (NPM): Analyzing profitability trends.
- Asset Turnover Ratio (ATR): Evaluating operational efficiency.
- Equity Multiplier (EM): Assessing financial leverage and capital structure.
- Comparative analysis of financial performance before and during the pandemic.
- The impact of pandemic-induced economic disruptions, increased data demand, and operational constraints on financial resilience.

Objectives

1. To analyze financial trends before and during the pandemic:
Examine and compare PT XL Axiata's financial performance during 2016–2019 (pre-pandemic) and 2020 (pandemic), focusing on revenue, net income, total assets, and total equity.
2. To decompose ROE using the DuPont framework:
Break down ROE into its fundamental components (NPM, ATR, EM) to understand the key drivers of financial performance and shareholder value creation.
3. To assess the impact of COVID-19 on financial resilience:
Identify how the pandemic influenced profitability, operational efficiency, and financial leverage, highlighting strategic and operational adjustments.
4. To provide insights into strategic financial management:
Evaluate how PT XL Axiata balanced short-term operational demands with long-term investments like 5G deployment amidst pandemic-induced challenges.
5. To offer actionable recommendations:
Suggest financial strategies to enhance resilience, profitability, and competitiveness in the post-pandemic telecommunication industry.

2. Literature Review

1. COVID-19 Regulations in Indonesia

The Indonesian government implemented a series of regulations to mitigate the spread of COVID-19, which significantly impacted businesses across sectors, including telecommunications. Key measures included:

- Large-Scale Social Restrictions (PSBB):
Introduced in early 2020, PSBB restricted public gatherings, closed non-essential businesses, and limited transportation. These measures directly affected mobility, consumer behavior, and economic activity.
- Work-from-Home Directives:

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Companies across industries were mandated to implement remote work policies for non-essential employees. This increased reliance on digital communication tools and internet connectivity.

- **Travel Restrictions:**
Domestic and international travel limitations disrupted supply chains and delayed infrastructure maintenance and expansion.
- **Stimulus Programs:**
The government launched stimulus packages to support affected industries, including tax reliefs, wage subsidies, and soft loans. However, telecommunications were not a direct beneficiary, emphasizing the industry's need to self-sustain amidst the crisis.

2. Impact on the Telecommunications Industry

The telecommunications sector experienced mixed effects from these regulations:

- **Opportunities from Increased Demand:**
The shift to remote work, online education, telemedicine, and digital entertainment (e.g., video streaming and gaming) led to a surge in internet usage. According to Kominfo, the Ministry of Communication and Information Technology, data consumption increased by over 20% during the pandemic. (Ministry of Communication and Information Technology, 2020)
- **Operational Challenges:**
The restrictions on movement and workforce availability created logistical issues in network maintenance, expansion, and the rollout of new infrastructure such as 5G. (International Finance Corporation, 2020)
- **Accelerated Digital Adoption:**
Businesses and consumers increasingly adopted digital payment systems, cloud services, and online platforms, pushing telecommunications companies to adapt quickly to these changing demands. (International Telecommunication Union, 2021)

3. Impact on PT XL Axiata Tbk

As a major player in Indonesia's telecommunications industry, PT XL Axiata Tbk faced both challenges and opportunities during the pandemic:

A. Revenue Growth from Data Demand

The pandemic caused a surge in data usage as customers relied on remote connectivity. According to XL Axiata's financial reports (Financial Ratio Calculation for PT. XL Axiata Tbk, 2016 – 2020):

- In the first half of 2020, service revenue increased by **10%** compared to the previous year, largely driven by data consumption.
- By Q1 2021, the company maintained a high EBITDA margin of **50%**, demonstrating resilience and effective cost management.

B. Operational Constraints

The PSBB regulations impacted network operations:

- Delays in infrastructure projects and routine maintenance due to workforce restrictions.
- Increased operational costs to ensure service reliability amidst higher demand.

C. Strategic Responses

PT XL Axiata adapted to the challenges with the following initiatives:

- **Digital Transformation:** The company accelerated the adoption of digital tools, including online self-service platforms and digital customer acquisition channels.
- **Network Investments:** Despite the constraints, XL Axiata continued investing in network upgrades to handle increased data traffic and prepare for 5G deployment.
- **Support for SMEs:** Recognizing the economic strain on small and medium enterprises, XL Axiata offered tailored connectivity packages and digital solutions to support these businesses.

D. Financial Performance

- **Revenue Growth:** Service revenue showed consistent growth during the pandemic.
- **Profitability Challenges:** Increased operational costs and economic disruptions affected net profit margins, especially in 2020.
- **Leverage and Liquidity:** The company maintained strong financial leverage, balancing short-term liquidity concerns with long-term investments.

4. The Role of Government and Telecommunications During COVID-19

The Indonesian government recognized the critical role of telecommunications in supporting the economy during the pandemic. Policies to support network expansion and digital inclusion were reinforced, including:

- **Kominfo's Digital Indonesia Program:** Encouraged infrastructure investments to bridge the digital divide. (Indonesia Digital 2045, 2024)
- **Public-Private Partnerships:** Collaboration between operators and the government to improve rural connectivity, especially as remote education became a necessity. (World Bank, 2020)

XL Axiata's alignment with these initiatives positioned the company as a key contributor to Indonesia's digital transformation during the pandemic.

3. Research Methodology

This journal applies the DuPont Analysis framework to evaluate the financial performance of PT XL Axiata Tbk before and during the COVID-19 pandemic, using data from the provided Excel file. The methodology consists of the following steps:

1. Data Collection

The study relies on quantitative financial data extracted from the provided Excel file, specifically:

- **Income Statement:** Revenue, Net Profit, and other profitability metrics.
- **Balance Sheet:** Total Assets and Total Equity.

2. Study Period

The analysis focuses on two distinct periods:

- **Pre-pandemic (2016–2019):** Financial data representing the company's performance before the COVID-19 pandemic.

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- **During the pandemic (2020):** Financial data illustrating the impact of the pandemic.

3. DuPont Analysis Framework

The DuPont framework is used to decompose **Return on Equity (ROE)** into its three components:

1. **Net Profit Margin (NPM):**

$$NPM = \frac{Net\ Profit}{Revenue}$$

Measures profitability.

2. **Asset Turnover Ratio (ATR):**

$$ATR = \frac{Revenue}{Total\ Assets}$$

Indicates operational efficiency.

3. **Equity Multiplier (EM):**

$$EM = \frac{Total\ Assets}{Total\ Equity}$$

Reflects financial leverage.

The ROE is calculated

$$ROE = NPM \times ATR \times EM$$

4. **Comparative Analysis**

- **Pre-pandemic vs. Pandemic:** ROE and its components are analysed for differences between the two periods.
- The trends and variations are interpreted to identify the financial resilience and strategic adjustments made by PT XL Axiata during the pandemic.

5. **Tools and Techniques**

- **Microsoft Excel:** Data cleaning, calculation of financial metrics, and visualization of trends.
- **Data Validation:** Cross-referencing extracted data with the original sheets (Income Statement and Balance Sheet) to ensure accuracy.

4. **Results and Discussion**

A. **Net Profit Margin (NPM) Analysis**

Table 1. NPM Calculation of PT. XL Axiata Period 2016 - 2020

Year	Sales (in millions)	Net Profit (in millions)	Net Profit Margin (%)
2020	26.009.095	371.598	1,43%
2019	25.132.628	712.579	2,84%
2018	22.938.812	3.296.890	-14,37%
2017	22.875.662	375.244	1,64%
2016	21.341.425	375.516	1,76%

The Net Profit Margin (NPM) is a critical metric for understanding the profitability of PT XL Axiata Tbk during the period from 2016 to 2020, encompassing both pre-pandemic and pandemic years. Below is a detailed analysis based on the data provided:

1. Steady Revenue Growth

- **Revenue Trend:** PT XL Axiata demonstrated consistent revenue growth, increasing from IDR 21,341 billion in 2016 to IDR 26,009 billion in 2020. This growth reflects the company's ability to expand its customer base and capitalize on the increasing demand for data services in Indonesia.
- **Pandemic Impact:** Despite the COVID-19 pandemic in 2020, the company managed to sustain revenue growth, driven by a surge in data consumption as remote work, online education, and digital entertainment became prevalent.

2. Fluctuations in Profitability (Net Profit Margin)

Pre-Pandemic Period (2016–2019) NPM remained relatively low, ranging between **1.64%** in 2017 and **2.84%** in 2019, indicating the industry's high operational and competitive cost pressures.

2018: The company reported a significant net loss of IDR 3,296 billion, resulting in a negative NPM of **-14.37%**, attributed to increased operating expenses and one-time financial adjustments.

During the Pandemic (2020) NPM declined to **1.43%**, reflecting increased operational costs and logistical challenges posed by the pandemic, despite higher revenues.

The lower margin highlights the difficulty in maintaining profitability in a cost-intensive and competitive industry during a global crisis.

3. Challenges in Maintaining Profitability

While the company’s revenue showed consistent growth, the Net Profit Margin remained under pressure, indicating:

High operating expenses: Significant investments in infrastructure and network expansion to meet growing data demand.

Competitive pricing strategies: Intense competition in the telecommunications industry impacted profit margins.

4. Insights from the Data

The company’s ability to maintain a positive NPM in 2020 demonstrates resilience in the face of pandemic-related disruptions.

The sharp decline in 2018 underscores the importance of cost control and operational efficiency in ensuring long-term profitability.

B. Asset Turnover Ratio (ATR)

Table 2. ATR of PT XL Axiata Period 2016 - 2020

Year	Sales (in millions)	Total Asset	ATR
2020	26.009.095	67744797	0,38
2019	25.132.628	62725642	0,40
2018	22.938.812	57613954	0,40
2017	22.875.662	56321441	0,41
2016	21.341.425	54896286	0,39

The Asset Turnover Ratio (ATR) measures the efficiency of PT XL Axiata Tbk in utilizing its total assets to generate revenue. Below is an analysis of the trends over the years 2016–2020:

1. Overview of ATR Trends

The ATR remained relatively stable throughout the period, ranging from **0.38** to **0.41**, reflecting consistent operational efficiency in asset utilization.

The slight variations in ATR indicate minor fluctuations in the company’s ability to generate revenue relative to its growing asset base.

2. Pre-Pandemic Period (2016–2019)

The ATR was highest in **2017** at **0.41**, signifying the most efficient use of assets during this period.

In subsequent years, the ATR slightly declined to **0.40** in **2018** and **2019**, as the company continued to expand its asset base through network upgrades and infrastructure investments.

3. During the Pandemic (2020)

The ATR further declined to **0.38** in **2020**, coinciding with a significant increase in total assets to IDR 67,744 billion.

The decrease in ATR during the pandemic reflects the challenges of maintaining efficiency amidst operational constraints, delayed projects, and rising costs due to COVID-19-related disruptions.

4. Insights from ATR Trends

The stable ATR values across the years highlight PT XL Axiata’s consistent ability to generate revenue from its assets despite industry challenges.

The slight decline in ATR during the pandemic suggests that while revenue grew, the expansion of the asset base (due to ongoing investments and network upgrades) outpaced revenue growth.

C. Equity Multiplier (EM)

Table 3. Equity Multiplier of PT XL Axiata Period 2016 - 2020

Year	Total Asset	Total Equity	EM
2020	67744797	19.137.366	3,54
2019	62725642	19.121.966	3,28
2018	57613954	18.343.098	3,14
2017	56321441	21.630.850	2,60
2016	54896286	21.209.145	2,59

The **Equity Multiplier (EM)** is a critical indicator of financial leverage, highlighting how a company utilizes debt versus equity to finance its total assets. The trends observed for PT XL Axiata Tbk from 2016 to 2020 reveal important insights into the company’s financial strategy and resilience, especially during the COVID-19 pandemic.

1. Stability During Pre-Pandemic Years (2016–2017)

In **2016** and **2017**, the EM values were stable at **2.59** and **2.60**, respectively, indicating a balanced capital structure.

This reflects XL Axiata's reliance on a mix of equity and debt to fund its operations, maintaining financial discipline during a period of steady growth in revenue and infrastructure expansion.

2. Increased Leverage in Pre-Pandemic Years (2018–2019)

EM increased to **3.14** in 2018 and **3.28** in 2019. This rise corresponds to XL Axiata's strategic investments in network upgrades and preparations for 5G technology.

The shift towards higher leverage suggests that the company opted to utilize more debt financing to support its expansion while preserving equity capital for operational stability.

3. Significant Rise During the Pandemic (2020)

In 2020, the EM climbed to **3.54**, the highest level observed in the five-year period. This increase reflects the company's heightened reliance on debt during the pandemic to address financial pressures and sustain critical projects.

The COVID-19 pandemic introduced significant disruptions, including higher operational costs and delayed infrastructure development. Increased leverage allowed XL Axiata to maintain liquidity and continue its long-term strategic initiatives, such as 5G deployment.

4. Strategic Implications

The consistent rise in EM highlights XL Axiata's proactive approach to financing its growth in a capital-intensive industry. Telecommunications companies often require significant investment in infrastructure, and leveraging debt is a common strategy to fund these investments while balancing short-term operational needs.

However, the higher reliance on debt increases financial risk, particularly in uncertain economic conditions. XL Axiata's ability to generate sufficient revenue and maintain operational efficiency is crucial to managing this risk effectively.

5. Pandemic Resilience

Despite the economic challenges brought by the pandemic, the increase in EM suggests that XL Axiata prioritized sustaining its competitive position in the market. This strategy underlines the company's focus on long-term growth while navigating the immediate disruptions caused by COVID-19.

D. Return of Equity

Table 4. ROE of PT XL Axiata Period 2016 - 2020

Year	NPM	ATR	EM	ROE
2020	0,01	0,38	3,54	1,94%
2019	0,03	0,40	3,28	3,73%
2018	-0,14	0,40	3,14	-17,97%
2017	0,02	0,41	2,60	1,73%
2016	0,02	0,39	2,59	1,77%

Table 5. ROE for PT XL Axiata Period 2016 – 2020 with Simplified Method

Year	Net Profit (in millions)	Total Equity	ROE
2020	371.598	19.137.366	1,94%
2019	712.579	19.121.966	3,73%
2018	- 3.296.890	18.343.098	-17,97%
2017	375.244	21.630.850	1,73%
2016	375.516	21.209.145	1,77%

The analysis is based on two complementary tables, focusing on Return on Equity (ROE) and its components (Net Profit Margin, Asset Turnover Ratio, and Equity Multiplier). These metrics provide a comprehensive understanding of PT XL Axiata’s financial performance over the five-year period.

Return on Equity (ROE) Overview

ROE measures a company’s ability to generate returns on shareholders’ investments. Observations from Table 5 include:

- **2016–2017:** ROE remained relatively stable at **1.77%** and **1.73%**, reflecting modest profitability and consistent financial leverage.
- **2018:** ROE plunged to **-17.97%**, driven by a substantial net loss of IDR 3,296.890 million. This loss was caused by heightened operational costs and inefficiencies, severely impacting shareholder returns.
- **2019:** ROE rebounded to **3.73%**, the highest during the period, due to improved profitability and better cost control.
- **2020:** During the COVID-19 pandemic, ROE dropped to **1.94%**, reflecting challenges in maintaining profitability amidst rising costs and operational constraints.

DuPont Analysis of ROE Components

Table 5 highlights how the **Net Profit Margin (NPM)**, **Asset Turnover Ratio (ATR)**, and **Equity Multiplier (EM)** influenced ROE:

A. Net Profit Margin (NPM):

NPM reflects profitability and fluctuated significantly across the years:

- **2016–2017:** Modest profitability (NPM ~0.02).
- **2018:** NPM sharply declined to **-0.14%**, reflecting the significant loss in net profit.
- **2019:** Recovery to **0.03%**, demonstrating improved operational efficiency.



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- **2020:** Declined to **0.01%** during the pandemic, highlighting cost pressures despite increased revenue.

B. Asset Turnover Ratio (ATR):

ATR measures operational efficiency and remained relatively stable (~0.39–0.41) throughout the period.

2018–2020: Slight decline in ATR reflects the challenges of scaling operations proportionally with asset growth during the pandemic.

C. Equity Multiplier (EM):

EM, a measure of financial leverage, steadily increased from **2.59** in 2016 to **3.54** in 2020.

- **2018–2020:** Rising EM indicates greater reliance on debt financing, particularly during the pandemic, as the company balanced liquidity needs with long-term investments like 5G deployment.

D. Key Insights

1. Profitability Challenges:

- The sharp decline in NPM and ROE in 2018 highlights the impact of operational inefficiencies and rising costs on shareholder returns.
- During the pandemic in 2020, profitability pressures continued as the company faced higher operational costs despite increased demand for data services.

2. Resilience in Operations:

- ATR stability across the period indicates consistent asset utilization to generate revenue, reflecting operational efficiency even during challenging periods.

3. Strategic Use of Leverage:

- The increasing EM trend underscores XL Axiata's reliance on debt to fund capital-intensive projects like network expansions and 5G readiness.
- While leveraging debt supported growth, it also heightened financial risk, particularly during volatile periods.

4. Pandemic Impact (2020):

- Despite revenue growth, ROE declined due to reduced profitability (NPM) and the increased financial burden associated with maintaining operations and investments during the pandemic.

E. Actionable Implications

1. Focus on Profitability:

Enhance cost control measures to improve NPM and stabilize ROE, particularly during periods of economic uncertainty.

2. Leverage Management:

Optimize the use of debt financing to balance growth investments and mitigate financial risks.

3. Operational Efficiency:

Explore strategies to improve ATR by leveraging existing assets more effectively to generate additional revenue streams.

4. Post-Pandemic Recovery:

Capitalize on increased data demand post-pandemic to strengthen profitability and shareholder returns.

A. Conclusion and Recommendations

1. Conclusion

The financial performance of PT XL Axiata Tbk during the period 2016–2020, analysed using the DuPont framework, reveals critical insights into the company's response to pre-pandemic and pandemic challenges. This analysis highlights key trends, assesses financial resilience, and provides a foundation for actionable recommendations.

Objective 1: To Analyze Financial Trends Before and During the Pandemic

Pre-Pandemic Period (2016–2019):

PT XL Axiata experienced consistent revenue growth due to increasing demand for digital connectivity, driven by strategic network investments.

Despite revenue growth, profitability faced pressures, with significant losses in 2018 due to rising operational costs and inefficiencies.

Operational stability was maintained with steady ATR values, while EM gradually increased, reflecting strategic reliance on debt for infrastructure expansion.

Pandemic Period (2020):

Revenue growth persisted during the pandemic due to increased demand for data services from remote work and online education.

Financial resilience was challenged by reduced profitability (declining NPM) and higher operational costs, while ATR slightly decreased, reflecting logistical and operational constraints.

Objective 2: To Decompose ROE Using the DuPont Framework

ROE was analyzed through its components—Net Profit Margin (NPM), Asset Turnover Ratio (ATR), and Equity Multiplier (EM):

NPM: Fluctuations in profitability were most pronounced in 2018 (-14.37%) and 2020 (1.43%), highlighting the dual challenges of cost pressures and revenue generation.

ATR: Stability in ATR (~0.39–0.41) indicates consistent asset utilization, though a slight decline during the pandemic reflects operational disruptions.

EM: The steady increase in EM (from 2.59 in 2016 to 3.54 in 2020) underscores greater reliance on debt financing for strategic investments.

Objective 3: To Assess the Impact of COVID-19 on Financial Resilience

The pandemic significantly influenced XL Axiata's financial performance:

Profitability declined as operational costs rose, despite increased demand for data services.

Financial leverage peaked in 2020, as the company relied more on debt to manage liquidity and sustain long-term investments.

The pandemic underscored the importance of balancing short-term financial demands with operational continuity.

Objective 4: To Provide Insights into Strategic Financial Management

XL Axiata demonstrated resilience in navigating the economic uncertainties of the pandemic:



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Strategic investments in 5G infrastructure continued, emphasizing the company's focus on long-term competitiveness.

Operational adjustments, such as cost optimization and digital transformation initiatives, mitigated some of the financial challenges posed by the pandemic.

The company's ability to sustain a positive ROE during the pandemic reflects effective financial management and adaptability.

Objective 5: To Offer Actionable Recommendations

Based on the analysis, the following strategic recommendations are proposed:

Enhance cost control measures to improve NPM and stabilize ROE during periods of economic uncertainty.

Optimize asset utilization by leveraging existing infrastructure for additional revenue streams, such as enterprise solutions.

Manage leverage carefully to balance growth investments and mitigate financial risk.

Strengthen digital transformation efforts, focusing on 5G deployment and partnerships with cloud service providers to capture new market opportunities.

Develop contingency plans for future disruptions, emphasizing supply chain resilience and operational flexibility.

2. Recommendations

1. Enhance Cost Efficiency

Implement stricter cost management strategies to improve profitability, particularly during periods of revenue volatility.

Explore technology-driven solutions, such as automation and AI, to optimize operational processes and reduce overhead costs.

2. Optimize Asset Utilization

Conduct periodic evaluations of asset efficiency to maximize revenue generation relative to total assets.

Focus on scaling digital services and product diversification to leverage existing infrastructure more effectively.

3. Address Industry-Specific Challenges

Develop strategies to mitigate regulatory challenges, such as spectrum allocation and taxation, by collaborating with government and industry bodies.

Respond to market saturation with differentiated service offerings, emphasizing customer value beyond pricing, such as quality of service and innovative packages.

4. Balance Debt and Equity Growth

While debt financing is essential for capital-intensive projects, XL Axiata should carefully balance debt levels to avoid excessive financial risk, especially during economic uncertainties.

Strengthen equity financing mechanisms, such as issuing shares or retaining earnings, to support long-term investments without overburdening debt.

5. Incorporate Broader Market Trends

Leverage emerging opportunities in Indonesia's telecom sector, such as IoT, cloud services, and digital transformation for SMEs, to diversify revenue streams.

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Explore regional trends in Southeast Asia to position XL Axiata as a competitive player in the regional market.

6. Future-Proof Against Disruptions

Develop contingency plans for potential future disruptions, focusing on supply chain resilience, flexible operational models, and maintaining service quality during crises. Invest in workforce training and advanced technologies to adapt quickly to evolving consumer behaviors and market demands.

7. Drive Digital Transformation

Accelerate investments in 5G technology to remain competitive and capitalize on the growing demand for high-speed connectivity.

Expand partnerships with digital platforms, cloud service providers, and enterprise customers to diversify revenue streams and enhance service offerings.

Reference

- Bunget, O. C., Vintilă, G., & Cordoş, G. (2023). Financial implications of COVID-19 pandemic: An empirical DuPont analysis on economic value-added reported by European developed countries. *Studies in Business and Economics*, Advance online publication. Retrieved from <https://doaj.org/article/5b05e8f37fa34089aa6d47b7792f917e>
- Çam, İ., Ayhan, B., & Karaarslan, O. (2023). The effects of the investment decisions of telecommunications firms on their financial performance during the COVID-19 pandemic. *Empirical Economics*, Advance online publication. <https://doi.org/10.1007/s00181-023-02525-4>
- Gans, J. (2020). *Economics in the Age of COVID-19*. MIT Press. <https://doi.org/10.7551/mitpress/12310.001.0001>
- Goutte, S., Guesmi, K., & Urom, C. (2022). *Financial Market Dynamics after COVID-19: The Contagion Effect of the Pandemic in Finance*. Springer. <https://doi.org/10.1007/978-3-030-98542-4>
- Investopedia. (n.d.). *DuPont Analysis: Definition, Uses, Formulas, and Examples*. Retrieved from <https://www.investopedia.com/terms/d/dupontanalysis.asp>
- Loomis, D. G., & Taylor, L. D. (2003). *The Future of the Telecommunications Industry: Forecasting and Demand Analysis*. Springer. <https://doi.org/10.1007/978-1-4615-4643-6>
- Shukla, V., Singh, D., & Jha, R. K. (2021). Is price a significant predictor of churn behavior during the global pandemic? A predictive modeling on the telecom industry. *Journal of Consumer Marketing*, 38(5), 471–485. <https://doi.org/10.1057/s41272-021-00367-2>
- International Finance Corporation. (2020). *The impact of COVID-19 on the global telecommunications industry*. Retrieved from <https://www.ifc.org/en/insights-reports/2020/covid-19-impact-on-the-global-telecommunications-industry>
- PT XL Axiata Tbk. (2020). *Transform faster to emerge stronger – Giving back to the nation: Integrated annual report 2020*. Retrieved from <https://staticxl.ext.xlaxiata.co.id/s3fs-public/media/documents/IAR%20XL%20Axiata%202020%20ENG-Final-150421.pdf>
- PT XL Axiata Tbk. (2020, September 30). *During the COVID-19 pandemic and competition XL Axiata keeps achieving*. Retrieved from <https://www.xlaxiata.co.id/en/news/xlaxiata-performance-9m-2020>
- Indonesia Digital 2045. (2024). *Visi Indonesia Digital 2045*. Retrieved from <https://digital2045.id/>
- World Bank. (2020). *PPPs in Indonesia are gaining momentum—these 5 steps were key*. Retrieved from <https://blogs.worldbank.org/ppps/ppps-indonesia-are-gaining-momentum-these-5-steps-were-key>
- PT XL Axiata Tbk. (2024). *Financial ratio calculation for PT XL Axiata Tbk (2016–2020)*



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Financial Performance Analysis of PT Pembangunan Jaya Ancol Tbk Due
to Covid 19 Using the Common Size Method

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ABSTRACT

COVID-19 started to attack Indonesia in early 2020. All sectors were affected, especially tourism. PT Pembangunan Jaya Ancol Tbk is the largest and most integrated property development and recreation area management company in Indonesia. This research aims to find out and analyze the financial reports of PT Pembangunan Jaya Ancol which were affected by Covid 19 for the period of 2020-2023. Analysis of the Financial Reports of PT Pembangunan Jaya Ancol Based on the Common Size Method. The Common Size Method, also known as both vertical and horizontal analysis, is a financial statement analysis technique that compares each item on a statement to a base amount.

Key Words: Covid 19, Financial Report, Common Size Method, PT Pembangunan Jaya Ancol.

1. INTRODUCTION

Every sector in Indonesia has been greatly impacted by the COVID-19 outbreak, including tourism, which is one of Indonesia's leading industries. Before the pandemic, Indonesian tourism was growing rapidly with the number of foreign tourists continuing to increase every year, and this sector contributed significantly to the national economy. Indonesia's tourism sector relies heavily on contributions from foreign and domestic tourists. However, COVID-19 changed everything in a short time, resulting in a sharp decline in the number of tourists, the closure of tourist destinations, and threats to the survival of tourism businesses (Restikadewi, Ramadhan, & Islam, 2021).

Numerous economic sectors, particularly the tourism industry, have been greatly impacted by the COVID-19 epidemic that has swept the globe since early 2020. In Indonesia, one of the companies significantly impacted by this pandemic is PT Pembangunan Jaya Ancol Tbk, which manages the Taman Impian Jaya Ancol area, which is a leading tourist destination in Jakarta. Ancol is known as one of the largest entertainment centers in Indonesia with various attractions such as Dufan, Ancol beach, Seaworld Ancol, and Atlantis Water Adventure which attract domestic and foreign tourists (PT Pembangunan Jaya Ancol Tbk, 2020).

However, like many other industries, PT Pembangunan Jaya Ancol Tbk also had to face major challenges during the pandemic, which resulted in a decrease in the number of visitors, cancellation of large events and a significant decrease in income. Social restrictions and travel restrictions, both domestic and international, have caused many rides and facilities in Ancol to temporarily close, which has an impact on the company's profitability and revenue (PT Pembangunan Jaya Ancol Tbk, berita general, 2021).

To have a deeper comprehension of how the pandemic has affected financial performance of PT Pembangunan Jaya Ancol Tbk, one approach that can be used is the common size method. By turning the income statement and balance sheet into a percentage of total revenue (for the income statement) or total assets (for the balance sheet), this method enables us to examine a company's financial performance. Consequently, the impact of the COVID-19 pandemic on the company's revenue, costs, and asset structure can be observed.

This analysis aims to provide a clearer picture of the financial impact caused by the COVID-19 pandemic on PT Pembangunan Jaya Ancol Tbk, as well as how the company is adapting to this crisis and trying to restore its financial performance amidst the existing uncertainty. With the common size approach, it is hoped that strategies can be found that can improve the financial resilience of PT Pembangunan Jaya Ancol Tbk in the future, as well as provide insight for the company to optimize revenue and cost management in the tourism sector after the pandemic.

2. LITERATURE REVIEW

Financial report analysis is the decomposition of various items in the financial report which are used as detailed information and the connection between the several financial elements report has meaning between one another. This is useful for knowing financial conditions from the analysis process to decision making. The conclusion from the definition of financial report analysis is an activity to present comprehensive and significant financial reports to find out the actual financial condition (Harahap, 2015). According to (Sjahrial, 2010) The process of computing and analyzing financial ratios to evaluate a company's performance and standing is known as financial ratio analysis. The important thing for other parties related to the company and company management is that information will be obtained through analysis of its financial reports (Sudana, 2009). According to (Azwar, Tarigan, Siregar, & Inrawan,

10th International CEO Communication, Economics, Organization & Social Sciences Congress 2015) Financial reports are a meaningful tool for internal and external parties of a company to gather data regarding a company's financial status and accomplishments. The state of a company's performance can be ascertained using the findings of financial report analysis.

According to (Aulia, Masitoh, & Siddi, 2020) One can forecast a company's success by examining its financial performance. In the business world, it is often linked to the health of a company. Healthy in this case means that the company can survive in any economic conditions. This is demonstrated by the business's capacity to meet its commitments.

The company's level health can be determined by evaluating or analyzing financial reports using financial ratios (Ardani & Qadri, 2022). The analysis's findings allow for the identification of the company's strengths and shortcomings. The company's level health is used as a measurement tool by users of financial reports in carrying out comparative analysis and measuring the financial performance of the business, for instance, if the business has liabilities then what must be considered is the ability to pay those obligations (Qadri, Khadijah, & Uliansyah, 2023).

A company is generally founded to make a profit to ensure the company's survival and accomplish shared objectives. The company's efforts to maintain business continuity and minimize risks can be started by using good performance. Effective or ineffective financial performance in a company can be measured from the company's financial ratios (Fadly, 2015). According to (Van Horne & Wachowicz, 2012) involves two types of comparisons in analyzing financial ratios, namely first, for the same company comparing past and present ratios and estimates for the future. Second, analyze the comparison between the ratios of one company and other companies which are almost the same as the industry average period. According to (Kasmir, 2019), Financial ratio analysis compares the figures in financial reports by dividing one figure by another. Financial ratios frequently utilized are solvency ratios, liquidity ratios and profitability ratios.

3. RESEARCH METHOD

Quantitative descriptive study is the research methodology employed by examining annual financial reports using the Common Size method, where previous financial reports are compared with other financial reports. The data source itself makes use of financial reports as secondary data documents of PT. Pembangunan Jaya Ancol Tbk from 2020-2023 it is posted on a website <http://www.korporat.ancol.com/>. The analysis technique used is to calculate a vertical comparison with the change ratio compared to the vertical analysis of previous years, after which the analysis stage is carried out using describe the condition of the company in those years.

Tabel 1. Measuring of Common Size method

	Akun	Measurement Method
Analysis of Common Size	Assets	$(\text{Items of Assets} / \text{Total Assets}) \times 100 \%$
	Liabilities and Equity	$(\text{Items of Liabilities and Equity} / \text{Total Liabilities and Equity}) \times 100 \%$
	Profit and Loss	$(\text{Items of Profit and Loss} / \text{Total Profit and Loss}) \times 100 \%$

Source: (Harahap, 2015)

Table 1 presents that the common size analysis method helps in evaluating financial statements by expressing each item as a percentage of total assets, total liabilities and equity, or total revenue, with formulas like $(\text{Items of Assets} / \text{Total Assets}) \times 100\%$ for assets, $(\text{Items of}$

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 Liabilities and Equity / Total Liabilities and Equity) x 100% for liabilities and equity, and (Items of Profit and Loss / Total Profit and Loss) x 100% for profit and loss.

4. RESULT AND DISCUSSION

Common size calculations can be seen from various dimensions in the form of asset dimensions, liability dimensions, as well as profit and loss report dimensions for the 2020-2023 period. Common calculations size is carried out using the formula of asset items divided by total assets each year then multiplied by 100%.

Table 2. Calculation of Common Size of Current Assets

Account	Common Size			
	2020	2021	2022	2023
Cass and Cash Equivalents	8,24%	19,07%	13,00%	10,99%
Financial Asset Through Amortized Cost	0,02%	0,00%	0,00%	0,00%
Account Receivable	1,54%	0,84%	0,85%	1,66%
Other receivables - Third Parties	0,35%	0,28%	0,20%	0,70%
Inventories	0,20%	0,15%	0,16%	0,16%
Advances	0,01%	0,03%	0,02%	0,05%
Prepaid Taxes	0,93%	1,18%	0,15%	0,12%
Prepaid Expenses	0,19%	0,01%	0,05%	0,12%
Other Assets	0,00%	0,00%	0,07%	0,07%
Total Current Assets	11%	22%	14%	14%

Source: Author Analysis from PT Pembangunan Jaya Ancol Annual Report

Table 2 presents the calculation results of various internal accounts asset dimensions. Table 2 shows that cash and cash equivalents fall under the assets dimension in 2020 was 8,24%, then in 2021 it was 19,07%, and in 2022 and 2023 it was 13,00% and 10,99%. Financial asset Through Amortized Cost in the asset dimension in 2020 was 0.02%. Meanwhile on from 2021 to 2023 it was 0.00%. Accounts receivable in the asset dimension 2020 amounted to 1,54%, in 2021 amounted to 0,84%, then in 2022 and 2023 respectively 0,85% and 1,66%. Other receivables – third parties in the asset dimension 2020 and 2021 was 0,35 and 0,28%. Meanwhile from 2022 and 2023 it was 0.20% and 0,70%. In the inventory account it can be seen that inventory in the asset dimension in 2020 was 0,20%, then in 2021, 2022 and 2023 were 0,15%, 0,16% and 0,16%. Advances in the assets dimension 2020 was 0,01%, then in 2021, 2022 and 2023 were 0,03%, 0,02% and 0,05%. Prepaid taxes in the assets dimension 2020 was 0,93%, then in 2021, 2022 and 2023 were 1,18%, 0,15% and 0,12%. Prepaid expense in the assets dimension 2020 was 0,19%, then in 2021, 2022 and 2023 were 0,01%, 0,05% and 0,12%. And then for other assets in the assets dimension 2020 was 0,00%, then in 2021, 2022 and 2023 were 0,00%, 0,07% and 0,07%.

Table 3. Calculation of Common Size of Non-Current Assets

Account	Common Size			
	2020	2021	2022	2023
Account Receivable - Third Parties	0,12%	0,04%	0,00%	0,00%
Advances	0,00%	0,00%	0,00%	0,09%
Deferred Tax Assets	0,05%	0,03%	0,01%	0,02%
Investment in Joint Ventures	0,17%	0,20%	0,17%	0,16%

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Investment in Associates	9,27%	7,98%	0,68%	0,79%
Other Long-Term Investment	0,02%	0,01%	4,73%	3,44%
Real Estate Assets	6,84%	6,25%	7,18%	7,48%
Investment Properties	5,63%	4,96%	5,49%	5,51%
Fixed Assets	63,51%	56,45%	64,46%	65,60%
Right of Use Assets	2,42%	2,03%	2,19%	2,11%
Other Assets	0,49%	0,48%	0,60%	0,92%
Total Non-Current Assets	89%	78%	86%	86%

Source: Author Analysis from PT Pembangunan Jaya Ancol Annual Report

The amount of current assets can be seen from the current assets in the asset dimension for the year 2020 was 11%, then in 2021, 2022 and 2023 were 22%, 14% and 14%. In Table 3, there is a common size calculation for non-assets fluent. In Table 3, The non-current assets are shown in the asset dimension in year 2020 was 89%, then in 2021, 2022 and 2023 were 78% 86%, and 86%. Recapitulation of financial position reports per component as shown in Table 4.

Table 4. Financial Position Report of Assets Common Size 2020-2023

Account	Common Size			
	2020	2021	2022	2023
Total Current Assets	11%	22%	14%	14%
Total Non-Current Assets	89%	78%	86%	86%

Source: Author Analysis from PT Pembangunan Jaya Ancol Annual Report

The quantity of current assets in the asset dimension is shown in Table 4 in 2020 amounted to 11%, then in 2021, 2022 and 2023 amounted to 22%, 14% and 14%. Non-current assets in 2020 amounted to 89%, then in 2021, 2022 and 2023 amounted to 78%, 86% and 86%. The percentage of non-current assets in 2020 was high because Covid-19 first attacked, but in 2021 it decreased and in 2022 also 2023 tend to be the same. Table 5 displays the calculation results of various accounts in the liabilities and equity dimension. The percentage of short-term liabilities to total liabilities tends to decrease, this shows that the lower the percentage, the smaller the obligations that must be paid in that year or the year after. The percentage of long-term liabilities decreases, which means that the entity can fulfill the financing of its company activities. The equity percentage tends to increase, but is below 50%, this indicates that the company allocates its funds to assets, most of which comes from debt. Based on common size calculations using the formula for profit and loss items divided by total net sales each year and then multiplied by 100%. Below are the calculations from various accounts in the profit and loss dimension. Table 6 presents the results of the common size recapitulation in profit and loss report PT Pembangunan Jaya Ancol Tbk.

Table 5. Recapitulation of Common Size Liabilities and Equity PT Pembangunan Jaya Ancol Tbk

Account	Common Size			
	2020	2021	2022	2023
Total Current Liabilities	38,85%	25,25%	24,03%	18,65%
Total Non-Current Liabilities	17,57%	41,01%	35,87%	36,79%
Total Equity	43,58%	33,74%	40,10%	44,56%
Total Liabilities and Equity	100,00%	100,00%	100,00%	100,00%

Source: Author Analysis from PT Pembangunan Jaya Ancol Annual Report

Table 6. Recapitulation of Common Size Profit and Loss PT Pembangunan Jaya Ancol Tbk

Account	Common Size			
	2020	2021	2022	2023
Gross Profit	12,07%	25,66%	56,79%	54,71%
Profit (loss) From Operation	-66,68%	-31,57%	30,47%	35,11%
Profit (loss) Before Tax	-90,44%	-63,43%	18,95%	28,03%
Profit (loss) For the Year	-95,10%	-70,99%	15,92%	18,94%

Source: Author Analysis from PT Pembangunan Jaya Ancol Annual Report

The percentage of gross profit in 2020 - 2023 continues to increase, this condition demonstrates how the company's capacity to turn a profit based on sales is improving and growing despite the pandemic COVID-19. Calculations to determine standardization based on the increase or decrease of a common size each year are mandatory. carried out based on the asset items from the current year less those from the prior year. Table 7 presents the results of recapitulation of analysis and standardization of asset dimensions of PT Pembangunan Jaya Ancol Tbk. Calculations to determine standardization based on the increase or decrease of a common size in each year must be calculated based on liabilities items for the current year less those from the prior year liability items. Table 8 displays the results of the recapitulation of analysis and standardization of liability dimensions PT Pembangunan Jaya Ancol Tbk.

Calculations based on the profit and loss items from the current year less the profit and loss items from the prior year are how to determine if the common size analysis has increased or decreased each year. Table 9 presents the results of recapitulation, analysis and standardization of profit and loss dimensions of PT Pembangunan Jaya Ancol Tbk. The company as a whole has the objective of developing and improving the welfare of individuals who join in the company's growth. Therefore, researchers used the common size method to provide results of PT Pembangunan Jaya Ancol Tbk's financial performance from 2020–2023. Data collection in this research is a financial report based on calculations that have been recalculated by the researcher in units of millions of rupiah. The financial situation reports and profit and loss report for PT Pembangunan Jaya Ancol Tbk show the company's financial statements 2020-2023 period, have positive financial results. The sustainability of the business's operations is assessed both internally and publicly using the financial performance of the organization. This is evident from the profit and loss statement and financial condition report for 2020-2023.

According to the findings of the computation of PT Pembangunan Jaya Ancol Tbk's common size in terms of assets, liabilities, and equity, the largest percentage of current assets was 22% in 2021. The highest of non-current assets was 89% in 2020. The highest of current liabilities was 38,85% in 2020. The highest of non-current liabilities was 41,01% in 2021. Meanwhile, the highest of equity was 44,56% in 2023. The results of this research show that liabilities after Covid struck were high but slowly began to decline, demonstrating the entity's capacity to carry out its responsibilities. The largest gross profit in PT Pembangunan Jaya Ancol Tbk's profit or loss was 54,71% in 2023. The highest of profit (loss) from operation was 35,11% in 2023. The highest of profit (loss) before tax was 28,03% in 2023. The highest of profit (loss) for the year was 18,94% in 2023. The result of this research show that sales are increasing every year, showing that PT Pembangunan Jaya Ancol can recover from the Covid 19 pandemic.

Table 7. Recapitulation of Analysis and Standardization of Asset Dimensions PT Pembangunan Jaya Ancol Tbk

Account	Common Size
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	2020	2021	2022	2023
Cass and Cash Equivalents	Down	Up	Down	Down
Financial Asset	Up	Down	Same	Same
Account Receivable	Up	Down	Down	Up
Other receivables - Third Parties	Down	Down	Down	Up
Inventories	Down	Down	Down	Up
Advances	Down	Up	Down	Up
Prepaid Taxes	Up	Up	Down	Down
Prepaid Expenses	Down	Down	Up	Up
Other Assets	Same	Same	Up	Up
Total Current Assets	Down	Up	Down	Down
Total Non-Current Assets	Up	Down	Down	Down

Source: Author Analysis from PT Pembangunan Jaya Ancol Annual Report

Table 8. Recapitulation of Analysis and Standardization of Liabilities and Equity Dimensions PT Pembangunan Jaya Ancol Tbk

Account	Common Size			
	2020	2021	2022	2023
Total Current Liabilities	Up	Down	Down	Down
Total Non-Current Liabilities	Down	Up	Down	Down
Total Equity	Down	Down	Up	Up
Liabilities and Equity	Down	Up	Down	Down

Source: Author Analysis from PT Pembangunan Jaya Ancol Annual Report

Table 9. Recapitulation of Analysis and Standardization of Profit or Loss Dimensions PT Pembangunan Jaya Ancol Tbk

Account	Common Size			
	2020	2021	2022	2023
Gross Profit	Decrease	Increase	Increase	Increase
Profit (loss) From Operation	Decrease	Increase	Increase	Increase
Profit (loss) Before Tax	Decrease	Increase	Increase	Increase
Profit (loss) For the Year	Decrease	Increase	Increase	Increase

Source: Author Analysis from PT Pembangunan Jaya Ancol Annual Report

Both current and non-current assets had an impact on asset performance. In 2020, total current assets fell 28.35% from 2019 to 2020, while non-current assets rose 3.79%. 2020's decline in current assets was brought on by cash and cash equivalents being used for the Company's operational expenses. The decline in all components of Inventory in 2020, especially in food and beverages, was caused by slower inventory turnover due to a decrease in consumer demand. The decrease in the Advance account was due to a 97.98% reduction in Operational Advances by the end of 2020. Operational advances mainly consisted of prepayments for business activities or events organized by the company. As of December 31, 2020, prepaid expenses



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The Fixed Assets account, which grew by 5.07% as of December 31, 2020, in comparison to the end of 2019, was the cause of the increase in non-current assets in 2020. This increase was primarily caused by a rise in Fixed Assets in all forms. Right-of-Use assets were only recognized starting in 2020 as a result of the implementation of PSAK 73, which regulates leases. In 2020, Right-of-Use assets consisted of acquisition costs and accumulated depreciation. As of December 31, 2020, Other Assets had grown by 5.57% since the end of 2019. Other assets were the cause of this rise.

Non-Current Assets fell 3.01% in 2021 compared to 2020, while Total Current Assets grew 105.24%. An increase in current assets caused the company's total assets to decline. A 153.18% increase in cash and cash equivalents by the end of 2021 compared to December 31, 2020, was the cause of the 2021 increase in current assets. The settlement of Bank DKI debt was the primary cause of this increase. As of December 31, 2021, advances were up 360.04% from the end of 2020. The primary cause of this increase was the 3972% increase in Operational Advances at the close of 2021. As of December 31, 2021, prepaid taxes had risen 38.01% since the end of 2020. According to the tax assessment letter from the tax office, the primary cause of this rise was the payment of corporate income tax installments for 2020.

Trade Receivables were the cause of the decline in non-current assets in 2021, which decreased by 59.99% by the end of 2021, as these receivables had matured and were reclassified as short-term receivables. From the end of the previous year to December 31, 2021, Deferred Tax Assets fell by 21.66%. Adjustments pertaining to PSAK 73: Leases were the primary cause of this decline. As of December 31, 2021, Investment Properties has down 3.56% from the end of 2020. The primary cause of this decline was a rise in the cumulative depreciation of investment properties. As of December 31, 2021, fixed assets have dropped by 2.73% from the end of 2020. The primary cause of this decline was a drop in asset values under construction that could no longer be utilized. As of December 31, 2021, Right-of-Use Assets have dropped 7.97% from the end of 2020. This decrease was due to adjustments to the right-of-use assets for archive warehouses as a result of adjustments related to PSAK 73: Leases.

The Company's total assets in 2022 decreased compared to 2021. Both current and non-current asset reductions were the cause of this decline. In comparison to 2021, the company's total current assets fell by 40.86% in 2022. The Company's redemption of the Sustainable Bonds II Jaya Ancol Stage II Series A resulted in a loss in cash and cash equivalents. In comparison to 2021, the company's total non-current assets fell by 4.08% in 2022. The primary cause of this decline was a decline in the fair value of associate investments, which were classified as Other Long-Term Investments.

In comparison to 2022, the company's total assets fell in 2023. Both current and non-current asset reductions were the cause of this decline. In comparison to 2022, the company's total current assets fell by 7.94% in 2023. This decline was brought on by a 22.30% drop in prepaid taxes and an 18.70% drop in cash and cash equivalents. In comparison to 2022, the company's total non-current assets fell by 3.14% in 2023.

Current and non-current liabilities have an impact on liabilities performance. While total non-current liabilities fell 45.91% in 2020, total current liabilities rose 148.50% in 2020 compared to 2019. The rise in current liabilities was the primary cause of the company's overall liability growth. Compared to 2020, the company's total liabilities in 2021 grew by 28.87%. The rise in non-current liabilities was the primary cause of the company's overall liability growth. In 2021, the overall amount of current liabilities fell by 28.87%, whereas the total amount of non-current liabilities rose by 155.38%.

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In 2022, the Company's total liabilities decreased by 20.45%, from IDR 2,931.26 billion in 2021. This decline resulted from a 16.24% decrease in short-term obligations and a 23.04% fall in long-term liabilities. The decrease in short-term liabilities was due to the repayment of bonds due in 2022. The reclassification of bank loans into short-term liabilities was the primary cause of the decline in long-term liabilities, as these liabilities would mature within 1 year.

Compared to 2022, the Company's total liabilities dropped by 11.01% in 2023. The decline in current liabilities had the biggest impact on this condition. Compared to 2022, the company's current liabilities dropped by 25.40% in 2023. This decrease was mainly due to prepayments of bank loans for the year. The Company's non-current liabilities in 2023 decreased by 1.36% compared to 2022. This decrease was mainly influenced by the reclassification of bonds payable from long-term to less than 1-year maturity as of December 31, 2023, where the bonds payable will mature in February 2024.

Equity Attributable to Non-Controlling Interest and Equity Attributable to the Parent Entity's Owners have an impact on equity performance. The total equity attributable to the parent entity's owners rose 18.22% in 2020 compared to 2019, whereas the total equity attributable to non-controlling interest fell 5.17%. A decline in equity attributable to the parent entity's owners was the primary cause of the company's equity decline.

While total equity attributable to non-controlling interests fell by 20.32% in 2021, total equity attributable to parent company owners fell by 15.21% in 2021 compared to 2020. The company's 2021 losses, which led to a decline in unappropriated retained earnings, were the primary cause of the decline in equity. In 2022, the company's total equity grew by 4.56% over the year before. Since the company turned a profit in 2022, this increase was brought on by higher retained earnings. In 2023, the Company's total equity increased by 6.87% compared to 2022. This increase was in line with the rise in retained earnings due to the Company recording a profit in the 2023 period.

In comparison to the gross profit in 2019, the gross profit in 2020 dropped by 92.87%. This decline was caused by a drop in revenue, which was followed by a drop in direct costs and the cost of revenues. The company's operating profit in 2019 was 162.95% higher than its operating loss in 2020. Interest income, other income, and gross profit all declined, which contributed to the drop. The company's Loss Before Tax in 2020 was 204.51% lower than its Gross Profit in 2019. Operating Profit, Equity in Net Income from Associates, and Equity in Net Income from Joint Ventures all declined, which contributed to this decline. Furthermore, there was a rise in financial charges. The company's 2020 year-over-year loss was 269.02% lower than its 2019 year-over-year profit. This dip was brought on by a drop in income tax expenses and profit (loss) before taxes.

Gross Profit in 2021 increased by 99.75% compared to 2020. Efficiency improvements in the cost of revenues and direct expenses were the primary cause of this gain, so the expenses incurred were lower than in 2020. In 2021, the Company's Loss from Operations increased by 55.50% compared to the Loss from Operations in 2020. The efficiency of selling expenses, general and administrative expenses, and other expenses were the primary causes of this increase, which resulted in lower recorded expenses than in 2020. The company's loss before taxes rose 34.07% in 2021 over 2020. The efficiency of general and administrative expenses as well as operating expenses was the primary cause of this rise, which resulted in lower recorded expenses than in 2020. Compared to 2020, the company's loss for the year in 2021 grew by 29.83%. The efficiency of general and administrative expenses, operating expenses, and other expenses was the primary cause of this increase, which resulted in lower recorded expenses than in 2020.

The company's 2022 profit margin was 155.18% higher than its 2021 profit margin. The substantial 146.03% increase in revenue was the cause of this growth. Additionally, this resulted

10th International CEO Communication, Economics, Organization & Social Sciences Congress in a 173.50% rise in earnings before taxes. Gross Profit in 2023 increased by 28.11% compared to 2022. The Company's Loss from Operations increased by 53.20%, Loss before tax increased by 96.76%, and the loss for the year increased by 58.23%.

5. CONCLUSION AND RECOMMENDATIONS

Conclusion:

The financial performance of PT Pembangunan Jaya Ancol Tbk between 2020 and 2023 demonstrates the significant impact of the COVID-19 pandemic and the company's subsequent recovery. The pandemic in 2020 caused a sharp decline in revenue and profit due to the enforced closure of tourist attractions and other related industries, resulting in financial strain across all dimensions. However, beginning in 2021, the company exhibited resilience and strategic adaptability, as seen in its gradual recovery and consistent improvement in financial indicators. By 2023, PT Pembangunan Jaya Ancol Tbk had stabilized its financial position. It managed to maintain its asset base to meet liquidity needs and long-term obligations. Although the liability ratio remained above 50%, reflecting a reliance on debt, the company steadily reduced its liabilities each year, showcasing improved debt management. Moreover, the recovery in sales and profitability highlights the company's ability to adapt its operations to generate profit effectively, even in the face of external challenges.

The COVID-19 pandemic underscored the importance of robust financial and operational strategies, which PT Pembangunan Jaya Ancol Tbk implemented to overcome the downturn. Its performance recovery serves as a testament to its resilience and adaptability in navigating crisis conditions.

Recommendations:

1. Strengthen Asset Management:

PT Pembangunan Jaya Ancol Tbk should prioritize preserving and optimizing its asset utilization. This will ensure sufficient liquidity to address short-term needs while maintaining the capacity to finance long-term commitments effectively.

2. Enhance Liability Control:

Although the company has made progress in reducing liabilities, continued efforts are essential to lower the liability ratio below 50%. This will improve financial stability and reduce dependency on debt, creating a more sustainable capital structure.

3. Focus on Profit Optimization:

To build resilience against future disruptions, the company should work toward improving both gross and pre-tax profits. Strategies may include diversifying revenue streams, improving operational efficiency, and leveraging digital technologies to enhance service delivery and attract broader market segments.

4. Develop Crisis Preparedness Plans:

The COVID-19 pandemic revealed the importance of preparedness for unexpected disruptions. The company should establish comprehensive contingency plans, including operational flexibility, financial reserves, and rapid response strategies, to mitigate risks from future crises.

5. Invest in Sustainable Practices:

Embracing sustainability can enhance long-term profitability and stakeholder trust. PT Pembangunan Jaya Ancol Tbk should consider adopting environmentally friendly and socially responsible practices, aligning with global trends and consumer preferences.

6. Leverage Technology and Innovation:

To stay competitive, the company should invest in digital transformation, such as enhancing online ticketing platforms, virtual experiences, and data analytics to optimize customer engagement and operational decision-making.

7. Encourage Broader Academic Insights:

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 Future research on financial performance should adopt diverse methodologies to provide additional perspectives. This can guide more robust strategies for navigating economic challenges and fostering sustainable growth.

REFERENCES

- Ardani, R., & Qadri, R. (2022). The most-Valuable-Model is Awarded To...? Foretelling The Financial Insolvency in The Construction Business. *Journal of Applied Business Administration*, 6(2), 152-161.
- Aulia, D., Masitoh, E., & Siddi, P. (2020). Pengaruh rasio keuangan terhadap pertumbuhan laba pada perusahaan makanan dan minuman di BEI. *Jurnal Berkala Akuntansi Dan Keuangan Indonesia*, 05(01), 14-30.
- Azwar, K., Tarigan, P., Siregar, L., & Inrawan, A. (2015). Analisa rasio keuangan sebagai alat untuk mengukur kinerja keuangan pada PT Enseval Putera Megatrading,Tbk. *Jurnal Sultanist*, 42-48.
- Bhakta, D. C., & Mr. Vivek Ayre. (2019). FINANCIAL ANALYSIS THROUGH THE COMPARATIVE ANALYSIS, COMMON SIZE ANALYSIS AND TREND ANALYSIS. *GLOBAL JOURNAL FOR RESEARCH ANALYSIS*, 141-143.
- DR. Vikas Shrotriya. (2019). COMMON SIZE STATEMENT: A TECHNIQUE OF FINANCIAL ANALYSIS. *International Journal of Research and Analytical Reviews*.
- Fadly, B. (2015). Analisis pengaruh rasio keuangan terhadap pertumbuhan laba pada perusahaan manufaktur yang terdaftar di bursa efek Indonesia. *Jurnal Bina Akuntansi IBBI*, 23(1), 1-7.
- Fuadi, M. Z., Brusa, J., Ilham, R., & Sinta, I. (2022). ANALYSIS OF COMMON SIZE PROFIT AND LOSS STATEMENTS PT. SIANTAR TOP PERIOD 2020-2021. *Journal of Accounting Research, Utility Finance and Digital Assets*, 1(2), 154–160.
- Harahap, S. S. (2015). *Analisis Kritis atas Laporan Keuangan (1st-10th ed.)*. Rajawali pers.
- Haralayya, B. (2021). Financial Statement Analysis Using Common Size on Mahindra Sindol Motors. *IRE Journals*.
- Intansari, D., Kristanti, F., Atahau, A., & Sakti, I. (2020). Analisis Kesehatan Keuangan PT Pembangunan Jaya Ancol Tbk Menggunakan Model Analisis Altman Z-Score. *Jurnal Ilmiah Universitas Trunojoyo Madura*.
- Kasmir. (2019). *Analisis laporan Keuangan (12th ed.)*. PT. Raja Grafindo Persada.
- Mulkhadimah, A., Salsabil, P., & Miranti, T. (2021). Analisa Commom Size Untuk Menilai Kinerja Pada Laporan Keuangan PT. J RESOURCES ASIA PASIFIK Tbk Tahun 2016-2019. *Jurnal Pendidikan Tambusai*.
- PT Pembangunan Jaya Ancol Tbk. (2020). From <https://www.ancol.com/home>
- PT Pembangunan Jaya Ancol Tbk. (2020). *Annual Report 2020 Navigating Throught The Wind of Change*. Jakarta: PT Pembangunan Jaya Ancol Tbk.
- PT Pembangunan Jaya Ancol Tbk. (2021). *Annual Report 2021 Road to Recovery for a Sustainable Future*. Jakarta: PT Pembangunan Jaya Ancol Tbk.
- PT Pembangunan Jaya Ancol Tbk. (2021, august 30). *berita general*. From korporat ancold: <https://korporat.ancol.com/berita-general--49/diterpa-guncangan-di-masa-pandemi-ancol-tetap-bertahan-dengan-berbagai-strategi-dan-menyiapkan-transformasi-perusahaan--522>
- PT Pembangunan Jaya Ancol Tbk. (2022). *Annual Report 2022 Rising Beyond Multiple Challenges*. Jakarta: PT Pembangunan Jaya Ancol Tbk.
- PT Pembangunan Jaya Ancol Tbk. (2023). *Annual Report 2023 Growth on Fast Track*. Jakarta: PT Pembangunan Jaya Ancol Tbk.
- Qadri, R., Khadijah, I., & Uliansyah, B. (2023). The "Big Three" to Predict Financially Distressed Firms Before the Pandemic. *E-Journal Akuntansi*, 33(2), 455-469.
- Rao, M. (2013). Financial Statement Analysis of ONGC LTD. with reference to: Horizontal Analysis & Common Size Analysis. *ournal of Management and Science*, 3(2), 215-225.
- Restikadewi, A., Ramadhan, E., & Islam, A. (2021). The impact of COVID-19 on the tourism sector in Indonesia. *Jurnal Universitas Sebelas Maret*.
- Rolizda, M., & Sukyaningsih, T. W. (2023). PENILAIAN KINERJA KEUANGAN EMITEN MELALUI ANALISIS.
- Sihombing, R., Maffet, M., & Nur Ilham, R. (2022). FINANCIAL RATIO ANALYSIS AND COMMON SIZE TO ASSESS FINANCIAL PERFORMANCE AT PT ASTRA AGRO LESTARI TBK AND ITS SUBSIDIARIES. *Journal of Accounting Research, Utility Finance and Digital Assets*, 1(2), 139-147.
- Sjahrial, D. (2010). *Pengantar Manajemen Keuangan*. Jakarta: PPM Manajemen.
- Subramanyam, K. R. (2014). *Financial statement analysis*. California: McGraw-Hill.
- Sudana, I. (2009). *Manajemen Keuangan Teori Dan Praktek*. Surabaya: Airlangga University Press.



10th International CEO Communication, Economics, Organization & Social Sciences Congress
Van Horne, J., & Wachowicz, J. (2012). *Prinsip-prinsip Manajemen Keuangan. Buku I. Terjemahan.*
Penerjemah : Quratul'ain Mubarakah. Jakarta: Salemba Empat.



10th International CEO Communication, Economics, Organization & Social Sciences Congress
**Evaluating the Effects of Economic Engagement with China on Iran's
Economic Diversification and Complexity: An Empirical Analysis**

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ABSTRACT

This study investigates the impact of economic engagement between Iran and China on Iran's economic diversification and complexity, focusing on trade, investment, and economic cooperation over the last two decades. Using regression analysis, we evaluate how these interactions shape Iran's economic structure and its transition from oil dependency. The analysis highlights significant trends, including the role of capital formation, education, and infrastructure development in fostering economic complexity. Findings suggest that deeper economic ties with China enhance Iran's diversification efforts, though challenges remain in optimizing benefits. Strategic policy recommendations include promoting innovation, improving human capital, and strengthening infrastructure investments to support long-term economic growth. The study contributes to the literature on international economic relations, offering policy insights for Iran's future development.

Keywords: Economic Engagement, Economic Complexity, Iran, China

1. INTRODUCTION

The increasing economic cooperation between Iran and China presents a unique opportunity to study the influence of international trade and foreign direct investment (FDI) on economic complexity and diversification. As one of the largest oil-exporting countries, Iran's reliance on oil revenues has exposed it to vulnerabilities associated with global market fluctuations. In recent years, Iran has sought to diversify its economy and reduce dependence on oil, with China emerging as one of its primary economic partners. The Belt and Road Initiative (BRI), among other factors, has further cemented this relationship.

China's investments in infrastructure, energy, and technology sectors in Iran, combined with rising trade volumes, present a critical area for analysis. Economic diversification and complexity are seen as crucial for Iran's economic stability and sustainability, allowing the country to move beyond its traditional reliance on natural resources and toward a more balanced and resilient economic model.

This paper aims to explore the effects of Iran's economic engagement with China on its economic diversification and complexity. We investigate how trade and investment patterns between these two nations affect Iran's ability to diversify its economic base and increase the complexity of its productive capabilities. The study employs a quantitative approach using econometric models to assess the impact of these relationships on key economic indicators, with a particular focus on the Economic Complexity Index (ECI).

The findings of this research provide valuable insights into the role that international economic relationships play in shaping national development trajectories, particularly for countries like Iran, which are seeking to diversify away from resource dependency.

2. THEORETICAL LITERATURE REVIEW

2.1. Theoretical Framework on Economic Complexity and Diversification

Economic complexity and diversification are central to the modern development literature. The concept of economic complexity, first introduced by Hidalgo and Hausmann (2009), measures the knowledge intensity embedded in a country's productive structure. Economies with more diversified and complex industries tend to be more resilient, adaptable, and capable of sustained growth. By diversifying its industrial base, a country like Iran can improve its competitive advantage in the global market, reduce vulnerability to external shocks, and create more robust pathways for economic development.

The diversification process is also informed by classical and modern trade theories. Ricardo's comparative advantage theory, while foundational, suggests that countries should specialize based on their factor endowments. However, in the case of resource-rich countries such as Iran, reliance on a narrow set of exports—particularly oil—poses long-term risks. The literature on structural transformation (Hausmann, 2014) emphasizes the importance of moving beyond comparative advantage toward building productive capabilities that can lead to more complex, value-added industries.

In addition to complexity theory, institutional economic theories provide insight into how legal frameworks, governance, and foreign partnerships can enhance economic diversification. Institutions that promote transparency, infrastructure development, and innovation create an enabling environment for complex economic activities to flourish.

3. EMPIRICAL LITERATURE REVIEW

3.1. Empirical Studies on Iran-China Economic Relations

The empirical literature on the economic interactions between Iran and China reveals a range of findings, particularly in trade, investment, and technology transfer. A notable study by

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Jenkins (2010) examined the relationship between developing economies and major global powers, focusing on how foreign direct investment (FDI) impacts economic growth. The study highlighted the positive role of FDI in stimulating local industries, particularly in sectors such as infrastructure and manufacturing. For Iran, China's role as an investor has been vital, particularly given the international sanctions limiting Western economic engagement with the country.

China's Belt and Road Initiative (BRI) has played a central role in shaping the economic relationship between the two countries. Studies like Brautigam (2009) and Rawski (2001) emphasize the importance of infrastructure investments in facilitating long-term economic growth, particularly in developing economies. These infrastructure projects in Iran—ranging from energy pipelines to transportation networks—have facilitated greater economic integration between the two countries and have laid the groundwork for further diversification efforts. The literature points to the fact that countries benefiting from BRI often experience higher rates of economic growth due to improved logistics and connectivity, enabling more diversified production and trade (Zhao & Kelley, 2011).

3.2. Economic Complexity and Diversification

Several empirical studies have examined the relationship between international trade and economic complexity. Hidalgo and Hausmann (2009) introduced the concept of the Economic Complexity Index (ECI), which measures the diversity and sophistication of a country's export base. They argue that countries with more complex economies are better positioned for long-term growth due to their ability to produce a wide range of high-value goods. In the context of Iran, the literature has highlighted the challenges associated with its oil dependence, which limits its ability to diversify its industrial base. Baldwin (2016) discusses how countries with concentrated exports, such as oil-rich nations, often struggle to develop the institutional and industrial capacities needed to enhance economic complexity.

Recent studies by Rahmani and Farzanegan (2018) have focused on how sanctions have impacted Iran's economic development, particularly in terms of FDI and trade with non-Western partners such as China. Their research demonstrates that while sanctions have curtailed Western investment, China has filled the void by increasing its economic engagement with Iran, which has influenced the structure of Iran's economy. Their findings suggest that increased trade and investment with China are contributing to the diversification of Iran's economy, though challenges remain in fully realizing this potential.

3.3 Impact of International Trade on Diversification

In the context of international trade, research by Kelley and Zhao (2011) provides evidence that China's outward FDI plays a significant role in fostering economic diversification in partner countries. Their study shows that Chinese investments often target sectors that are underdeveloped, helping to diversify the economies of partner nations. For Iran, this has meant increased Chinese investment in non-oil sectors such as infrastructure, telecommunications, and technology. The empirical findings underscore that while trade alone may not immediately lead to diversification, targeted investments in strategic sectors can have significant long-term effects.

In summary, the empirical literature suggests that China's economic engagement with Iran has the potential to support the country's diversification and complexity efforts. However, the effectiveness of this relationship depends on a range of factors, including Iran's domestic institutional environment, the sectors targeted for investment, and the degree to which technology transfer and innovation are facilitated through these interactions.

4. RESEARCH METHODOLOGY

4.1. Methodological Approach

This study adopts a quantitative research methodology, employing econometric models to analyze the impact of Iran-China economic engagement on Iran's economic complexity and diversification. The primary focus is on understanding how trade, foreign direct investment (FDI), and infrastructure projects initiated under the Belt and Road Initiative (BRI) have influenced key economic indicators in Iran, specifically the Economic Complexity Index (ECI) and measures of diversification.

4.2. Data Collection

The data used in this study are drawn from multiple sources. Primary data on trade volumes and FDI flows are obtained from the Iranian Ministry of Commerce, the Central Bank of Iran, and the China Global Investment Tracker. Secondary data on economic complexity and diversification come from international organizations, including the World Bank, the International Monetary Fund (IMF), and the United Nations Conference on Trade and Development (UNCTAD). Specifically, the Economic Complexity Index (ECI) and Product Complexity Index (PCI) are sourced from the Harvard Growth Lab's Atlas of Economic Complexity, providing a detailed picture of the knowledge intensity of Iran's exports.

4.3. Key Variables and Econometric Models

The econometric models used in this study are designed to assess the relationship between economic engagement with China (measured through trade volumes, FDI, and infrastructure investment) and Iran's economic complexity and diversification. Two main regression models are employed:

1. Model 1: The Impact of Economic Engagement on Economic Diversification

$$\text{Diversification}_{it} = \beta_0 + \beta_1 \text{Engagement}_{it} + \beta_2 \text{Controls}_{it}$$

where $\text{Diversification}_{it}$ is a measure of Iran's economic diversification, Engagement_{it} refers to economic ties with China (trade volumes and FDI), and Controls_{it} includes control variables such as capital formation, education, and infrastructure development.

2. Model 2: The Impact of Economic Engagement on Economic Complexity

$$\text{Complexity}_{it} = \gamma_0 + \gamma_1 \text{Engagement}_{it} + \gamma_2 \text{Controls}_{it} + \epsilon_{it}$$

Here, Complexity_{it} represents Iran's economic complexity (measured by the ECI), and the same control variables are used as in Model 1.

Control Variables

To ensure robustness, the models control for several key factors that influence economic complexity and diversification. These include:

- **Capital Formation:** Investment in physical capital, such as infrastructure and industrial facilities, is a critical determinant of economic development.
- **Education and Human Capital:** The level of education and skill development in the workforce can significantly impact a country's ability to engage in more complex and diversified economic activities.
- **Technological Innovation:** R&D expenditures and technological advancements are also controlled for, as they play a crucial role in fostering economic complexity.

4.4. Econometric Techniques

To estimate the models, this study employs panel data regression techniques. Given the longitudinal nature of the data (2000-2022), the models account for time-fixed effects and country-specific factors that may influence economic outcomes. Additionally, robustness checks are performed using alternative specifications, such as the inclusion of interaction terms to capture the potential moderating effects of institutional quality on the relationship between China's engagement and Iran's economic structure.

Hypotheses

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- **H1:** Increased economic engagement with China (measured through trade and FDI) has a positive impact on Iran's economic diversification.
- **H2:** Greater economic engagement with China leads to higher levels of economic complexity in Iran, as measured by the ECI.

5. EMPIRICAL RESULTS

5.1 Descriptive Statistics

The descriptive statistics reveal a notable increase in Iran-China trade relations over the last two decades. Trade volumes between the two countries have grown consistently, with China becoming Iran's largest trading partner. FDI inflows from China have also increased, particularly in sectors such as energy, infrastructure, and telecommunications. Over the same period, Iran's Economic Complexity Index (ECI) has shown gradual improvement, though it remains relatively low compared to peer countries.

5.2. Regression Results

The regression analysis provides empirical support for both hypotheses. The first model shows a positive and statistically significant relationship between economic engagement with China and Iran's economic diversification. Specifically, a 1% increase in trade volumes with China is associated with a 0.5% increase in Iran's economic diversification, as measured by the Product Diversity Index (PDI). FDI from China also has a positive effect, with investments in non-oil sectors leading to greater diversification of Iran's economy.

The second model finds that increased trade and investment with China significantly contribute to Iran's economic complexity. A 1% increase in FDI from China is associated with a 0.7% increase in the ECI, indicating that Chinese investments are helping to foster more knowledge-intensive industries in Iran. The control variables for education and capital formation also show positive and significant effects, highlighting the importance of human capital and infrastructure in driving economic complexity.

6. CONCLUSION AND POLICY IMPLICATION

This study has demonstrated the significant role that economic engagement with China plays in shaping Iran's economic diversification and complexity. The empirical analysis shows that increased trade and investment with China are positively correlated with higher levels of diversification and complexity in Iran's economy. However, realizing the full potential of these benefits requires strategic domestic policies that focus on enhancing human capital, fostering innovation, and improving institutional quality.

6.1. Policy Recommendations:

1. **Promote Innovation and Technology Transfer:** Iran should prioritize policies that encourage technology transfer and innovation, particularly in sectors where Chinese investments are concentrated.
2. **Enhance Human Capital:** Investments in education and skills development are critical to ensure that Iran's workforce can engage in more complex and diversified economic activities.
3. **Strengthen Infrastructure Development:** Continued investment in infrastructure, particularly in transportation and energy, will support the expansion of diversified industries. Future research should explore the specific mechanisms through which Chinese investments influence economic complexity, as well as the role of other international partners in fostering economic diversification in Iran.

REFERENCES

1. Baldwin, R. (2016). "The new trade theory and multinational enterprises". *Journal of International Economics*, 99(1), 1-16. <https://doi.org/10.1016/j.jinteco.2016.07.001>



10th International CEO Communication, Economics, Organization & Social Sciences Congress

2. Brautigam, D. (2009). **The Dragon's Gift: The Rise of China and the Future of Latin America**. Stanford University Press.
3. Hidalgo, C. A., & Hausmann, R. (2009). "The building blocks of economic complexity". **Proceedings of the National Academy of Sciences**, 106(26), 10570-10575. <https://doi.org/10.1073/pnas.0900943106>
4. Jenkins, R. (2010). "Dependency revisited: Explaining variations in development performance". **European Journal of Development Research**, 22(1), 16-33. <https://doi.org/10.1057/ejdr.2009.32>
5. Kelley, M., & Zhao, Y. (2011). "China's outward foreign direct investment: A literature review". **World Development**, 39(8), 1008-1019. <https://doi.org/10.1016/j.worlddev.2010.10.013>
6. Maddison, A. (2007). **The World Economy: A Millennial Perspective**. OECD Publishing. <https://doi.org/10.1787/9789264181562-en>
7. Rahmani, M., & Farzanegan, M. R. (2018). "The sanction effect on Iran's economic growth: An empirical investigation". **Journal of Policy Modeling**, 40(2), 437-454. <https://doi.org/10.1002/jae.2947>
8. Rawski, T. (2001). **The economic and social consequences of China's reform**. In M. Oksenberg & L. Li (Eds.), *China's Changing Political Economy* (pp. 1-42). Cambridge University Press.
9. The World Bank. (2023). Iran Data. <https://data.worldbank.org/country/IR>
10. Xinhua News Agency. (2021, March 27). "China, Iran sign 25-year strategic cooperation agreement". <https://www.chinadaily.com.cn/a/202103/27/WS605ae1e9a310efa1bd55d4b2.html>
11. Zhao, Y., & Kelley, M. (2011). "The impact of Chinese FDI on the economic growth of host countries". **Asia Pacific Business Review**, 17(1), 1-21. <https://doi.org/10.1080/13602381.2010.501673>



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**The Role of Culture, Education, and Regulation in Shaping
Entrepreneurial Success**

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ABSTRACT

This paper presents a comprehensive examination of policies aimed at stimulating innovation and entrepreneurship by considering various factors, effects, and policy recommendations. Challenging the simplistic assumptions surrounding innovation as an exogenous entity driven solely by government funding, this study emphasizes the importance of understanding the microeconomic foundations of innovation and entrepreneurship. It highlights the critical role of cultural and psychological factors in influencing entrepreneurial behavior and calls for a multi-faceted policy approach that fosters a conducive environment for innovation. By addressing regulatory barriers, improving educational systems, and promoting positive cultural attitudes, this paper aims to provide actionable recommendations for policymakers.

Keywords: Innovation, Entrepreneurship, Economic Growth.

In the contemporary economic landscape, the focus on innovation systems has intensified, particularly in industrialized countries. Policymakers are increasingly recognizing that the simplistic view of innovation as an exogenous factor, solely stimulated by government funding for research and development (R&D), is inadequate (Friedman et al., 2019). This paper asserts that a deeper understanding of the causal mechanisms behind innovation is necessary to formulate effective policies.

Innovation is inherently a complex, multi-layered process that involves various stakeholders, each with complementary skills and motivations. Therefore, systems must encourage risk-taking and foster an environment where individuals are motivated to engage in innovative endeavors despite uncertainties (Braunerhjelm & Lappi, 2022).

2. LITERATURE REVIEW

a. Cultural Attitudes and Perceptions

Cultural and psychological factors significantly influence entrepreneurial behavior. Entrepreneurs often pursue business ventures to realize personal visions rather than solely for financial gain. Societies that encourage creative thinking and entrepreneurship foster an environment conducive to innovation. Conversely, cultures that prioritize conformity may stifle entrepreneurial initiatives (Anderson & Larson, 2022).

b. The Role of Social Norms

Social norms and values surrounding entrepreneurship play a crucial role in shaping individual attitudes towards starting a business. Societies that celebrate entrepreneurial success and reward risk-taking tend to have higher rates of entrepreneurship. For instance, countries with a strong cultural emphasis on innovation, such as the United States and Israel, consistently demonstrate higher entrepreneurial activity compared to those that promote conformity and stability (Friedman et al., 2019).

The impact of role models also cannot be understated. Successful entrepreneurs serve as inspirations for aspiring business owners, creating a ripple effect that encourages others to embark on their entrepreneurial journeys. When individuals see their peers achieving success through entrepreneurship, they are more likely to believe in their own potential for success (Braunerhjelm et al., 2020).

c. Psychological Factors

Psychological attributes such as self-efficacy, resilience, and risk tolerance are critical determinants of entrepreneurial intention and success. Individuals who possess a strong belief in their capabilities are more likely to engage in entrepreneurial activities. This self-efficacy is often bolstered by supportive social environments that recognize and reward entrepreneurial efforts (Heller-Sahlgren & Jordahl, 2023).

Additionally, the ability to navigate uncertainty and failure is essential for entrepreneurs. Many successful entrepreneurs have experienced multiple failures before achieving their goals. A culture that embraces failure as a learning opportunity can foster resilience and encourage individuals to take calculated risks (Henrekson & Johansson, 2010).

d. Quality of Education

The education system plays a pivotal role in shaping future entrepreneurs. High-quality education that fosters creativity and critical thinking is essential for nurturing entrepreneurial intentions. Studies show that cognitive skills significantly influence economic growth

10th International CEO Communication, Economics, Organization & Social Sciences Congress (Hanushek & Woessmann, 2015). Therefore, educational policies must prioritize entrepreneurship education to cultivate a culture of innovation from an early age (Heller-Sahlgren & Jordahl, 2023).

e. **Entrepreneurship Education**

Integrating entrepreneurship education into curricula at all educational levels is crucial for fostering entrepreneurial skills. Research indicates that programs designed to teach entrepreneurial thinking, problem-solving, and innovation can significantly impact students' intentions to pursue entrepreneurship (Galloway & Brown, 2002).

Moreover, experiential learning opportunities, such as internships and project-based learning, allow students to apply theoretical concepts in real-world contexts. These experiences help students build networks, gain practical skills, and develop a deeper understanding of the entrepreneurial process (Neck & Greene, 2011).

f. **Lifelong Learning and Skills Development**

The rapid pace of technological change necessitates continuous skills development. Policymakers should promote lifelong learning initiatives that encourage individuals to update their skills throughout their careers. Such initiatives can include vocational training programs, workshops, and online courses focused on emerging technologies and entrepreneurial skills (OECD, 2019).

g. **Regulatory Frameworks**

Regulatory environments significantly impact innovation and entrepreneurship. Policymakers must strike a balance between protecting consumers and fostering an environment conducive to business development. Overly restrictive regulations can stifle innovation, while well-designed regulations can promote competition and encourage entrepreneurial initiatives (Braunerhjelm & Lappi, 2022).

h. **Labor Market Regulations**

Labor market regulations can either facilitate or hinder entrepreneurship. Rigid labor laws that make it challenging to hire and fire employees can deter entrepreneurs from starting new ventures. Conversely, flexible labor markets that allow businesses to adapt quickly to changing market conditions can enhance entrepreneurial activity (Audretsch et al., 2002).

Countries with dynamic labor markets, such as the United States, tend to have higher rates of entrepreneurship compared to those with stringent labor regulations. Policymakers should consider reforming labor laws to create a more flexible environment that encourages entrepreneurial risk-taking.

i. **Product and Market Regulations**

Product market regulations play a crucial role in shaping the competitive landscape. Excessive regulations can create barriers to entry for new firms and discourage innovation. Therefore, policymakers should aim to reduce unnecessary regulatory burdens while ensuring that necessary consumer protections remain in place (Anderson et al., 2012).

Additionally, fostering a competitive environment through regulatory reforms can incentivize firms to innovate. This includes revising antitrust laws to prevent monopolistic practices and ensuring that small businesses have access to the same opportunities as larger firms.

2.10 Financial Support Mechanisms

Access to finance is a critical factor influencing entrepreneurship. New ventures often



10th International CEO Communication, Economics, Organization & Social Sciences Congress struggle to secure funding, which can impede their ability to innovate and grow. Policymakers must implement strategies to enhance access to financing for startups and small businesses (Gonzalez et al., 2019).

2.11. Venture Capital and Angel Investment

venture capital and angel investment is essential for fostering innovation. These funding sources provide startups with the capital needed to develop new products and technologies. Policymakers can create incentives for private investors to support early-stage ventures, such as tax breaks or matching grant programs (OECD, 2020).

2.12. Crowdfunding and Alternative Financing

The rise of crowdfunding platforms has revolutionized the way entrepreneurs secure funding. These platforms enable individuals to raise capital from a large pool of investors, reducing reliance on traditional financing sources. Policymakers should consider regulatory frameworks that support and promote crowdfunding as a viable financing option for startups (Boeuf et al., 2020).

e. EMPIRICAL LITERATURE REVIEW

a. Economic Growth and Job Creation

Robust innovation policies can drive economic growth and job creation, particularly in metropolitan areas where the conditions for entrepreneurship are more favorable. Urban centers provide diverse resources, markets, and networks that facilitate business growth (Anderson & Larson, 2022).

b. High-Growth Firms

High-growth firms, often referred to as "gazelles," play a crucial role in job creation. Research indicates that these firms contribute disproportionately to net job growth, especially during economic downturns (Henrekson & Johansson, 2010). Policymakers should focus on supporting these firms through targeted initiatives that enhance their growth potential.

3.3. The Ripple Effect on Local Economies

Innovation policies that promote entrepreneurship have a ripple effect on local economies. As new businesses emerge and thrive, they create additional job opportunities, stimulate consumer spending, and foster a culture of innovation within the community (Braunerhjelm et al., 2020). This interconnectedness underscores the importance of supporting entrepreneurship as a driver of economic vitality.

3.4. Challenges in Housing and Labor Markets

Despite the positive impacts of innovation policies, challenges in housing and labor markets can hinder entrepreneurship. The high cost of living in urban centers, exacerbated by rigid housing regulations, can deter potential entrepreneurs from establishing businesses (Braunerhjelm & Lappi, 2022).

3.5. Housing Affordability

The lack of affordable housing options in metropolitan areas poses a significant barrier to attracting talent and entrepreneurs. As housing costs rise, many skilled individuals may be



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3.6. Labor Market Mismatches

Labor market mismatches can also hinder entrepreneurship. As the demand for skilled workers grows, many industries face challenges in finding qualified candidates. This mismatch can stifle innovation as firms struggle to recruit the talent necessary for growth. Policymakers should invest in education and training programs that align with the needs of local industries to bridge this gap (Eklund & Larson, 2023).

f. Policy Recommendations

To stimulate innovation and entrepreneurship effectively, a comprehensive policy approach is essential. The following recommendations outline key areas for intervention:

4.1. Revise Tax Regimes

Implement tax structures that incentivize entrepreneurship, such as reduced capital gains taxes for startups and increased support for R&D expenditures. Policymakers should consider establishing tax credits for small businesses that invest in innovative technologies.

4.2. Enhance Education Systems

Integrate entrepreneurship education into curricula at all educational levels, promoting creativity and problem-solving skills. This includes fostering partnerships between educational institutions and local businesses to provide students with real-world experiences.

4.3. Foster Cultural Change

Encourage a societal shift towards valuing entrepreneurship through media campaigns and community initiatives that celebrate entrepreneurial successes. Highlighting local entrepreneurs and their contributions can inspire others to pursue their entrepreneurial dreams.

4.4. Improve Housing Market Conditions

Implement policies that promote housing affordability and mobility, such as tax incentives for relocating to urban centers and relaxed regulations on subletting. These measures can alleviate some of the burdens associated with high housing costs.

4.5. Encourage Labor Market Flexibility

Modify labor regulations to enhance flexibility and adaptability, enabling companies to respond quickly to market changes. This may involve revisiting employment protection laws to ensure they do not disproportionately burden startups and small businesses.

4.6. Support Innovation Ecosystems

Invest in infrastructure that facilitates collaboration between universities, research institutions, and businesses to foster innovation and knowledge transfer. Establishing innovation hubs or clusters can provide a supportive environment for startups and entrepreneurs.

4.7. Promote Financial Literacy

Enhance financial literacy programs to equip aspiring entrepreneurs with the skills necessary to navigate funding options effectively. Workshops and resources focused on financial



10th International CEO Communication, Economics, Organization & Social Sciences Congress management, investment strategies, and crowdfunding can empower individuals to seek the capital needed for their ventures.

4.8. Strengthen Intellectual Property Protections

Ensure robust intellectual property protections to encourage innovation. Policymakers should streamline the patent application process and provide resources to help entrepreneurs understand their rights and how to protect their inventions.

4.9. Encourage Public-Private Partnerships

Promote collaboration between the public and private sectors to leverage resources and expertise. Public-private partnerships can facilitate investment in research and development, infrastructure projects, and community initiatives that support entrepreneurship.

4.10. Monitor and Evaluate Policies

Establish mechanisms for monitoring and evaluating the effectiveness of innovation policies. Policymakers should regularly assess the impacts of interventions and adjust strategies based on evidence to ensure continuous improvement in fostering entrepreneurship.

g. CONCLUSION

Innovation and entrepreneurship are critical drivers of economic growth and societal advancement. By addressing the cultural, educational, and regulatory factors that influence entrepreneurial behavior, policymakers can create a more conducive environment for innovation. This paper advocates for a multi-faceted policy approach that not only stimulates entrepreneurship but also fosters a culture that values innovation as a vital component of economic success.

REFERENCES

1. Anderson, T., & Larson, M. (2022). "Economic Growth and Job Creation in Metropolitan Areas". **Journal of Urban Economics**, 45(3), 123-145.
2. Audretsch, D. B., et al. (2002). "The Role of Small Firms in Innovation". **Research Policy**, 31(7), 1047-1060.
3. Boeuf, T., et al. (2020). "Crowdfunding: A New Way for Entrepreneurs to Fund Their Ideas". **International Journal of Entrepreneurial Behavior & Research**, 26(4), 845-863.
4. Braunerhjelm, P., & Lappi, J. (2022). "The Impact of Regulatory Frameworks on Entrepreneurship in Sweden". **Scandinavian Journal of Economics**, 124(1), 121-145.
5. Eklund, J., & Larson, K. (2023). "Addressing Labor Market Mismatches in Sweden: Challenges and Opportunities". **Labour Economics**, 65(1), 123-139.
6. Friedman, J., et al. (2019). "Understanding Innovation: A Holistic Approach to Entrepreneurship". **Journal of Business Venturing**, 34(5), 1025-1040.
7. Galloway, L., & Brown, W. (2002). "Entrepreneurship Education at University: A Driver for Economic Growth". **International Journal of Entrepreneurship and Small Business**, 1(2), 140-151.
8. Gonzalez, M., et al. (2019). "Access to Finance and Entrepreneurship: Evidence from the European Union". **European Journal of Innovation Management**, 22(3), 456-474.
9. Hanushek, E. A., & Woessmann, L. (2015). **The Knowledge Capital of Nations: Education and the Economics of Growth**. MIT Press.
10. Heller-Sahlgren, G., & Jordahl, H. (2023). "The Effect of Educational Quality on Economic Growth: Evidence from International Comparisons". **Economics of Education Review**, 55(2), 88-104.
11. Henrekson, M., & Johansson, D. (2010). "Gazelles as Job Creators: A Survey of the Evidence". **Small Business Economics**, 35(2), 227-244.



10th International CEO Communication, Economics, Organization & Social Sciences Congress

12. Neck, H. M., & Greene, P. G. (2011). "Entrepreneurship Education: Known Worlds and New Frontiers". **Journal of Small Business Management**, 49(1), 55-70.
13. OECD. (2019). **Entrepreneurship at a Glance 2019**. OECD Publishing.
14. OECD. (2020). **Financing SMEs and Entrepreneurs 2020: An OECD Scoreboard**. OECD Publishing.



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Financial Ratio Analysis and Evaluation of PT Indo Tambangraya Megah Tbk to Measure Financial Performance for the Period of 2017-2023

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ABSTRACT

PT Indo Tambangraya Megah (ITM) was established in 1987 and became a publicly traded company in 2007 by listing 20% of its shares on the Indonesia Stock Exchange. By 2010, ITM was recognized as the fourth largest coal exporter in Indonesia. Currently, the company operates six mines, five ports, and two coal loading points. In 2021, ITM achieved impressive financial results, recording revenues of US\$ 2.1 billion and profits of US\$ 475 million, primarily from coal trading for both export and domestic markets. Despite experiencing a decline in financial performance during the COVID-19 pandemic in 2020, ITM rebounded strongly in 2021. This research aims to measure and analyze the company's financial performance by utilizing financial ratios from 2017 to 2023. Data for the analysis were sourced from public financial statements. The findings of this study are expected to enrich the existing financial literature and provide valuable insights for decision-makers focused on enhancing profitability and efficiency within the company.

Keywords: Financial performance, financial ratios, coal mining, PT Indo Tambangraya Megah Tbk

1. INTRODUCTION

Coal is an important energy source and plays a vital role in power generation. As minerals and natural resources are valuable assets that support the development of a country (Kotijah, 2012), the mining industry plays a pivotal role in the economic growth of a country and is a significant contributor to government revenues (Ramadhan, 2012). PT Indo Tambangraya Megah Tbk (ITMG) is one of the coal mining companies that has contributed to this growth. Established in 1987, the company became publicly traded in 2007 by listing 20% of its shares on the Indonesia Stock Exchange. Since then, ITMG has experienced rapid growth, and by 2010, it became one of the largest coal exporters in Indonesia, ranking fourth in national coal exports (Borsuk, 2014).

A thorough grasp of the business's financial performance is essential to evaluating the effectiveness of resource management and foreseeing current difficulties in the face of the coal market's shifting dynamics. Thus, the purpose of this study is to use financial ratio analysis to assess and evaluate ITMG's financial performance from 2017 to 2023. This study focuses on analyzing ITMG's financial performance from 2017 to 2023 using financial ratios, with the objective of providing useful recommendations for the company to improve profitability and operational efficiency in the future.

Looking at the profitability, the company experienced a decline in profit in 2019-2020, which impacted the sustainability of the company's operations. Without profit, the company would likely need to withdraw equity from external sources (Kasmir, 2016). As a result, a business may be deemed illiquid if it cannot fulfill its immediate obligations.

Furthermore, it will be more challenging for the business to fulfill its financial commitments if its solvency ratio rises (Risna, 2023). But once the COVID-19 pandemic's effects receded, the business started to bounce back from the drop in its financial ratios. This highlights the need for a performance analysis of ITMG, which will be useful for investors and shareholders in evaluating the company's performance (Mareta, 2022). In light of the above, conducting a financial performance analysis of ITMG from 2017 to 2023, focusing on profitability, liquidity, solvency, and activity ratios, is crucial.

2. LITERATURE REVIEW

The financial statements of a company provide essential indicators of its success in achieving profitability and long-term financial sustainability (Demmer, 2015). Analysts frequently utilize financial performance measurements as a crucial signal to assess a company's ability to increase its value (Katja, 2009). According to Benjalux (2006), performance metrics are essential for determining a company's economic value, which is necessary for making wise investment choices. Financial ratio analysis is the foundation of the methodology used in this investigation. The following sources and all financial ratio analysis formulas are used to evaluate a company's financial performance, according to Piper (2010):

2.1 Profitability Ratios

Profitability ratios are used to assess a company's capacity to turn a profit in relation to its sales, assets, and equity, claim Hanafi & Halim (2016). Because they represent the company's primary goal of attaining profitability, these statistics are crucial. Some essential formulas for profitability ratios are listed below:

- a) The Return on Assets (ROA) ratio calculates how well a business uses its resources to produce profits over a given time frame. Since a company's assets are primarily used to produce income and profits, return on assets (ROA) assists investors and management in determining how well the business is turning asset investments into earnings.

$$ROA = \frac{\text{Net income}}{\text{Total assets}}$$



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- b) Return On Equity (ROE), measures the company's ability to generate profits by showing how much profit is produced relative to the money invested by shareholders.

$$ROE = \frac{\text{Net income}}{\text{Shareholders' equity}}$$

- c) The percentage of sales income left over after subtracting the cost of goods sold (COGS) is known as the gross profit margin, or GPM. This ratio measures how efficiently a company utilizes its raw materials, labor, and production processes to generate profit, highlighting the effectiveness of its production efficiency and pricing strategy.

$$GPM = \frac{\text{Gross margin}}{\text{Net sales revenues}}$$

- d) The percentage of net income to total revenues is known as the net profit margin, or NPM. It shows the amount of profit a business makes from all of its sales after deducting all costs, taxes, and expenses. This ratio sheds light on the business's overall profitability and operational management effectiveness.

$$NPM = \frac{\text{Net income}}{\text{Net sales revenues}}$$

- e) In relation to the company's net income, the Dividend Payout Ratio (DPR) shows the percentage of earnings distributed to shareholders as dividends. It displays the portion of profits that are paid out as dividends to shareholders. This ratio is frequently used by investors to evaluate if the firm is giving shareholders a fair portion of its profits while striking a balance between rewarding shareholders and reinvesting in the company.

$$DPR = \frac{\text{Dividends}}{\text{Net income}}$$

2.2 Liquidity Ratios

Liquidity ratios measure a company's operational efficiency and ability to pay short-term obligations when they fall due (Hermanto & Agung, 2015). A high Quick Ratio suggests that the business is in a strong position to meet its short-term commitments, claim Chritianto & Firnanti (2019). It also suggests that the company is more capable of distributing dividends to investors, which in turn enhances investor confidence in its financial stability.

Some key formulas for liquidity ratios are:

- a) Current Ratio: This liquidity ratio evaluates a business's capacity to fulfill its long- and short-term commitments. It provides a measure of the company's overall financial health by contrasting its total current assets (liquid and illiquid) with its current liabilities.

$$\text{Current Ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

- b) Quick Ratio: This ratio evaluates how well a business can use its most liquid assets to pay off its short-term debt. Unlike the current ratio, which only considers assets that are easily convertible into cash, it does not include inventory or prepayments.

$$\text{Quick Ratio} = \frac{\text{Current assets} - \text{Inventory}}{\text{Current liabilities}}$$

- c) Days Cash on Hand: This ratio indicates how many days a business can use its cash on hand to pay for its operating costs. It calculates how long the business can continue to operate without generating new revenue. Ideally, a company should have at least 45 days of cash on hand or more.

$$\text{Days Cash} = \frac{\text{Cash}}{\text{Cash expenses: 365}}$$

2.3 Solvency Ratios

Leverage ratios, also known as solvency ratios, are used to evaluate how much of a company's assets are financed by debt. According to Kasmir (2016), these ratios assess a company's capacity to fulfill its short- and long-term commitments. The following are some typical solvency ratio formulas:

- a) **Financial Leverage Ratio:** This ratio assesses a company's capacity to meet its financial commitments by calculating the percentage of its capital that comes from debt. Usually, businesses finance their operations with a mix of debt and equity.

$$\text{Financial Leverage Ratio} = \frac{\text{Assets}}{\text{Shareholders' equity}}$$

- b) **Debt to Equity Ratio (DER):** This ratio divides a company's total liabilities by shareholders' equity to determine how leveraged it is financially. In relation to its equity base, it shows how much of a company's operations are financed by debt.

$$\text{DER} = \frac{\text{Total Liabilities}}{\text{Shareholders' equity}}$$

- c) **Ratio of Debt to Assets (DAR):** The overall liabilities of the business are divided by the total assets to arrive at this ratio. It shows the percentage of the business's assets that are funded by debt.

$$\text{DAR} = \frac{\text{Total Liabilities}}{\text{Total assets}}$$

2.4 Activity Ratios

Activity ratios evaluate a company's resource utilization efficiency. These ratios assess the company's capacity to use its assets effectively and gauge how well assets are used to generate income. Some key formulas for activity ratios are:

- a) **Asset Turnover Ratio:** This ratio evaluates the worth of a company's assets in relation to its sales or revenue. It gauges how well a business makes use of its resources to produce income. Comparing the ratios of businesses in the same industry is the best course of action because asset turnover ratios can vary throughout industries.

$$\text{Asset Turnover} = \frac{\text{Sales revenues}}{\text{Total assets}}$$

- b) **Equity Turnover:** This ratio contrasts the sales and equity of a business. It is used to evaluate how well the management of the business uses equity to produce sales income.

$$\text{Equity Turnover} = \frac{\text{Sales revenues}}{\text{Shareholders' equity}}$$

- c) **Inventory Turnover:** This ratio displays the frequency of sales and replacements of a company's inventory over a given time frame. The average number of days it takes to sell the available inventory can be calculated by dividing the number of days in the period by the inventory turnover.

$$\text{Inventory Turnover} = \frac{\text{Cash of sales}}{\text{Inventory}}$$

3. RESEARCH METHOD

This study's data collection approach is documentation, which entails gathering a variety of written documents, including financial reports from PT Indo Tambangraya Megah Tbk, which are accessible on www.idx.co.id. Using secondary data collected from coal mining businesses listed on the IDX, this study takes a quantitative approach. ITMG, a publicly traded coal mining firm in Indonesia, is the specific sample used in this study.

The research first compares ITMG's financial performance from year to year through ratio analysis. Financial ratios are then used to evaluate the company's financial performance, as they have become essential tools, indicators, and standard for assessing company performance (Barnes, 1987).

The sample examined consists of seven years of ITMG's financial reports (from 2017 to 2023). These annual financial reports are then calculated and analyzed with respect to the characteristics of the trend movement in the graphs each year and interpreted. Finally, at the end of the study, conclusions and recommendations will be provided.

4. RESULT AND DISCUSSION

Table 4.1 shows financial ratios for PT Indo Tambangraya Megah Tbk for the period from 2017 to 2023.

Tabel 4.1

Financial Ratios of PT Indo Tambangraya Megah Tbk for the period 2017-2023

Profitability Ratios	2017	2018	2019	2020	2021	2022	2023
Return On Asset ROA (%)	18,60	17,94	10,46	3,26	28,53	45,43	22,84
Return On Equity ROE (%)	26,37	26,68	14,30	4,47	39,56	61,50	27,93
Gross Profit Margin GPM (%)	29,92	29,09	19,04	16,80	44,13	52,10	31,27
Net Profit Margin NPM (%)	14,96	12,89	7,37	3,19	22,89	32,98	21,04
Dividen Payout (%)	78,77	96,37	169,20	171,22	22,45	44,89	134,90
Liquidity Ratios	2017	2018	2019	2020	2021	2022	2023
Current Ratio (%)	2,15	1,96	2,01	1,98	2,71	3,26	4,35
Quick Ratio (%)	1,82	1,68	1,57	1,69	2,54	3,09	4,02
Days Cash (days)	108,01	88,08	36,11	83,44	211,12	147,35	126,43
Solvency Ratios	2017	2018	2019	2020	2021	2022	2023
Financial Leverage Rasio (Times)	1,42	1,49	1,37	1,37	1,39	1,35	1,22
Debt to Equity Ratio DER (%)	41,80	48,77	36,70	36,91	38,67	35,37	22,33
Debt to Asset Ratio DAR (%)	29,48	32,78	26,85	26,96	27,89	26,13	18,25
Aktivity Ratios	2017	2018	2019	2020	2021	2022	2023
Asset Turn Over (Times)	1,24	1,39	1,42	1,02	1,25	1,38	1,09
Equity Turn Over (Times)	1,76	2,07	1,94	1,40	1,73	1,86	1,33
Inventory Turn Over (Times)	10,90	13,20	13,54	16,38	18,58	18,13	16,66

Source : Secondary Data Processed, 2024

4.1. Profitability Ratio Analysis

4.1.1. Return on Assets (ROA)

ROA assesses how effectively a business generates profits from its assets.

- 2017 - 2019: ITMG's ROA showed a significant decline from 18.60% in 2017 to just 3.26% in 2020. This decline may be related to several external factors, such as falling coal commodity prices, rising operational costs, or the impact of the COVID-19 pandemic in 2020, which reduced operational efficiency.
- 2020 - 2021: A sharp increase in ROA occurred from 3.26% in 2020 to 28.53% in 2021. This rise could be attributed to the post-pandemic market recovery, higher coal prices, or improvements in the company's operational efficiency.
- 2022 - 2023: Although ROA declined from 45.43% in 2022 to 22.84% in 2023, both figures are still very high, reflects the company's success in utilizing its assets to produce profits efficiently.
- The significant increase in ROA in 2021 and 2022 indicates that ITMG was able to optimize its assets very effectively. The decline in 2023 could reflect challenges in the market or an increase in capital expenditure for expansion or new project development.

4.1.2. Return on Equity (ROE)

ROE shows how well a business makes money for its investors in proportion to their equity investment.

- **2017 - 2019:** ROE showed a significant decline, from 26.37% in 2017 to 4.47% in 2020. This decline likely reflects a decrease in net profit during this period, most likely due to falling coal prices and the impact of the pandemic on the company's operations.
- **2020 - 2021:** ROE sharply increased from 4.47% in 2020 to 39.56% in 2021. This rise could be attributed to increased net profit as a result of the economic recovery and rising coal prices.
- **2022 - 2023:** Although there was a decline from 61.50% in 2022 to 27.93% in 2023, the company's ROE remains strong, indicating that despite the decline in profits, ITMG is still efficient in delivering significant returns to its shareholders.
- The high ROE in 2021 and 2022 indicates excellent performance in managing equity and generating profit. The decline in 2023 may be related to decreased profits or increased capital used by the company.

4.1.3. Gross Profit Margin (GPM)

GPM assess the company is able to produce gross profit after subtracting direct production costs from revenue.

- 2017 - 2019: GPM declined from 29.92% in 2017 to 16.80% in 2020. This decline may reflect rising production costs or falling coal prices in the global market during this period.
- 2020 - 2021: GPM surged sharply from 16.80% in 2020 to 44.13% in 2021, indicating that the company successfully controlled production costs and/or experienced a significant increase in coal prices during this period.
- 2022 - 2023: GPM continued to increase to 52.10% in 2022 before slightly declining to 31.27% in 2023. This increase reflects better cost control or higher selling prices.
- The significant improvement in GPM in 2021 and 2022 shows that ITMG was very effective in managing production costs and benefiting from rising coal prices. The decline in 2023 might indicate cost pressures or a decrease in selling prices.

4.1.4. Net Profit Margin (NPM)

NPM calculates the proportion of net profit to total revenue produced by the business.

- 2017 - 2019: NPM decreased from 14.96% in 2017 to 3.19% in 2020. This decline is most likely related to the decrease in profit due to falling coal prices and the impact of the COVID-19 pandemic on the company's operations.
- 2020 - 2021: NPM surged from 3.19% in 2020 to 22.89% in 2021. This indicates a significant recovery, likely driven by the recovery in coal prices and better cost control.
- 2022 - 2023: NPM increased to 32.98% in 2022, before dropping to 21.04% in 2023. Despite the decline, the NPM still shows strong performance, reflecting effective cost control and high revenue.
- The very high NPM in 2021 and 2022 suggests that ITMG successfully managed operational costs and improved its net profit margin, especially during the post-pandemic economic recovery period. The decrease in 2023 may be related to increased costs or fluctuations in coal prices.

4.1.5. Dividend Payout Ratio

These ratios demonstrate the portion of net profit given to shareholders as dividends.

- **2017 - 2019:** ITMG had a very high dividend payout ratio, reaching 78.77% in 2017 and even increasing drastically to 169.20% in 2019. A figure over 100% indicates that the company may have paid out more dividends than its earnings, possibly using reserves or debt.
- **2020 - 2021:** In 2020, the dividend payout ratio surged to a very high level (171.22%), even though the company's net profit may have been under pressure. In 2021, the ratio decreased significantly to 22.45%, reflecting a conservative dividend policy during market uncertainty.
- **2022 - 2023:** In 2022 and 2023, the dividend ratio increased again to 44.89% and 134.90%, indicating that the company began to distribute a larger portion of its profits to shareholders after the period of conservatism.
- The very high dividend payout ratios in 2019 and 2020 demonstrate the company's commitment to providing substantial returns to shareholders despite declining profits. However, the lower dividend ratio in 2021 reflects a cautious approach to maintaining the company's liquidity during a period of uncertainty.

4.2. Liquidity Ratio Analysis

4.2.1. Current Ratio

- 2017-2020: The current ratio stayed above 1.9, demonstrating strong liquidity and the capacity to meet short-term obligations.
- 2021-2023: There was a significant increase, reaching 2.71 in 2021 and continuing to rise to 4.35 in 2023. This implies that the business has enough liquid assets to pay for its immediate liabilities.
- Although the trend shows very good liquidity, the sharp increase between 2021-2023 could suggest that the company is relying more on current assets that have not been fully utilized. Ideally, a ratio around 2 already indicates healthy liquidity, but a much higher figure could indicate that the company has idle cash reserves that are not being productively used.

4.2.2. Quick Ratio

Because it primarily considers liquid assets that can be swiftly turned into cash, such as cash and receivables, these ratios offer a more cautious evaluation.

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- 2017-2020: The Quick Ratio remained stable between 1.57 and 1.82, meaning the company could cover its short-term obligations without relying on inventory.
- 2021-2023: The Quick Ratio sharply increased, reaching 2.54 in 2021 and 4.02 in 2023. This indicates that the company is highly liquid and can cover its short-term liabilities with highly liquid assets (cash and receivables).
- While the rapid increase suggests strong liquidity, such high ratios may also indicate that the company is holding excessive cash and cash equivalents, which could potentially be underutilized or not optimally invested.

4.2.3. Days Cash

Days Cash measures how long the company can sustain its operations using the cash it holds to cover operational obligations.

- 2017-2019: The Days Cash figure remained stable, with 108 days in 2017, dropping significantly to 36 days in 2019, and then recovering to 83 days in 2020.
- 2021-2023: Despite a decline from 211 days in 2021 to 126 days in 2023, the figure remains quite high, indicating that the company can sustain itself for a longer period using its cash reserves.
- The decrease in Days Cash in 2023 from 211 days (in 2021) suggests that the company may have become more active in investing its cash in projects or other operations. However, despite this drop, the still-high value indicates that the company has sufficient cash reserves.

4.3. Solvency Ratio Analysis

4.3.1. Financial Leverage Ratio (FLR)

These ratios evaluate the percentage of a company's assets that are financed by debt as opposed to equity.

- 2017-2023: The FLR shows slight fluctuations, with figures ranging from 1.22 to 1.49. The highest occurred in 2018 (1.49), while the lowest was recorded in 2023 (1.22). Generally, an FLR above 1 indicates that the company is using more debt than equity to finance its operations.
- The company's decreased reliance on debt in 2023 is indicated by the decline in FLR, which may reflect more prudent debt management or an increase in equity. This might be viewed as a step in the right direction to lower financial risk.

4.3.2. Debt to Equity Ratio (DER)

These ratios provide information about a company's financial structure by showing the percentage of debt to equity.

- 2017-2020: The DER remained stable at around 36%-48%, indicating that the company used a moderate amount of debt to finance its operations and expansion.
- 2021-2023: In 2023, the DER decreased to 22.33%, reflecting a significant reduction in debt dependence. This is a sharp decrease compared to 2017 (41.80%) and even compared to previous years.
- The sharp drop in DER in 2023 indicates a reduction in debt load, improving the company's capital structure and reducing financial risk.

4.3.3. Debt to Asset Ratio (DAR)

These ratios display the percentage of the business's total assets that are funded by debt.

- 2017-2022: The DAR remained relatively stable, ranging from 26% to 33%, indicating that about a quarter to a third of the company's total assets were financed by debt.

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- 2023: The DAR decreased to 18.25%, showing a reduced reliance on debt to finance the company's assets. This reduction indicates that more assets are being financed by equity, which lowers the company's risk related to external financing.
- The decline in DAR in 2023 signifies that ITMG has increasingly reduced its use of debt in asset financing, strengthening its financial position and reducing solvency risk.

4.4. Activity Ratio Analysis

4.4.1. Asset Turnover

The effectiveness with which a business uses its assets to produce income is gauged by asset turnover.

- 2017-2019: This ratio shows relatively stable and slightly increasing figures, from 1.24 in 2017 to 1.42 in 2019. This suggests that the business improved the way it used its resources to produce income.
- 2020: A sharp decline to 1.02 indicates a drop in asset efficiency, likely due to the impact of the COVID-19 pandemic, which disrupted operations and caused a decline in sales.
- 2021-2023: The ratio recovered to around 1.25 in 2021 and 1.38 in 2022, although it slightly decreased in 2023 to 1.09.
- The decline in 2020 was caused by external disruptions (the pandemic), but the subsequent recovery indicates that ITMG was able to optimize its asset utilization again, despite a slight drop in 2023. The average ratio of 1.26 shows that the company is fairly efficient in using its assets to generate revenue, even though there was a slight decline in the final year.

4.4.2. Equity Turnover

Equity Turnover gauges how well a business makes money off of its equity.

- 2017-2019: This ratio remained relatively stable and increased, from 1.76 in 2017 to 2.07 in 2018, then slightly decreased to 1.94 in 2019.
- 2020: A sharp decline to 1.40 indicates the impact of the pandemic on the efficiency of the company's use of equity.
- 2021-2023: Despite some recovery, this ratio continued to decrease to 1.73 in 2021, 1.86 in 2022, and 1.33 in 2023. The decline in 2023 may indicate that, although the company used more equity, the revenue generated was not proportional to the increase in equity.
- Despite an increase in equity utilization, the decline in 2023 raises the possibility that the business may have had trouble making enough money from its stock. This could reflect inefficient investments or external factors hindering profitability.

4.4.3. Inventory Turnover

Inventory turnover gauges how well a business sells and manages its stock over a given time frame.

- 2017-2023: This ratio showed steady increases over the period, from 10.90 in 2017 to 16.66 in 2023. The peak occurred in 2021 (18.58), indicating very efficient inventory management during that year.
- The increase in Inventory Turnover indicates that the company has become more efficient in managing and selling its inventory, reducing waste, and ensuring faster turnover of goods. The small decline in 2023 (16.66) may reflect changes in market dynamics or inventory strategy, but it still indicates excellent management.

5.1. Conclusion

1. ITMG experienced significant fluctuations in profitability, with a strong recovery in 2021 and 2022 after a decline in 2020 due to the pandemic. This recovery was marked by a sharp increase in key profitability ratios like Return on Assets (ROA) and Return on Equity (ROE), highlighting the company's capacity to bounce back and capitalize on market conditions post-pandemic.
2. The company's liquidity has been consistently strong, evidenced by significant improvements in both the current ratio and quick ratio. From 2021 onward, these ratios have steadily increased, signaling ITMG's robust ability to meet short-term financial obligations without liquidity concerns.
3. ITMG's solvency has improved significantly since 2020, as indicated by a decrease in its debt-to-equity ratio (DER) and debt-to-asset ratio (DAR). These reductions in debt reliance reflect the company's commitment to reducing financial risk and building a more sustainable capital structure, particularly from 2021 onwards.
4. The Company's efficiency in managing inventory has improved consistently, as seen in the rising inventory turnover ratios from 2017 to 2022. However, the efficiency in utilizing assets and equity, as reflected in the asset and equity turnover ratios, has slightly declined in 2023, suggesting a need for renewed focus on optimizing asset use for higher returns. The decline in asset and equity turnover began in 2023, signaling a potential area for managerial attention.

5.2. Recommendations:

1. Improve Asset Efficiency: Focus on optimizing asset utilization to improve Asset Turnover, given the decline observed in 2023.
2. Maintain Conservative Debt Management: Continue reducing dependence on debt to maintain a healthier capital structure, as reflected in the lower DER and DAR ratios.
3. Balanced Dividend Strategy: Maintain a conservative dividend policy to safeguard cash reserves and liquidity, while still providing a reasonable return to shareholders.
4. Optimize Inventory Management: Although Inventory Turnover is strong, it is important to monitor and optimize inventory management to ensure efficiency and avoid risks of overstocking or stockouts.

By focusing on these areas, the company can improve overall financial performance, reduce risks, and enhance its competitive position in the market.

REFERENCES

- Kotijah, Siti. (2012). Pengaturan Hukum Pengelolaan Pertambangan Batubara Secara Berkelanjutan di Kota Samarinda. *Yuridika*, 27(1), 47–60. Google Scholar.
- Piper, Mike. (2010). Accounting Made Simple. Accounting Explained in 100 Pages or Less. Illinois.
- Ramadhan, D. I. (2019). The highest state revenue from mining is claimed, how much is that. Finance. Detik.Com. Google Scholar.
- Borsuk, R. (2014). Liem Sioe Liong's Salim Group: The Business Pillar of Suharto's Indonesia. Institute of Southeast Asian Studies, Singapore.
- Risna. (2023). Analisis Kinerja Keuangan Sektor Pertambangan Sebelum Dan Masa Pandemi Covid-19. *Optimal*, Vol.20, 58–75.
- www.idx.co.id
- <https://www.itmg.co.id/en/investor/company-information/annual-report>
- <https://britama.com/index.php/laporan-keuangan-emiten-tahun-2023/>
- <https://britama.com/index.php/laporan-keuangan-emiten-tahun-2022/>
- <https://itmg.co.id/id/investor/company-information/annual-report>
- Mareta, V. (2022). Implementasi Sustainable Development Goals (SDGs) pada Perusahaan Pertambangan di Jakarta Islamic Index (JII). *Repository IAIN Kudus*, 17, 43.



- 10th International CEO Communication, Economics, Organization & Social Sciences Congress**
- Kasmir. (2016). Pengantar manajemen keuangan. Kencana.
- Demmer, M. (2015). Improving profitability forecasts with information on Earning Quality. School of Business and Economics. Discussion paper.
- Katja, L. (2009). Assessing the resource usage decisions and financial performance in Finnish sawmills within the resource-based view framework. Faculty of Forest Sciences, University of Joensuu, Finland.
- Benjalux, S. J. (2006). An Empirical Study into Factors Influencing the use of value-Based Management Tools. PhD, Thesis, Southern Cross University.
- Hermanto, B., & Agung, M. (2015). Analisis Laporan keuangan. Jakarta: Lentera Ilmu Cendekia.
- Chritianto, H. Y., & Firnanti, F. (2019). Faktor-faktor yang Mempengaruhi Return Saham. *Jurnal Bisnis Dan Akuntansi*, 21(1a-1), 27–38.
- Barnes, P. (1987). The Analysis and Use of Financial Ratios: A Review Article. *Journal of Business Finance and Accounting*, 14 (4).
- Hanafi, M. M., & Halim, A. (2016). Analisis laporan keuangan. UPP STIM YKPN.



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**İnsan Kaynakları Politikalarının Organizasyon Kültürü ve Üretkenlik
Üzerindeki Etkisi (Azerbaycan örneğinde)**

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ÖZET

Bu çalışma, insan kaynakları (İK) politikalarının organizasyon kültürü ve üretkenlik üzerindeki etkilerini, aynı zamanda İK politikaları hakkında, kamu ve özel sektör arasındaki farklılıkları ortaya çıkarmak amacıyla Azerbaycan ve dünya çapındaki örnekler eşliğinde incelemektedir. İK politikaları çalışanlarının bağlılığı, motivasyonu ve verimliliği üzerinde doğrudan etkili olmaktadır. Kamu sektörü, statik bir kültürde ve özel sektörde olduğu gibi girişimcilik ve inovasyona izin vermeyen tüm tarafların gelişme sürecinde yer aldığı bir hiyerarşi ile karakterize edilir. Verimlilik ve yüksek performans ölçümü bakımından kültür belirsizdir. Özel sektör, verimliliği içsel olarak büyüklendiren ve üretkenliği ve inovasyonu her şeyin üzerinde yerleşen performansa dayalı bir sistem benimsemiştir. Azerbaycan'ın sosyal politikası analizine göre, özel sektör, dünya çapındaki yeni İK uygulamalarına doğru yeni yönleri benimsemeye başlayan yerel uygulamaları sergilemektedir. Özellikle, esnek çalışma saatleri sistemleri, performans değerlendirme sistemlerine dayalı ödüllendirme politikaları ve diğer uygulamalar yaygınlaşmaktadır. Özel sektördeki bu yaklaşımlar, çalışan bağlılığı ve verimi artırmaktadır. Kamu sektöründe, iş güvenliği açısından İK politikaları oldukça belirgindir, ancak verimliliğe ve iş inovasyonuna dair diğer alanlarda geri kalmaktadır.

Araştırmada kullanılan istatistikler bu nedenle Azerbaycan'da kamu ve özel sektör İK uygulamalarının üretkenlik ve çalışan katılımı üzerindeki etkisini karşılaştırmak için hem ulusal, hem de uluslararası verilerle desteklenmiştir. Çalışan devir oranları, işgücü üretkenliği ve gönüllü çalışan kaybı gibi özel sektör metrikleri, performansa dayalı özel sektör İK stratejilerinin etkili olduğunu ancak daha fazla personel değişikliği görüleceğini göstermiştir. Kamu sektöründe, durgun İK politikaları nedeniyle düşük kayıp oranlarına rağmen üretkenlik sınırlıdır. Bu sonuçlara dayanarak, Azerbaycan'da kamu sektörü için daha esnek İK politikalarına geçiş yapılması ve özel sektör için çalışan katılımını sürdürmek amacıyla mentorluk ve kariyer geliştirme programlarının geliştirilmesi önerilmektedir. Bu nedenle araştırma, mevcut küresel eğilimlere dayalı olarak Azerbaycan'da İK politikası geliştirme ve gelecekteki araştırmalar için bir temel sunmaktadır.

Anahtar Kelimeler: İnsan Kaynakları politikaları, organizasyon kültürü, üretkenlik, kamu ve özel sektör karşılaştırması, Azerbaycan İnsan Kaynakları uygulamaları

The Impact of Human Resources Policies on Organizational Culture and Productivity (Azerbaijan Example)

ABSTRACT

This study examines the effects of human resources (HR) policies on organizational culture and productivity, as well as the differences between the public and private sectors regarding HR policies, with examples from Azerbaijan and around the world. HR policies have a direct impact on employee commitment, motivation, and productivity. The public sector is characterized by a static culture and a hierarchy where all parties are involved in the development process, which does not allow for entrepreneurship and innovation, as in the private sector. The culture is unclear in terms of productivity and high performance measurement. The private sector has adopted a performance-based system that internally maximizes productivity and places productivity and innovation above



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all else. According to the analysis of Azerbaijan's social policy, the private sector exhibits local practices that are beginning to adopt new directions towards new HR practices around the world. In particular, flexible working hours systems, reward policies based on performance evaluation systems, and other practices are becoming widespread. These approaches in the private sector increase employee commitment and productivity. In the public sector, HR policies are quite prominent in terms of job security, but lag behind in other areas of productivity and business innovation.

The statistics used in the research have therefore been supported by both national and international data to compare the impact of public and private sector HR practices in Azerbaijan on productivity and employee engagement. Private sector metrics, such as employee turnover rates, labor productivity, and voluntary employee attrition have shown that private sector HR strategies based on performance either have been efficient however, will more personnel changes be seen. In the public sector, productivity is limited despite the low attrition rates due to stagnant HR policies. Based on these results, it is recommended that a transition to more flexible HR policies be made for the public sector in Azerbaijan and that mentorship and career development programs be developed for the private sector to maintain employee engagement. The research, therefore, provides a basis for HR policy development and future research in Azerbaijan based on its current global trends.

Keywords: Human Resources policies, organizational culture, productivity, public and private sector comparison, Azerbaijan Human Resources practices.

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İnsan kaynakları (İK) politikaları, kuruluşun çalışan ilişkilerini, işe alım süreçlerini, eğitim ve gelişim fırsatlarını, performans değerlendirme sistemlerini ve çalışan motivasyonunu etkileyen bir dizi kuraldır. Bu politikalar örgüt kültürünün temel unsurlarından biri olarak kabul edilmektedir. Örgüt kültürü ise bir şirketin kimliğini, iş yapma şeklini, değerlerini ve çalışanların bu değerlere nasıl uyum sağladığını belirler. Son yıllarda İK politikalarının sadece çalışan memnuniyeti üzerinde değil, örgütsel verimlilik ve performans üzerinde de önemli bir etkisi olduğu gösterilmiştir.

Personel politikasının örgüt kültürü ve üretkenlik üzerindeki etkisi Azerbaycan'da ve dünyada önemli bir araştırma alanı haline gelmiştir. Küresel düzeyde iş gücü verimliliği, dijitalleşme ve esnek çalışma modelleri gibi eğilimler İK uygulamalarında köklü değişikliklere yol açmıştır. Özellikle kamu-özel sektör farklılıkları örgüt kültürü ve üretkenlik üzerindeki etkileri açısından dikkat çekmiştir. Bu çalışma Azerbaycan'ın kamu ve özel sektöründeki personel politikasını incelemekte ve bunu dünya üzerinden örneklerle karşılaştırmaktadır.

ANA KISIM:

İnsan Kaynakları Yönetimi ve Organizasyon Kültürü

İnsan kaynakları yönetimi, işletmenin en önemli ve gerekli varlığı olan çalışanları yönetme ve geliştirme sürecidir. İyi bir İK politikası, çalışanları motive ederek şirketin hedeflerine ulaşılmasına katkıda bulunur. Literatürde personel politikasının örgüt kültürünü doğrudan etkilediği ileri sürülmektedir. Örneğin, çalışanların adil, aynı zamanda ölçülebilir bir performans değerlendirme sistemi ile değerlendirildiği ve ödüllendirildiği bir iş ortamında, bağlılık ve verimlilik artar.

Organizasyon kültürü, bir işletmenin değerlerini, inançlarını, disiplinlerini ve normlarını ifade eder. İK yönetimi ile organizasyon kültürü arasındaki bu güçlü bağlantı, çalışan davranışlarını şekillendirmekte ve işletmenin rekabet gücünü artırmakla kârını yükseltmektedir. Schein (2010) tarafından yapılan çalışmalara göre organizasyon kültürü üç katmanlıdır: artefaktlar (gözle görülebilir unsurlar), değerler (resmi olarak ifade edilen kurallar) ve varsayımlar (temel inançlar) (Schein, 2010:203). Görünen kısım ofis düzenleri, semboller, ritüeller ve sloganlar içerirken, görünmeyen kısım bütünleşik değerler ve hatta daha derin temel varsayımlar ve derin inançlar içerir. Personel politikası bu 3 katmanı etkileyerek kültürün oluşmasına katkıda bulunur.

Trice ve Beyer'in kitaplarında kültürel formlar olarak gösterdikleri dış katman unsurları, çalışanların organizasyon içinde gelişen günlük olayları kendilerine göre tercüme etmelerine ve anlamalarına yardımcı oluyor.

Üretkenlik Kavramı ve Ölçütleri

Üretkenlik, bir kuruluşun kaynaklarını en verimli şekilde kullanarak ürettiği çıktılarının toplamı olarak bilinir. Üretkenlik, çalışanların bireysel performansından şirketin genel performansına kadar çeşitli konularda değerlendirilir. İş gücü verimliliği, çalışan bağlılığı, işe devamsızlık oranları ve çalışan devir hızı gibi ölçümler, insan kaynakları politikalarının verimliliğe olan etkilerini daha açık ve net bir şekilde anlaşılmanı sağlamak için kullanılır. Örneğin, bir organizasyonda çalışan devir hızı yüksek olduğunda, üretkenlik de düşük olacaktır. Bu nedenle, uzun vadede üretkenlik, personel bağlılığını ve motivasyonunu artıran insan kaynakları politikaları tarafından olumlu şekilde etkilenir. Bağlılık ve verimlilik gibi kavramlar, özel ve kamu sektörü arasında farklılık gösterir, bu nedenle her iki sektörde de verimlilik analizleri yapılması gerekir (Cameron ve Quinn, 2011).

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Kamu ve Özel Sektör İK Politikalarının Karşılaştırılması

Kamu ve özel sektör, insan kaynakları yönetiminde önemli bir farklılık gösterir. Kamu sektöründe insan kaynakları politikaları daha çok bürokratik bir yapıya sahiptir. Bu nedenle, örgüt kültürü daha geleneksel ve hiyerarşik bir yapıya sahiptir. Kamu kuruluşlarında iş güvenliği, çalışanların davranışlarını kısıtlayan belirli standartlara bağlıdır. Örneğin, Azerbaycan'da kamu sektöründe çalışanlar arasında yüksek bir iş güvenliği algısı vardır. Bu algının bir sonucu olarak, kamu kurumlarının organizasyon kültürü daha statik ve yeniliğe daha az açıktır (Öztürk ve Dündar, 2013).

Özel sektörde ise insan kaynakları politikaları genellikle daha esnek ve yenilikçi uygulamalara izin verir. Performansa dayalı bir kültür, rekabetin yoğun olduğu piyasalarda özel sektör işletmeleri tarafından benimsenir. Özel sektörde performans değerlendirme sistemleri, eğitim ve gelişim fırsatları, ödüller ve teşvikler daha yaygındır. Bu nedenle, şirket kültürü yenilikçiliğe ve hızlı değişime daha açıktır. Örneğin, dünya çapında çok sayıda özel sektör şirketleri, esnek çalışma saatleri, uzaktan çalışma ve açık iletişimi destekleyen politikalar uygulayarak çalışanlarına daha fazla bağlılık sağladı. Google ve Microsoft gibi şirketler, bu tür insan kaynakları politikalarını kullanarak şirket içi inovasyonu ve çalışanların birbirlerine daha fazla bağlılık duymalarını geliştirmiştir.

AZERBAYCAN VE DÜNYA ÖRNEKLERİ

Azerbaycan'daki İK Politikaları

Kamu Sektörü

Azerbaycan kamu sektöründe insan kaynakları politikaları daha geleneksel ve bürokrattiktir. Performans değerlendirme sistemleri genellikle standart prosedürlere dayanmaktadır ve çalışanların iş güvenliği önceliklidir. Bu durum, çalışan bağlılığı açısından istikrar sağlasa da esneklik ve yenilikçilik açısından sınırlıdır.

- **Örnek:** Azerbaycan'daki bazı devlet kurumlarında (örneğin, Eğitim Bakanlığı), çalışan performansını iyileştirmek için yeni bir girişim olarak mesleki gelişim programları başlatıldı. Ancak, bu programlar hala sınırlıdır ve daha çok teknik becerilere odaklanmaktadır.

Özel Sektör

İkinci olarak, Azerbaycan özel sektörü, insan kaynakları politikalarını küresel trendlere uyarılama konusunda daha hızlı ilerlemektedir. Yerel işletmeler, büyük uluslararası şirketler tarafından Azerbaycan'daki faaliyetleri nedeniyle çağdaş insan kaynakları politikaları açısından ilham almıştır.

- **Örnek:** BP gibi uluslararası şirketler, Azerbaycan'daki çalışanlarına performansa dayalı ödüllendirme sistemleri, esnek çalışma saatleri ve uzaktan çalışma fırsatları sunmaktadır. Bu şirketler, çalışanlarına daha fazla bağlılık sağlamak için eğitim ve mentorluk programları sunmaktadır.
- **Yerel Örnek:** AzerGold gibi özel sektörde faaliyet gösteren Azerbaycan şirketleri, çalışanların memnuniyetini ölçmek ve yeni politikalar oluşturmak için düzenli olarak çalışan memnuniyeti anketleri yapmaktadır.

Dünya Genelinde İK Politikaları ve Uygulamaları

ABD: İnovasyon ve Esneklik

Amerika Birleşik Devletleri'ndeki şirketler, çalışanların üretkenliğini ve bağlılığını artırmak için yenilikçi insan kaynakları politikaları benimsemektedir. Özellikle teknoloji sektöründe, çalışanların yaratıcılığı ve özgürlüğüne izin veren esnek iş modelleri öne çıkmaktadır.

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- **Örnek:** Google, çalışanlarına "20% Proje" adlı bir fırsat vererek zamanlarının %20'sini seçtikleri projelerde harcamalarına izin verir. Bu tür uygulamalar, şirketin yaratıcı bir kültür oluşturmaya yardımcı oldu ve çalışanlar daha fazla memnun oldu.
- **Ödüllendirme:** Amazon'daki çalışanlar, dinamik bir mekanizma kullanılarak performanslarına göre rutin olarak ödüllendirilir. Şirketin artan üretkenliği bu stratejiden olumlu yönde etkilenir.

Avrupa: Çeşitlilik ve Kapsayıcılık

Avrupa'daki İK düzenlemeleri kapsayıcılığı ve çeşitliliği teşvik etmeye odaklıdır. Çalışan katılımını artırmanın yanı sıra, bu, organizasyonun kültürünü de genişletir.

- **Örnek:** İsveç ve Norveç gibi ülkelerdeki işletmeler ebeveyn iznini artırarak hem erkek hem de kadın çalışanlar için sağlıklı bir iş-yaşam dengesi teşvik ediyor. Bu tür teknikler çalışanların elde tutulmasını artırarak üretkenliği yükseltmiştir.
- **Yerel Yönetim:** Almanya'da kamu sektörünün dijitalleştirilmesine yönelik projelere özel önem veriliyor ve çalışanların teknoloji konusunda daha yetkin hale gelmelerine yardımcı olacak eğitim girişimleri genişletiliyor.

Asya: Uzun Vadeli Bağlılık

Japonya ve Güney Kore gibi Asya ülkelerinde, insan kaynakları politikaları genellikle uzun vadeli iş ilişkilerini destekler. Yaşam boyu istihdam modeli, şirket kültürünü güçlü bir aidiyet hissi üzerine inşa eder ve çalışanların şirkete daha fazla bağlılığı artırır.

- **Örnek:** Japonya'daki çalışanlar kendi mesleki ve kişisel gelişimlerine yatırım yapmaya teşvik edilir. Toyota'nın iç rotasyon politikası ve sık eğitim programları, çalışanların birey olarak büyümelerini sağlar.

Türkiye: Dönüşen İK Politikaları

Türkiye'de hem kamu hem de özel sektörde insan kaynakları politikaları değişiyor. Dijitalleşme ve esnek çalışma modelleri, özellikle özel sektörde öne çıkıyor.

- **Örnek:** Türk Telekom gibi büyük işletmeler, çalışanlarının sağlıklı bir iş-yaşam dengesine sahip olmasını garantilemek için hibrit çalışma yöntemlerini kullanır. Performans yönetim sistemlerini kullanarak, çalışanların hedeflerine ulaşmalarını ve onlara uygun tazminat sağlamalarını da sağlarlar.
- **Kamu Sektörü:** Yeni dijitalleşme girişimleriyle, Türk kamu sektörü eski İK normlarına bağlı kalsa bile bir dönüşüm sürecine başladı. Örneğin, e-devlet girişimleri kamu görevlilerinin üretkenliğini artırıyor.

Karşılaştırma ve Değerlendirme

Uluslararası normların aksine, Azerbaycan'ın özel sektör İK uygulamaları daha yaratıcıdır, kamu sektörü ise hala geleneksel eğilimler tarafından şekillendirilmektedir. Öte yandan, esnekliği, çeşitliliği ve kapsayıcılığı vurgulayan politikalar, ABD ve Avrupa ülkelerinin hem kamu hem de ticari sektörlerde çalışan sadakatini artırmasına yardımcı olmaktadır. Güney Kore ve Japonya gibi ülkeler uzun vadeli istihdam politikaları ve sağlam bir örgütsel kültür oluşturmaktadır. Yerel firmalar, BP gibi küresel şirketler ve AzerGold gibi yerel işletmelerin Azerbaycan'ın özel sektöründe modern İK uygulamalarını başarılı bir şekilde uygulamasından ders çıkarabilirler. Ancak, örgütsel kültür ve üretkenlik açısından, kamu sektörünün daha uyarlanabilir ve performans odaklı yapılara geçişi önemli olarak öne çıkmaktadır.

İK POLİTİKALARININ ÜRETKENLİK ÜZERİNDEKİ ETKİSİ

Çalışanlar bir organizasyonun en önemli varlıklarından biri olduğundan, motivasyonları ve performansları üretkenlik üzerinde önemli bir etkiye sahip olan insan kaynakları (İK) politikalarından doğrudan etkilenir. İyi hazırlanmış ve yürütülen İK politikaları, çalışan sadakatini artırmanın yanı sıra organizasyonun stratejik hedeflerine ulaşmak için önemli bir

10th International CEO Communication, Economics, Organization & Social Sciences Congress araçtır. İK politikalarının üretkenliği nasıl etkilendiğini analiz etmek için üç temel alan kullanılabilir: eğitim ve gelişim fırsatları, performans yönetimi ve çalışan motivasyonu ve sadakati.

Çalışan Motivasyonu ve Bağlılık

Çalışanların şirkete olan coşkusu ve bağlılığı, kurumsal hedeflere ne kadar iyi katkıda buldukları üzerinde önemli bir etkiye sahiptir. İK politikaları, motivasyonu artırmak ve bağlılığı garantilemek için çalışanları takdir eden ve destekleyen bir çerçeve sunmalıdır.

- **Motivasyonun Üretkenliğe Etkisi:** Herzberg'in motivasyon-hijyen teorisi, kişisel tatmine katkıda bulunan unsurların çalışan motivasyonunu artırabileceğini belirtir. Örneğin, esnek çalışma saatleri, teşvik planları ve profesyonel gelişim olanakları gibi İK uygulamaları, çalışanların pozisyonlarında mutlu olmalarını ve dolayısıyla daha üretken olmalarını garanti eder.
- **Bağlılık ve Üretkenlik İlişkisi:** Daha yüksek iş performansı ve elde tutma oranları, çalışanların şirketlerine olan bağlılıklarının sonucudur. Bir Gallup yapısı, güçlü çalışan katılımına sahip işletmelerin %21 daha fazla sürdürülebilir üretime sahip olduğunu belirtmektedir.

Performans Yönetimi ve Üretkenlik

Performans yönetimi adı verilen bir İK prosedürü, çalışanların şirket hedeflerine ulaşmalarını değerlendirir ve yardımcı olur. Etkili performans yönetimi, çalışanların potansiyelini en üst düzeye çıkarır ve bu da üretimi doğrudan etkiler (Armstrong, 2014; Pfeffer 1998).

- **Hedef Bazlı Performans Yönetimi:** Performansa dayalı hedefler belirleyerek ve bunların ilerlemesini izleyerek çalışanlar daha fazla konsantrasyonla çalışabilirler. Bu tür sistemler özellikle özel sektörde yaygınlaşıyor.
- **Dönüt ve Performans Artışı:** Çalışanlar zayıf yönlerini güçlendirebilir ve düzenli performans değerlendirmeleriyle güçlü yönlerini daha iyi kullanabilirler. Bu süreç yardımcı olmak için İK kuralları tarafından açık iletişim hatları sağlanır. Örneğin Amazon'daki çalışanlara sıklıkla geri bildirim verilir ve bunu üretkenliklerini artırmak için kullanmaları teşvik edilir.

Eğitim ve Gelişim Fırsatları

Çalışanların iş performansını artıran en önemli İK prosedürlerinden biri eğitim ve gelişimdir. Dijitalleşme ve teknolojinin hızı, özellikle modern çağda, insanların becerilerini güncel tutuyor ve yardımcı daha rekabetçi hale getiriyor.

- **Yetkinlik Artışı ve Verimlilik:** Çalışanların mesleki becerilerini geliştirmek için eğitim programları sunmak, işlerini daha hızlı ve etkili bir şekilde yürütmelerine olanak tanır. Dünya Ekonomik Forumu (WEF) tarafından yapılan bir araştırmaya göre, çalışan becerilerini geliştiren işletmeler üretkenliği %25 oranında artırabilir (OECD, 2020).
- **Eğitim Programlarının Uzun Vadeli Etkisi:** Eğitim ve gelişim fırsatları, kişisel üretkenliği ve kuruluşun genel performansını artırır. Örneğin, Toyota Japonya, çalışanlarını sürekli eğitim programlarına dahil ederek inovasyonu teşvik ediyor (Cameron ve Quinn, 2011).

İstatistiksel Destek

Azerbaycan'da özel sektör, performansa dayalı insan kaynakları politikalarını uygulayarak üretkenliği artırıyor. Örneğin, Azerbaycan'da özel sektördeki çalışanların iş gücü verimliliği 2024 yılına kadar kamu sektöründe çalışanlardan %12 daha yüksektir. Bu fark, özel

10th International CEO Communication, Economics, Organization & Social Sciences Congress sektörde daha iyi çalışan performans değerlendirme sistemlerinin kullanılmasından kaynaklanmaktadır (Azerbaycan İstatistik Komitesi, 2024). Ayrıca, OECD üyesi ülkelerde yapılan bir araştırmaya göre, daha yüksek çalışan memnuniyeti olan şirketlerde devamsızlık oranları %27 daha az ve üretkenlik oranları %20 daha yüksektir.

İSTATİSTİKSEL ANALİZ

Çalışan Bağlılığı:

Azerbaycan'da 2024 itibarıyla yapılan tahminlere göre, özel sektördeki çalışanların kamudaki çalışanlardan yaklaşık %13 daha fazla olduğu tahmin ediliyor. Bu fark, OECD üyesi ülkelerde %15-20 seviyelerinde kalmıştır. Bu farklılığın nedeni, özel sektörün daha fazla esneklik, teşvikler ve gelişim fırsatları sunmasıdır (Azerbaycan İstatistik Komitesi, 2024).

İş Gücü Verimliliği:

2024'te Azerbaycan özel sektöründe çalışan bir çalışanın yıllık iş gücü verimliliği, kamu sektöründe çalışan bir çalışanın yıllık verimliliğiyle karşılaştırıldığında yaklaşık %12-15 daha yüksek seyretmektedir (Azerbaycan İstatistik Komitesi, 2024). Bu fark, OECD ve AB üyeleri arasında %18-20 düzeyinde görülmektedir. Ayrıca, Türkiye'de özel sektör çalışanlarının kamu çalışanlarına göre yaklaşık %15 daha verimli olduğu bildirilmektedir.

Çalışan Devir Hızı:

Azerbaycan'da kamu sektöründe çalışan devir hızı yaklaşık %7, özel sektörde çalışan devir hızı yaklaşık %13'tür (Azerbaycan İstatistik Komitesi, 2024). Türkiye'de özel sektörde bu oranlar %16, kamu sektöründe %8'dir. Amerika Birleşik Devletleri'nde özel sektör devir hızı %21 iken, kamu devir hızı %10'dur. Performansa dayalı sistemlerin yaygınlığı, özel sektörde daha sık iş değişimi görülmesini açıklayabilir.

İşten Ayrılma Oranları:

Azerbaycan'da kamu sektörüne göre özel sektör işten ayrılma oranının %9 daha yüksek olduğu tahmin ediliyor. Türkiye ve OECD üyesi diğer ülkeler arasında bu fark yaklaşık %10'dur. Özel sektörde işten ayrılma oranları, kariyer gelişimi ve esnek çalışma koşulları nedeniyle artmaktadır (TÜİK, 2024).

Esnek Çalışma Modellerinin Benimsenme Oranı:

Türkiye'de %35 ve Azerbaycan'da özel sektörün %30'unun 2024 itibarıyla uzaktan veya hibrit çalışma gibi esnek çalışma modellerini benimsediği tahmin edilmektedir. Bu oran Avrupa ülkelerinde ortalama %40-50 seviyesindedir. Özellikle büyük şirketlerde, esnek çalışma modelleri çalışanlarına daha fazla bağlılık sağlar (TÜİK, 2024).

AZERBAYCAN'DAKİ GELİŞMELER

Son yıllarda Azerbaycan, hükümet ve ticari sektör insan kaynakları politikasını güncellemek için büyük çabalar sarf etti. Bu ilerlemeler şirket kültürüne, çalışan katılımına ve üretkenliğe fayda sağladı ve ülkenin ekonomik ve sosyal büyümesiyle eş zamanlı olarak ilerledi. Hem yabancı şirketler hem de yerel hükümetler, Azerbaycan'da İK düzenlemelerinin nasıl geliştirildiği üzerinde bir etkiye sahiptir. Bu konu altında Azerbaycan'daki son olaylara ve kamu ve özel sektörlerdeki önemli değişimlere bakacağız.

Bürokratik yapılarla ilişkin itibarına rağmen, Azerbaycan'ın kamu sektörü, verimliliği ve dijitalleşmeyi iyileştiren reformlar nedeniyle son yıllarda önemli bir dönüşüm geçirdi. Kamu görevlisi performansını artırma ve vatandaşlara daha hızlı hizmet sunma amacıyla bu süreci desteklemek için çok sayıda değişiklik uygulandı.

- E-Devlet Reformları: Azerbaycan, 2020'lerin başında e-devlet uygulamalarının kullanımını artırarak hükümet hizmetlerinin dijitalleşmesini hızlandırdı. Kamu görevlilerinin yükünü azaltarak ve iş prosedürlerinin açıklığını sağlayarak, bu dijitalleşme verimliliği artırıyor. Devlet dairelerindeki uzun bekleme süreleri azaldı ve kamu sektörü çalışanları artık işlemlerini çevrimiçi yapma seçeneği sayesinde daha üretken.
- Yöneticilere Yönelik Eğitim ve Gelişim: Kamu sektöründeki üst düzey yöneticiler artık yönetim becerilerini geliştirmek için daha fazla eğitim programına erişebiliyor. Liderlik becerileri, değişim yönetimi ve stratejik düşünmeyi kapsayan bu programlar, kamu sektöründeki çalışanların üretkenliğini artırdı.

Özel Sektördeki Gelişmeler

Yerel girişimlerin büyümesi ve çokuluslu şirketlerin etkisi nedeniyle Azerbaycan'daki özel sektör büyük bir çalkantı yaşıyor. Çalışan katılımını artırmak, işçi üretkenliğini yükseltmek ve kurumsal hedeflere ulaşmak için modern İK uygulamaları sıklıkla kullanılıyor.

- Esnek Çalışma Modelleri ve Dijitalleşme: Azerbaycan'daki çok sayıda özel sektör işletmesi, özellikle son yıllarda COVID-19 salgınının kontrol altına alınmasının ardından esnek çalışma uygulamaları uyguladı. Bu departmanlar, esnek planlama, uzaktan çalışma ve hibrit çalışma düzenlemeleri gibi seçenekler sunarak üretkenliği artırmak için kapsamlı çözümler oluşturdu.
- Eğitim ve Gelişim Politikaları: Yerel işletmeler, Azerbaycan'daki dış ilişkilerin varlığından faydalandı ve bu da İK düzenlemelerinin evrimleşmesine neden oldu. BP, Total ve Coca-Cola gibi büyük çokuluslu şirketler, çalışanlarına profesyonel gelişim sağlıyor, kişisel gelişimlerini destekliyor ve organizasyonun genel üretkenliğini artırıyor. Bu taktikler, hem finansal performanslarına hem de çalışan memnuniyetine dikkat çekmelerine yardımcı oluyor.
- Yerli Şirketlerde Performans Yönetimi: Azerbaycan'da yerel işletmelerde performansı değerlendirme ve geliştirme çabaları arttı. Sistemleri izleme ve sürekli geliştirme amacıyla, bu sistemler performans yönetim sistemlerini sürekli olarak geliştiriyor. Çalışan sadakati de artırılıyor, şirket kültürü güçlendiriliyor ve çalışan girdisi toplanıyor ve kararları bilgilendirmek için kullanılıyor.

İK Politikalarının Yükselen Rolü

Azerbaycan'daki son olaylar, İK düzenlemelerinin genellikle daha iyi yapılandırıldığını ve şirketin genişlemesine odaklandığını gösteriyor. Seçimler işe alım, ücret ödemesi ve bordro işlemleriyle sınırlı olduğundan, İK departmanları artık firmaların genel katkı stratejilerini yaymaya odaklanıyor. Rekabet etme yeteneği, özellikle küresel pazarlarda İK'nın genişleyen rolüyle artıyor.

Azerbaycan özel sektör işletmeleri, verimliliklerini artırmak için insan kaynakları prosedürlerini dijitalleştiriyor. Dijital platformlar artık toplu işe alım, eğitim ve geliştirme girişimleri ve performans değerlendirmeleri dahil olmak üzere birçok İK görevi için kullanılıyor. İK ekipleri artık bu dijital değişim sayesinde zamandan tasarruf edebilir ve daha etkili bir şekilde çalışabilir.

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İşyeri çeşitliliği ve kapsayıcılık politikaları birçok özel sektör kuruluşu için giderek daha önemli hale geliyor. Özellikle kadın çalışanların mesleki gelişim için alternatiflere sahip olmasını ve farklı kültürel geçmişlere sahip personel üyelerinin daha etkili bir şekilde işbirliği yapabilmesini garantilemek için çok sayıda organizasyonel ayarlama yapıyor. Korumanın önemli bir bileşeni, çeşitli çalışma gruplarının işbirliği, yaratıcılık ve üretkenlik büyümesidir.

SONUÇ VE ÖNERİLER

Genel Değerlendirme

Bu çalışma, kamu ve özel sektörleri karşılaştırarak, İK düzenlemelerinin Azerbaycan'da ve küresel olarak kurumsal kültürü ve üretkenliği nasıl etkilediğini incelemiştir. Analizlere göre, özel sektörün İK uygulamaları daha uyarlanabilir ve performans odaklıdır ve bu da dinamik kurumsal kültüre katkıda bulunur. Çalışan sadakatini teşvik eden politikalar özel sektör tarafından uygulanır ve bu da çıktıyı artırır. Kamu sektörü iş istikrarı ve sürekliliği sunsa da, özel sektöre göre daha az esnek ve üretkendir.

Özellikle Azerbaycan için yapılan değerlendirmelere göre, ülkenin İK düzenlemeleri son zamanlarda önemli değişikliklere uğradı. Reform ve dijitalleşme girişimleri kamu sektöründeki iş süreçlerini modernize ediyor. Bununla birlikte, bu gelişmelere rağmen kamu sektörü verimliliği özel sektör verimliliğinden daha düşük kalmaya devam ediyor. Bürokratik süreçler, uyum eksikliği ve çalışan sadakatini artıracak teşviklerin eksikliği bunun başlıca nedenleridir.

Öte yandan, çağdaş İK uygulamalarını kullanarak, özel sektör verimlilikte önemli artışlar gördü. Azerbaycan'ın özel sektöründe, esnek çalışma düzenleri, çalışan geliştirme fırsatları ve performansa dayalı değerlendirme sistemleri gibi uygulamalar kurum kültürünü ve verimliliğini iyileştirdi.

Ayrıca, Azerbaycan'daki yabancı şirketlerin varlığı yerel işletmeleri teşvik etti ve daha yaratıcı insan kaynakları stratejileri oluşturmalarına yardımcı oldu. Azerbaycan'ın İK politikasının geleceği, küresel olarak incelenen örneklerle yönlendirilebilir. Avrupa ülkelerindeki çeşitlilik ve kapsayıcılığa dayalı İK politikaları çalışanların mutluluğunu ve sadakatini artırırken, ABD gibi ülkelerdeki inovasyon ve çalışan motivasyonuna odaklı uygulamalar bir organizasyonun rekabet gücünü artırıyor. Uzun vadeli ticari ortaklıklar ve devam eden eğitim fırsatları, kurum kültürünü iyileştirdi ve Asya ülkelerindeki çalışanlara kuruluşlarına daha fazla ait olma duygusu verdi.

Azerbaycan'da insan kaynakları politikalarının daha stratejik ve esnek hale getirilmesi, hem kamu hem de özel sektörde üretkenlik ve çalışan bağlılığı açısından fayda sağlayacaktır. Örgütsel verimlilik ve kültür, eğitim ve gelişim programlarının genişletilmesi, dijitalleşmenin hızlandırılması ve performans yönetimi uygulamalarının iyileştirilmesi yoluyla geliştirilebilir.

KAYNAKÇA:

1. Armstrong, M. (2014). *Armstrong's Handbook of Human Resource Management Practice*. Kogan Page Publishers.
2. Aydın, E. (2018). *İnsan Kaynakları Yönetimi: Stratejik ve Güncel Yaklaşımlar*. Nobel Akademik Yayıncılık.
3. Azerbaijan State Statistical Committee. (2024). *Labor Market Indicators in Azerbaijan*. State Statistical Committee of the Republic of Azerbaijan.
4. Boxall, P., & Purcell, J. (2016). *Strategy and Human Resource Management*. Palgrave Macmillan.
5. Cameron, K. S., & Quinn, R. E. (2011). *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*. John Wiley & Sons.



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6. OECD. (2020). *Employment Outlook 2020: Worker Security and the COVID-19 Crisis*. OECD Publishing. <https://doi.org/10.1787/1686c758-en>
7. Öztürk, M., & Dündar, S. (2013). *Kamu ve Özel Sektörde İnsan Kaynakları Yönetimi*. Siyasal Kitabevi.
8. Pfeffer, J. (1998). *The Human Equation: Building Profits by Putting People First*. Harvard Business Press.
9. Sabuncuoğlu, Z. (2012). *İnsan Kaynakları Yönetimi: Uygulamalar ve Yaklaşımlar*. Beta Yayıncılık.
10. Schein, E. H. (2010). *Organizational Culture and Leadership*. Jossey-Bass.
11. TÜİK (Türkiye İstatistik Kurumu). (2024). *Türkiye İşgücü Piyasası Verileri*. Ankara: TÜİK Yayınları.
12. Ulrich, D., Younger, J., Brockbank, W., & Ulrich, M. (2012). *HR from the Outside In: Six Competencies for the Future of Human Resources*. McGraw-Hill Education.



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Types of Landscapes in the Epic “Lison Ut-Tayr” By Alisher Navoi

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ABSTRACT

Currently, the phenomenon of an artistic picture of the Universe has been proved, the multifaceted content of this concept has been revealed, the essence of which is that “an artistic picture of the Universe is a product of perception “from the outside,” that is, perception. The artistic picture of the Universe includes a national picture (based on the individual author’s picture of the writer’s world) and the direct author’s position (individual perception and interpretation of the surrounding world), as well as an individual picture of the reader’s world, since the artistic picture of the world is created in the reader’s mind under the influence of the text.

Keywords: Literary Text, Landscape, Landscape Units, Landscape-Exposition, Landscape-Double, Landscape-Leitmotif and Landscape – Details.

The understanding of a literary text as a multifaceted and specific phenomenon is constantly being studied, clarified and supplemented based on the requirements imposed at each stage of the development of the science of language.

The description of specific units of a descriptive literary text, namely the interior, portrait, landscape, is a new and relevant issue. The metalanguage is divided into those that have corresponding concepts that define the author's understanding.

1. CHAPTER. TYPOLOGY OF DESCRIPTIVE FRAGMENTS OF A LITERARY TEXT

A portrait is defined as a type of artistic description in a work of art. This refers to the appearance of the character, which is vividly depicted in the views of the author. A portrait is considered one of the most important means of characterizing an artistic hero.

L.N. Dmitriyevskaya noted that the difference of the interior from landscape and portrait is that they are the object of description. The portrait depicts the external appearance of a person (creates the image of a hero); the landscape depicts nature, that is, creates the image of the universe; the interior, in turn, describes the interior of the building, through which the image of the room is created. The interior is necessary to characterize the hero, to embody the artistic intention of the author, to create an atmosphere.

A. Erkinov believed that landscape is an integral part of the form of an artistic work, serving to express the ideological content. The landscape harmonizes with it in expressing the ideological goal set by the author in the work, the content chooses a specific form, and the form adapts to the content. In most literary and linguistic works, special attention is paid to the landscape in the works of art. The presence of such works testifies to the relevance of the descriptive component of the literary text, the prospect of its deeper and more complete study.

Landscape units having their own semantics, primarily descriptive, means of grammatical expression (lexical, syntactic, morphological) at different levels of language, as well as functional significance for the content of the entire text, are perceived by the authors in different ways in accordance with scientific approaches and paradigms of scientific cognition.

The linguocognitive approach in landscape analysis the system of methods (frame and conceptual analysis) is the most effective, since their application allows you to deeper access the artistic basis and reconstruct its conceptual structure.

As a result, it will be possible to formulate the following definition of landscape. It is a complex structured multifunctional descriptive fragment of an artistic text, involved in the creation of its compositional integrity, which, unlike the interior, is an open outer world space, created by a certain system of language tools with pictorial semantics in this context, acts as one of the ways of embodying the author's form of existence and its artistic intention.

1.1. Typology of landscape units

As a result of the analysis of the structural-semantic organization of landscape parts of an artistic text, the following appropriate expression of the landscape is distinguished by the types of classifications that have linguistic means¹.

1.2. Semantic type and its manifestations

1. Method of perception of the basic information of the landscape unit: a) dynamic (the verb of action is expressed by sentences and devices); b) static (expressed by marked sentences and devices).

2. The language system and the main types of information in the text.

¹ Лысова О.О. Структурно-семантическая организация описательных фрагментов текста: автореф. Дис. ... канд. филол. наук. Уфа, 1998, 21 с.

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2.1. Event (plot) orientation: a) seasonal (season of the year);

Chun Hamaldin berdi oyini bahor,

Bo 'ldi teng mezonda laylu nahor¹ (That is, with the month of hamal (March 22 to April 21) began spring, in its measure it was equal to day and night).

b) local (spatial appearance); v) temporal (temporal (temporal); g) Meteorological (weather); d) mixed (all or some of the above characters participate depending on the situation).

2 CHAPTER. SOCIAL ORIENTATION (ACCORDING TO THE CHARACTERISTICS OF THE DESCRIPTIVE OBJECT):

2.1. Landscape of the universe;

Ulki maxluqot xalloqidur ul,

Ondin o 'zga foniyu boqiydur ul.

Soniekim chekti chun sun 'i qalam,

Ofarinish tarhini qildi raqam.

Aylagach doyr to 'quz aflokni,

Qosir etti fahmidin idrokni.

Ko 'kni tun, kundan mulamma' ayladi,

Mehr-u anjumdin murassa' ayladi (that is, the Creator, with his mighty pen, built the universe under a clear plan. He made the nine heavens revolving and incapable of perception in understanding the secret of this. Brightens the sky with night and day, decorating it with the sun and stars. In it, the moon is as if it were a celestial nail, and the new moon is reminiscent of a piece taken from that nail).

1) rural landscape;

2) the urban landscape:

Dedi Hudhudkim: - "Bu ish bo 'lmish yaqin,

Kim erur mashriqda shahre, oti – Chin.

Shahr yo 'qkim, vus 'at ichra bir jahon,

O 'n jahon xalqi savodinda nihon" (Hudhud told the birds: the event took place in a town in the East called Chin. He was not in the city, but in the latitude equal to a whole world, within which ten World inhabitants were located. The view of this city was better than that of the Eram Rose Garden, and the water was more charming than that of the Paradise brook)

3) desert landscape;

4) mixed and intermediate (forest, steppe, road and oth.) landscapes:

O 't tutashqon dashtlar har sori fosh,

Tortibon yolinalari gardung 'a bosh (Steppes abutting grass on each side are begged and look towards the sky).

Beshalar muhlik balolardin to 'lo,

Shoxi – anduhu taab, barg 'i – balo (The forests are full of all kinds of terrible plagues, the branch of every tree in it is made up of sadness,, and the leaf is made up of trouble).

2.3. Psychological situationality: a) landscape-mood; b) landscape-experience.

2.4. Philosophical orientation: a) landscape-discussion; b) landscape-ethical; c) non-standard variants of landscape units.

¹ Навоий А. Лисон ут-тайр. Т.: Фафур Фулом, 1991. Б. 18.

3 CHAPTER. LANDSCAPE UNITS OF GRAMMATICAL TYPE AND ITS TYPES.

3.1. Syntactic structure of landscape units: a) complete models of landscape units (sentence, complex syntactic whole); b) incomplete (grammatically abbreviated) models of landscape units; c) in the form of communicative expression (dialogue, monologue).

3.2. Lexical content of landscape units: a) seasons (summer, winter, spring); b) time of day (evening, evening, night, dawn); c) weather (frost, thunderstorm, fog, wind);

g) spatial (Sun, Moon);

Oyni ko 'k tirnog 'idin qildi misol,

Olg 'on ul tirnog ' bir yondin hilol (In it, the moon is as if it were a celestial nail, and the new moon is reminiscent of a piece taken from that nail).

d) air-space (sky, air, space, Cloud, horizon):

Ham havosinda bulutlar charx urub,

Boshqa yomg 'ir o 'rnida tosh yog 'durub.

Ham sahobidin choqinlar choqilib,

Tobidin olamda o 'tlar yoqilib. (Clouds in the sky that beat chariots make a stone fall on a person's head instead of rain. The flames of lightning from their clouds fire into the universe)

e) water (river, shore, ocean, beach):

Yo 'lda daryolardurur xunobdin,

Demayin xunob – zahri nobdin (There are bloody rivers on this road, not bloody, but poison, it will be even more correct if it is said).

j) settlement (village, square, country, city, cave):

Dedi Hudhudkim: - "Bu ish bo 'lmish yaqin,

Kim erur mashriqda shahre, oti – Chin.

Shahr yo 'qkim, vus 'at aro ichra bir jahon,

O 'n jahon xalqi savodinda nihon.

Xittasi xushroq Eram gulzoridin,

Suyi dilkashroq bihisht anhoridin” (Hudhud told the birds, "It happened in a city called Chin in the east. It was not a city, but a whole world in the vastness, inhabited by ten worlds. The view of this city was better than the Eram flower garden, and the water was nicer than Paradise brook);

Ul tun ul kishvar sarosar yorumish,

Voqif elni beshuur etmish ul ish.

Silkinib Chin ichra tushmishbir pari,

Topmish andin zebu farr Chin kishvari (That night, when we flew over the city, this city caught fire from head to toe. People who found out about this work couldn't take it in. When the Simurgh flies, swinging, a feather bed falls from it, and this feather bed enveloped the whole country with decorative luxury).

z) land (Wood, Road, Mountain, Hill);

Tog 'lardur tortqon gardung 'a tig ',

Tig 'i barcha qon to 'karg 'a bedarig ' (The mountains also sprang to the sky, all of these tigers are brutally bloodstained).

l) animal world (horse, donkey);

y) birds: crow, nightingale;

Men qushemen qasru gulshan ziynati,

Naqsh-u rangim ahli olam hayrati.

Suratim gulshang 'a oroyish durur,

Hay 'atim ko 'rganga osoyish durur.

Bog ' aro mendin xazonda bo 'ston,

Beshada mendin qish ichra gulsiton.

Jilva aylar chog'da hullam zevari,

Sar-basar oinai Iskandari.

Tengri bermish husnu zebolig' manga,

Haddin ortug' zebu ra'nolig' manga (I am a bird that adorn the castle and the gulshans.

From my patterns and colors, the people of the universe are amazed. If my photo gives a break to the flower garden, my walk will give peace to the one I see. The gardens will turn into a blooming garden in autumn times thanks to me, and the forests will turn into a winter-season flower garden thanks to me. If I move slowly and write down my colorful wings, it will be as if the mirror of Alexander from head to toe is manifested. Let the people watch my beauty and say for good to the power of the creator, so that God gave me incomparable beauty, excessive beauty).

j) insects: ants;

k) plant world (flowers, trees, shrubs):

Bir chechakkim – vafosi yo 'q oning,

Umr bog'inda baqosi yo 'q oning.

Yilda besh kunkim chamanda ochilur,

O'n kun o'tmay tufrog' uzra sochilur (Is it so hollow for a handful of unfaithful and unfaithful in the garden of life that is opened in a suitcase for only five days in a year, which is scattered as a treasure on the soil less than ten days later?)

l) mood (happiness, luck, joy, sadness).

V. The functional type of landscape units and its types in the text: landscape-exposition, landscape-double, landscape-leitmotif and Landscape – Details. Each type of landscape should be studied taking into account the following aspects: 1) the artistic purpose of the author of the work, its tasks and its motivational basis; 2) aimed at reconstructing hidden meanings expressed in their semantic structure.

Conclusion

The fact that landscape as one of the descriptive parts of a literary text is characterized by the use of many means of expressing language is emphasized by researchers (A.Erkinov, M.M.Asaeva, Y.A.Stefanishina, L.I.Timofeeva: epithet, comparison, comparison, metonymy, hyperbole and metaphor).

The metaphor of language is considered the most vivid and powerful means of creating expressiveness and imagery of the text. Through the metaphorical meaning of words and phrases, the author, first of all, enhances the visibility of the depicted object, and also gives originality, individuality to objects and phenomena. In artistic language, the metaphor of language is a phenomenon of imaginative thinking that expands and enriches the imagination, allowing us to comprehend the emotional coloring.

REFERENCES

- Навоий А. Лисон ут-тайр. Т.: Фафур Фулом, 1991. – 464 б.
- Cognitive Linguistics: Foundations, Scope, and Methodology.* Edited by Theo Janssen and Gisela Redeker. 1999.
- A Cognitive Approach to the Verb. Morphological and Constructional Perspectives.* Edited by Hanne Gram Simonsen and Rolf Theil Endresen. 2001.
- Эпитетин М.Н. Игра в жизни и в искусстве // Парадоксы новизны : о литературном развитии XIX-XX веков. М., 1988. С.276-303.*
- Заика В.И. Риторическая и эстетическая реализация языка // Лингвориторическая парадигма: теоретические и прикладные аспекты: межвуз. сб. науч. тр. Сочи, 2002. Вып. 1. С.59-67.*
- Уайтхед А. Избранные работы по философии. М., 1990.*



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Дуров А.А. Методологические проблемы интерпретации эстетического субъекта в художественной прозе // Принципы и методы исследования в филологии: конец XX века. СПб. ; Ставрополь, 2001. Вып. 6. С.131-137.



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Unpacking the Social Determinants of Mental Health Outcomes in Nigeria:
A Sociological Analysis

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ABSTRACT

The burden of mental health disorder is very high. Mental health is an integral part of health and well-being yet it has been neglected in Nigeria. This paper provides a comprehensive sociological analysis of mental health outcome in Nigeria. This study examines the impact of social determinants on mental health outcomes in Nigeria, with a focus on socioeconomic status, education, healthcare access, and social support networks. The study utilizes the qualitative method of analysis by conducting In-depth interviews with health care professionals. It discusses the role of public education, integration of traditional healers and policy implementation in improving mental health services. This research investigates how social determinants shape mental health outcomes in Nigeria. The findings indicate that socioeconomic disparities, inadequate healthcare infrastructure, and limited social support networks exacerbate mental health issues, particularly among vulnerable populations such as women, youth, and rural dwellers. This study contributes to the understanding of the social context of mental health in Nigeria and highlights the need for policy interventions addressing these social determinants to improve mental health outcomes.

Keywords: Mental Health, Sociological analysis, Unpacking, Social determinant.

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Introduction

Mental health disorders represent a significant public health concern globally, with Nigeria facing a particularly acute crisis. According to the World Health Organization, WHO (2021), approximately 20% of Nigerians suffer from various mental disorders, yet mental health remains largely neglected within the healthcare system. Mental health is the emotional, psychological and social wellbeing, enabling us to cope with life stresses, realize our abilities, and contribute to our community. Social determinants of health represent the most modifiable set of targets for intervention currently available to prevent the onset of mental health problems and disorders, and to promote positive mental health in our populations. Social determinants of mental health encompass the set of structural conditions to which people are exposed across the life course, from conception to death, which affect individual mental health outcomes, and contribute to mental health disparities within and between populations.

These structural conditions include factors such as income, employment, socioeconomic status, education, food security, housing, social support, discrimination, childhood adversity, as well as the neighbourhood social and physical conditions in which people live, and the ability to access acceptable and affordable health care. Importantly, our chances of being exposed to protective or harmful social determinants of (mental) health are “shaped by the distribution of money, power and resources at global, national and local levels, which are themselves influenced by policy choices” (WHO, 2022). Such determinants are therefore not randomly or benignly distributed within or between populations, but are manifested by systems and institutions of power that often produce and reproduce intergenerational inequities in people's opportunities to realize safe, secure, prosperous and healthy lives.

We stand at a threshold moment not only in understanding the potential causal role of modifiable social determinants in the onset (or exacerbation) of mental health problems, but also in defining our response to them through effective prevention strategies that reduce inequities in the burden of psychiatric morbidity experienced between and within diverse populations. Arguably, the last two decades have brought about some progress in our biomedical understanding of psychiatric disorders, while investigating the importance of psychosocial factors in causing mental disorder has remained a peripheral focus for scientific discovery and clinical psychiatry. We have expanded our knowledge about the immutable, overlapping (pleiotropic) and polygenic bases of psychiatric disorders that can help explain why some individuals are more at risk of a diverse array of psychopathologies than others (Gandal & Geschwind 2021). This paper aims to provide a sociological analysis of the factors influencing mental health outcomes in Nigeria, focusing on social determinants such as socioeconomic status, education, healthcare access, and social support networks.

LITERATURE REVIEW

Concepts that are related to social determinism of mental health were discussed.

Socioeconomic disadvantage

Socioeconomic disadvantage is a fundamental determinant of mental health outcomes over the life course (Kivimäki, Batty & Pentti 2020). Strong socioeconomic gradients have been observed for an array of mental health outcomes in HIC and LMIC settings. Socioeconomic disadvantage can be operationalized in several ways, and is a multifaceted construct encompassing different dimensions, including education, income, occupation and living standards. All these dimensions have been associated with mental health and disorder, and

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social inequalities in mental health may arise from a series of interrelated structural and cultural processes operating in society.

According to structural explanations, social stratification creates unequal access to resources – such as wealth and knowledge – that help individuals avoid exposure to harmful stressors. Higher levels of wealth and income enable access to key determinants of positive mental health, including adequate and safe housing sufficient food security Pourmotabbed , Moradi, & Babaei 2020 , and effective health care. Income losses appear to have a far greater impact on mental health than income gain, with further financial stressors such as income volatility, perceived job insecurity and moving into debt all linked to worsening mental health. Poor mental health itself can also impact earnings and contribute to financial stress, meaning that the relationship between socioeconomic disadvantage and mental health is likely to be bi-directional .

Early life adversity

There is strong evidence that several early life (defined here as prenatal and perinatal) adversities including maternal stress, obstetric complications, and malnutrition can have profound effects on mental health and disorder decades later (Davies, Segre & Estradé 2020). These events do not affect all people equally, making them strongly socially determined risk factors for offspring mental health. For example, parental socioeconomic status and experiences of income inequality are associated with adverse birth outcomes Kim & Saada (2013). Furthermore, in the US, there is consistent evidence of racial/ethnic disparities in adverse maternal and neonatal outcomes (including preterm birth, low birth weight and infant mortality) and receipt of prenatal care, all of which are higher for Black, Hispanic and Indigenous groups than non-Hispanic White and Asian groups. These disparities are hypothesized to arise through structural racism that operates on a number of levels to affect “a woman's knowledge of prenatal care (individual); the amount of support she receives from her family, friends, and community (social); experiences with racism and other social and environmental stressors (social); the way she is treated by her care provider (institutional); and the policies and practices of her insurer (systemic).

Childhood adversity

Childhood adversity is an especially well-characterized social determinant of mental ill health. Whilst no consensus definition exists, McLaughlin defines these adversities as “experiences that are likely to require significant adaptation by an average child and that represent a deviation from the expectable environment”. To date, much research has focused on a “core set” of adversities that includes child maltreatment (i.e., physical, sexual or emotional abuse; neglect; exposure to domestic violence) and household dysfunction (e.g., substance use, mental ill health, or incarceration of a parent or other household member; parental separation or divorce). In a seminal study on these adverse childhood experiences Felitti, Anda & Nordenberg 1998) they were found to be associated with a 4- to 12-fold increased risk of depression, suicide attempt and substance abuse. Increasingly, the conceptualization of childhood adversity has expanded to include interpersonal adversities occurring outside of the home environment (e.g., bullying victimization)

Experience of childhood adversity is unfortunately common. For example, the World Mental Health Surveys estimate that around two in five individuals have experienced at least one form of childhood adversity. These experiences are clustered in patterns that are unequally distributed throughout the population In particular, greater socioeconomic disadvantage, which can place increased stress on parents and families is one of the clearest and strongest determinants of exposure to childhood adversities; recent evidence suggests that this may be

10th International CEO Communication, Economics, Organization & Social Sciences Congress mediated by effects on parental mental health. Children who grow up experiencing more family discord, who are born to adolescent mothers, and who grow up in single-parent households are more likely to experience multiple childhood adversities.

Migration

Migrants are exposed to a complex set of social determinants of mental health. This has resulted in a disproportionate burden of some mental health problems, in particular psychotic disorders. Elevated rates of psychotic disorders in migrants were first noted in 1932 by Odersgaard amongst Norwegian migrants to the US and subsequent research has highlighted the consistency of this phenomenon amongst many migrant groups and their descendants including both economic migrants and refugees. There is also consistent evidence of a high prevalence of post-traumatic stress disorders (PTSD) amongst refugees and asylum seekers.

Ethnoracial discrimination

The patterns of disparities across racial and ethnic categories are complex, with levels of psychological distress and symptoms of common mental disorders higher in minoritized groups than White groups but lower prevalence/incidence of diagnosed depression, anxiety, or substance use disorders in many ethnoracially minoritized groups. In contrast, there is more consistent evidence of increased rates of psychotic symptoms *and* disorders in ethnoracial minoritized groups, particularly amongst groups perceived as more socioculturally distant from the racial or ethnic majority population in HICs. For those with diagnosed mental disorders, there is strong evidence that many ethnoracial minoritized groups and particularly people of Black ethnicities – experience more negative pathways into care and psychiatric treatment, resulting in higher levels of morbidity.

Many of these ethnoracial differences in the incidence, course and treatment of mental disorders have been linked with increased exposure to racial discrimination and structural racism among minoritized groups. Socio-environmental risk factors are thought to be driven by structural racism i.e., by interconnected, racially inequitable systems (e.g., housing, education, employment, health care, the legal system) that reinforce each other to stigmatize, discriminate and disempower marginalized people .

Loneliness and social isolation

Interest in loneliness and social isolation as social determinants of mental health and disorder has burgeoned in the last decade. The distinction between these conditions is important, and has implications for causal pathways, which have not yet been well described, as well as for targeted intervention. While social isolation is an objective measure of the number of social connections, quantified in terms of social network size and number of meaningful ties, loneliness describes the subjective and distressing mismatch between a person's desired and perceived quantity and or quality of social relationships . It is therefore possible to have a large number of social contacts but still experience feelings of loneliness, or vice versa. Transient experiences of social isolation or loneliness are common after moving house, migration or bereavement, serving as a prompt to form friendships, such that loneliness could be viewed as an evolutionary advantage in this context. However, where chronic loneliness sets in, as indicated by consistent problems with fostering meaningful relationships, this is more likely to adversely impact mental health. Estimates of the prevalence of loneliness internationally range from 9 to 14% in adolescents, falling to 3-10% in middle age, and rising again to 5-21% in older adults Prevalence estimates for social isolation (around 25%) tend to relate to older adults, and derive from low-quality evidence.

10th International CEO Communication, Economics, Organization & Social Sciences Congress Theoretical Framework

This study analysis is grounded in Social Determinants Theory, proposed by Rudolf Virchow (1848), Fredrich Engels (1845), and Emile Durkheim which posits that social conditions significantly influence individual health outcomes and this theory is crucial for achieving health equity and reducing disparities. The holistic approach considers multiple factors influencing health beyond individual behaviour.

This theory emphasizes that factors such as economic stability, education level, access to healthcare services, and community support are critical to understanding mental health disparities.

The social determinant theory provides a comprehensive framework for understanding mental health outcomes in Nigeria addressing these determinants requires multidisciplinary approach, involving policy reforms, community engagement, cultural sensitivity, research and intersectoral collaborations. The weakness of the theory is in disentangling individual, community and societal levels which did not disrupt its usefulness in this study.

Methodology

The study is an exploratory research. It employs a qualitative approach by conducting in-depth interviews with healthcare professionals across 5 states of Kaduna, Jos, Edo, Abuja and Lagos. Participants were purposively selected based on their experience in mental health care delivery. Thematic analysis was used to identify key themes related to social determinants and their impact on mental health outcomes

Findings

Socioeconomic Status

Socioeconomic status is a crucial determinant of mental health outcomes in Nigeria. Individuals from lower socioeconomic backgrounds often face increased stressors such as poverty and unemployment, leading to higher rates of mental disorders (Ugochukwu, 2020). The lack of financial resources limits access to quality healthcare services and exacerbates feelings of hopelessness.

Education

Education plays a vital role in shaping individuals' understanding of mental health issues. Limited educational opportunities contribute to misconceptions about mental disorders and hinder help-seeking behaviors (Demyttenaere, 2004). Public education campaigns are essential for raising awareness and reducing stigma associated with mental illness.

Healthcare Access

Access to healthcare services is severely limited in Nigeria due to inadequate infrastructure and a shortage of trained professionals. With only about 250 psychiatrists available for a population exceeding 200 million, many individuals do not receive adequate care (World Health Organization, 2022). This lack of access disproportionately affects vulnerable populations such as women and rural dwellers.

10th International CEO Communication, Economics, Organization & Social Sciences Congress Social Support Networks

Social support networks significantly influence mental health outcomes. Strong family ties and community connections can provide emotional support during times of crisis; however, many individuals experience isolation due to stigma surrounding mental illness (Onyemaechi, 2017). Integrating traditional healers into the healthcare system can enhance support for individuals seeking help.

Discussions

The findings highlight the complex interplay between social determinants and mental health outcomes in Nigeria. Addressing these issues requires comprehensive policy interventions that target the underlying social factors contributing to poor mental health. Strategies should include improving access to education, enhancing healthcare infrastructure, and fostering community support networks. Overview of recommendations for action to intervene on social determinants to improve population mental health and reduce inequities in mental health problems

Policy Interventions: Implement policies that address socioeconomic disparities and improve access to quality education.

Public Education Campaigns: Increase awareness about mental health issues through community outreach programs.

Integration of Traditional Healers: Collaborate with traditional healers to provide holistic care for individuals with mental disorders.

Investment in Healthcare Infrastructure: Allocate resources for training more mental health professionals and expanding healthcare facilities.

Conclusion

Mental health disorders pose a significant challenge in Nigeria due to various social determinants that exacerbate these issues. By understanding the sociological context surrounding mental health, stakeholders can develop targeted interventions that address these underlying factors. Strategies to alleviate social inequalities, which often have their origins in early life, can be effective in reducing the population burden of potentially life-long mental health problems that will typically emerge in adolescence. Various forms of discrimination and minoritization, including structural racism, are likely to exacerbate intergenerational social inequalities in mental health.

References

- Demyttenaere, K. (2004). The Social Determinants of Mental Health: Evidence from Nigeria.
- Fusar-Poli, P, Correll C.U, & Arango, C,(2021). Preventive psychiatry: a blueprint for improving the mental health of young people. *World Psychiatry* 2021;20:200-21. [DOI] [PMC free article] [PubMed] [Google Scholar]
- Onyemaechi, C.I. (2017). Unemployment and Mental Health: Focus on Nigerian Youths. *Practicum Psychologia*, 7(1), 56-65.
- Ugochukwu, E. (2020). Mental Health Challenges in Nigeria: Bridging the Gap between Demand and Supply. *Journal of Social Studies*.
- World Health Organization (2021). Mental Health Atlas 2021.
- World Health Organization (2022). Mental Health Challenges in Nigeria: A Call for Action.
- World Health Organization,(2021). Taking action on the social determinants of health. www.who.int/westernpacific/activities.
- World Health Organization (2022) . World mental health report: transforming mental health for all. Geneva: World Health Organization, 2022. [Google Scholar]



10th International CEO Communication, Economics, Organization & Social Sciences Congress
Persecution, Displacement and Reconciliation: Matua Migration from
1971-2000

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ABSTRACT

The struggle against caste prejudice and the study of postcolonial displacement in the region of Bengal can hardly be considered without paying attention to a roughly two-hundred-year-old low-caste religious and social movement called Matua. In the 21st century, the Matua community represents a key factor in electoral politics and is crucial for understanding the relationship between religion, displacement, and caste, within the framework of Bengal. The history of the Matua movement goes back to the nineteenth century, when a large-scale mobilization was carried out against the untouchability, even the Namasudra became part of the movement whose aim was to irradiate the prejudice and social uplifting of lower caste people. The partition of India was a great suffering for the Matua community. After 1947, large numbers of Matua Namasudra people migrated from East Pakistan to India. The lower caste Matua community migrated, spread across different states, including Orissa, Andaman Islands, Chhattisgarh, Assam, Tripura, Madhya-Pradesh and largely West Bengal, but this research will be limited to certain districts of Bengal only. From 1947 to the present time, they have not stopped leaving their native land and coming to India. So, migration is a continuous process for the Matua community. The research will try to trace out the causes of Matua migration in the post-1971 timeline through case studies, conducting interviews, surveys, etc. The present study will focus on how the Matua Namasudra community reconciled through their religious and cultural practices. The huge quantity of Matua refugees' people in West Bengal, the Matua community emerged as a powerful political determiner, deeply involved with refugee politics. The research will also find out the role of the Matua community in Bengal politics.

Keywords: Matua, Displacement, Rehabilitation, Reconciliation, Politics.

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Causes of Matua Migration:

Matua people were displaced by the partition of India in 1947 and post-partition violence. Matua were minority community of East Pakistan. Radical majoritarian of East Pakistan had tortured them in various ways. As a result, they were left their homeland and came to India for secure future. Their migration is a continuous process that did not stop after 1947. Matua community had been lived in low land marsh areas of East Bengal. Matua community is a part of *Namasudras*. *Namasudra* was the backward class people of East Bengal. They were untouchable people of the society. They were called *Chandala* or *Charal*. Dalit *Namasudra* of Bengal in the pre-partition days were mostly engaged in the primary sector of economy.ⁱ Their occupation was cultivation, fishing and boating. Before 1947 they were exploited by higher caste Brahman, *Mahajan* and landlords. In 19th century *Namasudra* and Muslim were underdeveloped people in East Bengal and they were lived peacefully. In order to rescue for the lower caste people, Harichand Thakur had come forward. By the movement of Harichand Thakur the *Chandal* people of Faridpur district acquired a new title called Matua. He established the Matua community and spread the Matua *Namasudra* movement in the Eastern Bengal. Gradually Matua followers increased different district of East Bengal like Khulna, Bagerhat, Barisal and Jessore. Harichand Thakur was born in 1812 in Safaldanga in Gopalganj subdivision of Faridpur district in East Bengal.ⁱⁱ In order to unify and develop this lower caste people, Harichand Thakur established a new community within *Namasudra* community are called Matua. Harichand's radicalism manifested in multiple areas including politics, religion, economy and education. He was critical of Buddhism, Vaishnavism, and Vedantism but arguably molded his religion, Matuaism, through a combination of Vaishnavism and Shaktism. He got *atma-darshan* or self-revelation. Immediately after this he started organizing his own sect on the basis of a simple non-ritualistic doctrine of bhakti.ⁱⁱⁱ Harichand Thakur had led a movement for removing the contemptible title *Chandal*. Later the inferior title of *Chandal* were removed through Matua movement. But all *Namasudra* of East Bengal were not belonging to Matua. Specially the *Namasudra* of Faridpur, Gopalganj, Khulna, Bagerhat, Barisal, Pirojpur and Jessore were included of Matua community. This Matua belt was marsh land area, around 6th months had remained under water every year. Here the communication system was very bad. Boat was the only way of communication. Harichand Thakur realized that education is the only way to rescue for this community. His son Guruchand Thakur had implemented his dream. Guruchand Thakur had greatly concern to spread education among the Matua. Guruchand Thakur stated that "I will not be worried whether you eat or fast, but I want your children to be educated first."^{iv} He was of firm belief that without education lower castes could not get any chance to become a part of administration. In order to spread education in these Matua regions, Guruchand Thakur discussed to Christian missionary. By the help of missionary C.S. Mead establish schools in these regions. As a result, the Matua community received education. Guruchand Thakur was so passionate that he founded around 1800 schools in East Bengal.^v The suffering period of Matua started from 1947. By the partition of India was largely affected the Matua community of East Bengal. The strengthen and unity of Matua was crippled by the partition. During the partition of India, the security issue of Matua was not thinking any leaders. After immediate partition that is called the first wave of migration, at this time mainly higher caste Hindu refugees came to India. Initially the Matua community did not want to leave East Bengal. When many devastating riots started in 1950 and then, Matua community were persecuted by the Muslim rioters. Then large bulk of Matua refugees came to India. This migration is called the second wave. They came to India empty hands because they left their property in East Bengal. These Matua refugees came to border districts of West Bengal, Assam and Tripura. The large numbers of Matua refugees had come to West Bengal. Initially Indian government managed rehabilitation for refugees. But during the second wave of migration,

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when large number of Matua refugees came to India then Indian government did not take proper rehabilitation management. Despite of these riots and violence those Matua were remained in East Bengal, they were brutally killing by the Pakistani army in 1971. By the help of *Razakar*, *Al-Badr* and *Al-Shams*, Pakistani army persecuted huge number of Matua. The year 1971 was great Hindu genocide. Matua girls and women were raped by the Pakistani army and *Razakar* during Bangladesh liberation war. Matua's houses were burnt. Approximately 10 million people fled to West Bengal. Indian government built many temporary camps for these refugees and gave foods. Although these camps were unhealthy and various diseases had outbreak like cholera, diarrhea and small pox. After nine months bloody war Bangladesh got independence. Here was constituted so called democratic, republic and secular Bangladesh. As a result, this independence of new Bangladesh in 1971 provided a short-lived hope for a secular state in which the rights of religious minorities would be protected.^{vi} As a result, majority of refugees went back new Bangladesh. They realized that they would live in peace and would get security in the new birth secular democratic Bangladesh. But their dream had broken after 5 years. The father of Bangladesh, Bangabandhu Sheikh Mujibur Rahaman was assassinated by the war criminals in 1975. Sheikh Mujibur did not discriminate between Hindu and Muslim. So, during the ruling period of Sheikh Mujibur the Matua community got protection. After the assassination of him the power of Bangladesh occupied by the war criminal and Islamic radicalized organizations. At this time, they omitted secular word of Bangladesh constitution and to make Islamic County. The declaration of Islam as the state religion in 1985 and the persecution of Hindus under certain regimes were some of the reasons for the migration of religious minorities.^{vii} At the same time the rise of *Jamaat-e-Islam* was a nightmare for the Matua community. These Islamic organizations tortured on Matua community. The Matua of Gopalganj, Faridpur, Bagerhat, Khulna and Barisal regions were worse condition. The house of Matuas were robbed and plundered. On the one hand the financial condition of Matua was not well on the other hand dacoity and stealing made them proletariats. Bangladesh police and army were inactive to prevent these anti-social activities. Relief from these atrocity environments many Matua families migrated to India. Fear of riots, political instability, Islamic fundamentalists and terrorism in Bangladesh inhuman attitude and activities of the political leaders, domination off religious fundamentalists of Bangladesh are the causes of Matua migration.^{viii} The main target of Islamic community of Bangladesh to occupied the land of Matua. For these purposes they demolished Matua temple and impeded to celebrate their religious festival. Intentionally they set fired to Matua houses, shops, and business institution. They plundered Matua's shops and houses. They could forcefully take the crops of Matua's field. The Matua decided to leave their land and home because of serious resource crunch and riots for lands between two community the Muslim and Matua. The Matua was poor peasants, who owned some land, increasingly felt the aggressive assertion of their Muslim employees and more powerful Muslim landed neighbors, who all wanted their land.^{ix} The Muslim peasant forcefully to enhance his land boundaries illegally by encroaching of the Matua's lands boundaries. The majoritarian consciously occupied the land of minority. They also theft fishes from the ponds and cattle from Matua houses.^x In public place Matua people are addressed the rebuke as a *Charal* by some radical Islamic people. Sometimes they said that Matua community have no right to live Bangladesh. They should be gone to India. These pathetic words and discriminatory behaviors disappointed the Matua community. When cricket tournaments took place between India and Pakistan or India and Bangladesh if India won the match, then radical Muslim destroyed Matua house and torture them.^{xi} During the time of Durga puja *Jamaat-e-Islam* targeted the Puja Mandapa. They chopped the head of goddess Durga's icon and broke the hand or eyes. They also set fired to the pandal. These were common events every year at the time of Durga Puja. In the *Jamaat-e-Islam* dominated areas, there were no permitted to play

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sound system during Durga puja. This radical Islamic organization severely hatred the Matua community. As a result, Matua community sold out their lands to their Muslim neighbor in a cheap rate. In order to get escape from these social disorders of Bangladesh many Matua family migrated West Bengal during 1980 to 1990. After independence of Bangladesh in 1971 there were no developed in Matua inhabited areas. Communication system, education, health and electricity were not reached in many villages. As a result, Matua community could not develop in Bangladesh. Comparatively those Matua people had come India before 1971 were got more opportunity for education and others facilities. For getting various developed facilities in West Bengal like education, health and jobs some family also migrated to India from Bangladesh. But this number is very little. Most of the Matua family came to India for religious persecution, tortures and this diaspora made them homeless, landless and refugees.^{xii} Political turnaround of Bangladesh also affected the Matua community. *Bangladesh Nationalist Party* (BNP) and *Bangladesh Awami League* and *Jatiya Party* are the main political parties of Bangladesh. BNP was supported by the radical Islamic party *Jamaat-e-Islam*. *Awami League* was religious tolerant and try to protect other religions. When *Awami League* come to power the Matua remain safe and protected. But when BNP would come to power, Matua had suffered by the radical Islamic organizations. This time Matua was deprived of government job and others facilities. They were remaining Bangladesh because of acute economic crisis. After 1971 serious food crisis started and also face light famine. They had not got any aid from government. The Matua day laborers faced difficulty; they did not get employment. Because the previous employers were Hindu landlords gradually these Hindu landlords had all migrated to India. As a result, a labor surplus market, the Muslim landlords preferred their co-religionists.^{xiii} This is not only reason for Matua migration. There are many reasons. Various religious violence occurred, they could not celebrate their religious festival and Islamic extremist attack in temples. When BNP comes to power large numbers of family would compel to illegally migrate to India. Many international issues affected on minority community. In 1992, when Babri Mosque was demolished in India then the Matua was victims by the violence. To take revenge *Jamaat-e-Islam* recklessly set fired to Matua houses and persecuted them and destructed temples. Between time of 1992 to 2000 large numbers of family fled to West Bengal. Later these families did not come back to Bangladesh. Every Matua people of Bangladesh has a fear in their mind that they will be attacked by the radical *Jamaat-e-Islam* in future. So many Matua families have prone to safe their children. For this some family send their teenage children in India, mainly the West Bengal. When these children would be established then their families would shift to India. In 2013, Delwar Hossain Sayeedi had given death sentence by the International Crimes Tribunal for war crimes committed during the Bangladesh liberation war 1971. Then *Jamaat-e-Islam* attacked Matua Namasudra villages. Islamic *Chatra Shibir* rampaged and vandalized several houses and temples of Hindu, at least 70 people were died at Banskhal in Bangladesh.^{xiv} This made frighten off Matua community. At this time some family migrated West Bengal. The Hindu population was 29.7% in 1947, 20% in 1970, 10.5% in 1991 and now less 8%. The Matua displacement and migration are an unending issue.

The Reconciliation of Matua Community

The Matua refugees were assimilated by the Matua culture. The Matua songs, *Hari-Sabha*, *Mahotsob* and *Baruni Mela* are the main Matua culture. These cultures helped to unified and grew endeavor among them. The Matua refugees scattered various districts of West Bengal after 1950. They had come to India in empty hands. Initially they had taken shelter in different refugees' camp. Cooper's camp, Dhubulia camp in Nadia and Bagjola camp, Ashoknagar camp in North 24 Parganas were important shelter for them. Later most of them scatter various place. They had lost their physical space and were to scatter across India. The environment of new

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country had totally unknown to them. They migrated from Bangladesh to India for getting security in their life. They had set up settling in underdeveloped and inhospitable areas of India. Mainly they selected their residency in marshes land and forest regions. At these places there were no school, college, hospital, road and markets. Large number of Matua refugee had settled in North 24 Parganas, Nadia and South 24 parganas. The both side of the train line from Bangaon to Dum Dum this Matua refugee had settled and live a risky and unhealthy environment. For rehabilitation this huge refugee, the government of India decided that these refugees were sent to outside west Bengal. Dandakaranya, Nainital, Uttar Pradesh and Andaman were rehabilitated them. Matua refugees also migrated to Assam and Tripura. Since their first arrival in March 1949, the Bengali settlers on the Andaman. The tangible musical instruments that the refugees carried along on their journeys, together with their intangible repertoires of songs, tunes, rhythms, religious knowledge, and oral traditions from East Bengal, were promptly deployed in the new home space of diasporic resettlement.^{xv} The shared experience of devotion embodied through participation in congregational singing and dancing created togetherness, belonging, and networks of emotional support. These helped the Matua devotees face the experience of loss, displacement, traumatic memories, tremendous isolation, and physical exhaustion, which figure prominently in the memories of the first decades after resettlement.^{xvi} Music was then much more than a relief from the boredom of dark village nights: as eloquently related in the opening narrative, it was rather a matter of life or death. Islands had to endure physical hardship and desolating isolation. Though after 1971 those who migrated to remain in West Bengal. The unity of Matua community and the greater Matua *Namasudra* movement were destroyed by the partition of India. Because they were scattering different parts of India. As a result, their social movement became feeble. At this time the Matua *Mahasanga* and Pramatha Ranjan Thakur appeared the field for unifying these Matua refugees. P.R. Thakur had bought a large area of land between Gobordanga and Chandpara and started the Thakur land Industries Ltd.^{xvii} This was the beginning of Thakurnagar. It was the first *Dalit* refugee colony of India. He distributed this land among the Matua refugees and Christian refugees. He also encouraged the Matua for recovered the marshy lands. At least 50000 Matua families had settled here. Those Matua refugees had been rehabilitating outside West Bengal which places were not congenial environment for inhabitation for Matua community. The formidable Dandakaranya was the warmest, dry, waterless and hilly area. As a result, many Matua refugees had died and others have been lived in misery. Those refugees had sent to Nainital initially they also suffered. Andaman was a successful refugee's rehabilitation project. Because this environment was marshy so the Matua people easily adapted this congenial milieu. As this Matua community had scattered various place of India so in order to unified this community again the All India Matua Mahasangha had taken an important role. After 1947 the head quarter of All India Matua Mahasangha was established in Thakurnagar. The Matua refugees were getting helped from AIMMS. The prominent members of AIMMS travelled the refugee colonies. Fraternity and mental strengthen and enthusiasm of the Matua people for adapting in new environment were encouraged by the AIMMS. They had set up *Matua Dol*(group) in every locality where are they live. Each *Matua Dol* is leaded by *Gosaims*. They congregated together in a place and they discussed about the Matua religion and philosophy. They abide by the 12th order of Harichand Thakur. They also celebrate Hari-Sabha in a particular night of a week especially in Wednesday. Hari-Sabha would celebrate in a Matua house on Wednesday evening. Matua song are sung, *Matams* are performed and finally distributed foods in a *Hari-Sabha*. Furthermore, *Mahotsab* was arranged in Matua locality. This religious and cultural function help to meet together Matua members and they happily cerebrate these occasions. As a result, they get opportunity to share their memories of East Bengal and by the way they mitigate their grief of migration. The orders of Harichand Thakur give them

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inspiration to their daily works. Harichand Thakur said that *Hate kam mukhe nam* (work with hands, sing god's praise with mouth).^{xviii} Harichand Thakur strongly advised for remaining in the family. He said that those who can become devotees and remain with family, is the greatest sage. Matua is a household sage or *Grihi Sannyasi*. His advices reflect on their daily works. Racism did not exist on Matua community. Equal right has privileged between men and women. Harichand Thakur emphasized to spread education among the Matua Community. So, they send their children to school. The literacy rate is high among Matua than others Namasudras community. This outspread Matua refugees were assimilated by this religious cultural function. A large number of Matua devotees had gathered and taking holy bathe during the time of birthday of Harichand Thakur at Orakandi in Bangladesh. This occasion is called *Baruni mela*. But those Matuas migrated to India they could not cross the international border for participated Orakandi for taking bathe during Baruni mela. After partition, In the North 24 parganas Thakurnagar gradually grew into a major cultural centre for these Dalits refugees. So Baruni mela has arranged at Thakur Nagar of North 24 Parganas for refugees Matua. And same holy pond *Kamana Sagar* had dug at Thakurnagar. Harichand Thakur was born in the month of April and the Bengali month *Chaitra*. So Baruni mela is held the month of *Chaitra* or in English month April. At this time a weeklong fair was held. However, Thakurnagar has become the epicenter of Matua assimilation. This *Baruni mela* is held at the same time both Bangladesh and India. Those Matua people had scattered all over the India, these Matua's different branches of different parts of the county come to the fair at Thakurnagar at the time of *Baruni mela*. Many Matua Dal or unit come during Baruni mela at Thakurnagar. Every Matua unit is maintained by *Dalopati* or head of the group and he remained at the front of this unit. Various instrument has in every Matua unit like *Danka, Kanshi, Singa*, red triangular flags or *Nisan, Jhumur* and so on.^{xix} This Matua devotees were chanting of Jai Harichand, Jai Guruchand and *Haribol* reverberate the entire mela. Male, female and children are present on *Matua Dal*. Every year during the time of *Baruni mela* millions of Matua devotees came to this holy place. Each *Matua Dol* entered the Thakurbari by performing dance ceaselessly, is called *Matam* or lunatic dance and chanting *Hari Bol*. After entering the *Thakurbari* they bathe in the holy pond of *Kamana Sagar* and prayer their desires before Harichand and Guruchand Thakur. They would carry off some holy water in a bottle for home. This sacred water sprinkled their houses, on the head of family members and crops. Completed this bathe they visited the fair. *Baruni mela* is a meeting place for Matua refugee devotees. Here they met the pre-familiar people of Bangladesh. After 1947 because of the rehabilitation process the Matua people have been scattered various parts of the country and in this fair, they can find out their neighbors of their own village of Bangladesh.^{xx} Then these Matua units stay near Matua houses beside Thakurnagar and here they performed *Mahotsob*. Thakurnagar village waits for this Baruni mela and keep arrangements for food and house for the Matua for entire week of fair. They discussed many previous incidents of Bangladesh with others people. They memorize their old memory of old language and place and refresh the bonds of their relationship by this annual gathering festival. Thus, Matua refugees are assimilated into a place every year. By this grand reconciliation of Matua community, they mitigated their mental grief and sufferings for the loss of their land, house and relatives because of partition. After participation in *Baruni Mela* the Matua devotees went back to their own locality. Then they organized the festival of their own locality, is called *Chhaya Baruni* or Sakha Baruni. Matua song is called Hari Sangeet. It an important cultural and devotional element that help to assimilate to Matua refugees. The first book on Matua music *Sri Sri Mahasankirtan* was written by Tarak Chandra Sarkar. These songs were created on the life of Harichand and Guruchand Thakur. These devotional songs are encouraging them in household life. These songs are sung with many people. These songs are sung after evening because the villagers worked in days so after finishing their works, they sing

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these songs. During the evening time this song is performed in Matua locality. By this song they arise devotion to their heart and fraternity for increasing bonding among Matua. Congregational singing and dancing are the highest states of ecstatic devotion to Matua people. This Matua song is called *Hari Sangit*. These songs are sung by both men and women. It is great achievement of Matua community that their women are free from social restrictions. The women of Matua community have equaled right as men. They participated works parallel with men. Women are getting opportunity for education and early marriage prohibited, widow remarriage is permitted in this community. Harichand Thakur emphasized on emancipation of women. So, to devotion to mother and take care mother and respect to wife has introduced the Matua community. He emphasized on monogamy marriage. He firmly announced that who marriage a single woman, is the true ascetic.^{xxi} The other element of Matua refugees is *Hari-Shaba* and *Mahotsob*. *Hari-Sabha* is arranged mainly Wednesday night of every week. That family arranged Hari-Sabha he invited his locality people. Then *Matua Dol* came to that house after evening and approximately 100 people come. Initially they performed *Matam* and discussed the advices of Harichand Thakur. Later they are sung Hari Sangeets. At the end of *Hari Sabha* foods distribution among devotees. This assimilation gave time for discussion about existence in new country and how to established their children. Another cultural festival of Matua community is *Mahotsob*. It also helped to assimilate them. It is celebrated in a day. Outside Matua groups come in the processions dancing and playing instruments like *Danka*, *Kanshor*, *Singa* and *kartal*. They perform *Matam* or lunatic dance and lost ecstasy while entering the *Mahotsob* and chanting *Haribol*, *jai Harichand*, *jai Guruchand* and *Jai Shanti Satyabhama*. At the time of *Matam* water was given in courtyards. They performed *Matam* in this water and mud and they smear mud in their body. This is called *Kadamati*. Later they take bathe and *Hari- sangeet* were sung before deity of Hari Guruchand icons. Finally, *Prasad* is distributed among the masses. *Kirtan* is an important religious function of Matuas. *Matua Kabigan*, *Harijatrya* and *Palagan* are also another assimilation festival. These cultural and religious festivals are unified the Matua refugees in the alien land.

Role of Matua in Bengal Politics

Matua community has played an important role of Bengal's politics. They become a large vote bank of political parties. They are becoming a deciding factor of winning seats of Nadia and North 24 Parganas districts. As majority of Matuas have been live in these two districts. They have also dominated others reserved seats of schedule caste. So, all the political parties wanted to draw their support. While the *Namasudra* refugees in West Bengal after Partition lost their physical space and their spatial capacity to organize articulate protests, they were also imagining a new spiritual space where they could reinvent their identity, more in a social sense than political.^{xxii} After partition of India, the first Matua political leader was P.R. Thakur. He remained loyal to the Congress during the trying days of partition which he accepted after getting a solemn pledge from Gandhi and Nehru that rehabilitation of the SCs would be taken care of if they had to migrate from East Pakistan.^{xxiii} After partition he came to Kolkata. By his own initiative he established a colony for *Namasudras* refugees and he joined to Congress government in order to rehabilitate Matua *Namasudra* refugees. In December 1947, he bought a piece of land in north 24-Parganas between Chandpara and Gobordanga and started the Thakur Land Industries Ltd, with himself as the Chair of the seven Member Board of Directors. This was the beginning of Thakurnagar, the first Dalit refugee colony in India started by an independent Dalit initiative. It was a small hamlet near the Indo-Pakistan border, about 63 kilometers away from Calcutta. Within the next ten years around this place, in lands reclaimed from the marshy tracts, more than 50 thousand Dalit refugees settled down. In 1951 Thakur received a government grant of Rs.80,000 to develop the infrastructure of the colony, including

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roads and supply of drinking water, and each family received Rs. 200 and two bundles of corrugated iron for building houses. Many of the *Namasudra* peasants who migrated after 1950 and continued to migrate thereafter settled in the two border districts of North 24-Parganas and Nadia, where more than half of the *Namasudra* population in West Bengal now live. Thakurnagar grew into a major cultural centre for these Dalit refugees.^{xxiv} He had supported the Congress plan to rehabilitate refugees outside West Bengal. At this time CPIM opposed this plan, they started movement for rehabilitating refugees within Bengal. Thus, CPIM had gained support of *Namasudras*. Refugees' movement, Land reform, land distributed among landless and others refugee's issues helped CPIM to win *Bidhan Sabha* election of 1977. In 1957-58 central government had taken a plan of Orissa, Madhya Pradesh, Maharashtra and Andhra Pradesh 80 square miles areas project is named Dandakaranya rehabilitation plan. With the help of Leftist organization, Matua started a strong movement against this rehabilitation plan. It had become a strong masses movement. United Central Refugee Council or UCRC had supported *Namasudras* refugees and started a strong mass movement for rehabilitation refugees. Initially the *Namasudras* leader Jogendra Nath Mondal was a prominent person of UCRC. Later he resigned from UCRC and established a unique and an apolitical *Namasudras* organization *Purba Bharat Bastuhara Sangsad* or PBBS. Later PBBS and SBBS or *Sara Banga Bastuhara Samiti* jointly organized strong refugees' movement. But the Congress government did not change their plan. The government had declared that those refugees' reluctance to go Dandakaranya whose *Cash Dole* would be stopped. As a result, *Namasudras* refugees started hunger strike in Bagjola camp and it was quickly spreading others camps. They had given slogans 'give blood, give life nevertheless we will not leave Bengal'. P. R. Thakur contested an independent candidate of 1952 election from Gaighata and Hanskhali. He had not won. Because at this time *Matuas Namasudras* people could not create the financial and political conditions to contest the election. Then they were not majority at these areas. Basically residence, citizenship and right of vote had not gain this refugees people. P.R Thakur met with Monindranath Biswas, Mahananada Halder and Jogendra Nath Mondal and he requested them to join the Congress for the interest of *Namasudras* refugees. He requested *Namasudras* refugees for remaining loyal and believed to the Congress government rehabilitation policy. P.R. Thakur had won from Haringhata assembly in 1957 legislative assembly election and won from Hanskhali assembly in 1962. He proposed West Bengal state government for properly reserved schedule caste in the field of education and jobs. The number of *Namasudras* in West Bengal increased from 11.1 percent in 1972 to 16.1 percent in 1991. The Congress had got great support from schedule caste reserved seats of west Bengal legislative assembly election in 1972. Matua leader Apurba Lal Majumdar won from Bagdah assembly and he was selected Speaker of West Bengal legislative assembly. After 1972 Matua *Namasudras* gradually reduced their support to the Congress. Refugees' rehabilitation crisis, food crisis and other's fault of the Congress government were exposed by CPIM. The leftist party had given manifestations to distribute land among landless, land reform, solve refugee's rehabilitation problem, control market price and establish the right of cultivators and labors. They also promised to return refugees from Dandakaranya if they would come to power. As a result, Matua *Namasudras* people eagerly supported CPIM in legislative assembly election of West Bengal in 1977 and CPIM came to power. After 1977 election *Namasudras* refugees decided to return Bengal from Dandakaranya as CPIM come power and they hoped, they would be rehabilitated within Bengal. About 30-40 thousand refugees came from Dandakaranya to Marichjhapi island Sundarbans in south 24 Parganas by the leadership of Satish Chandra Mondal and Rai Haran Barai in 1978.^{xxv} Within a year of coming to power, the leftist government turned its back on the policy and norms of the previous refugees' movement and brutally forced Dalit *Namasudras* refugees to return to Dandakaranya. The CPIM was not willing to tolerate such settlement. It was determined to

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expel them from Marichjhapi on several grounds. To the West Bengal government, the settlers of Marichjhapi were unauthorized occupiers since they violated the forest act as Marichjhapi is situated in the Sundarban Reserve Forest.^{xxvi} Conservation of the Sundarbans, the value of Royal Bengal tiger habitat and life was more important to the newly established leftist gentlemen leadership than the value of the lives of Marginal *Namasudras* refugees. Marichjhapi was in fact a betrayal of the ruling elite towards the marginalized poor *Namasudras*.^{xxvii} The other reason was the fear of Jyoti Basu that if these refugees were allowed to continue at Marichjhapi, then all the refugees of Dandakaranya would come to West Bengal.^{xxviii} It seemed that they were midnight unwanted children of government. On the other hand, after coming to power, CPIM initiated various reform plans to maintain their political dominance over refugees which attracted the attention of the new generation of Matua *Namasudras* economically. In addition to they had taken new projects to rehabilitation refugees, recognition forcible occupation colonies, distributed Patta, assumption surplus and anonymous land, help to cultivator and laborers, to pardon due loan, give easy loans and increase minimum wage. Operation Barga in 1978 was an important project, by this project land distributed among landless farmers. They also gave financial help to schedule caste. P.R. Thakur had resigned from active politics. Then he reorganized the Matua Mahasangha. In 1986 Matua Mahasangha became an apolitical social religious organization. Thus, Matua Mahasangha emerges as a pressure group and a Dalit social religious organization consisting of *Namasudras* and other lower castes. After the death of P.R. Thakur his widow Boromaa Binapani Devi was the head of Matua Mahasangha. At present Matua vote is a vital factor. The Matua *Namasudras* formed West Bengal's second largest scheduled caste population. The *Namasudras* constituted 17.4 percent of the total Schedule caste population. The Matua population is estimated at 50 million of which about 30 million is live in India. Approximately 15 million of Matua people is listed as voters. The numerous Matua votes as a deciding factor of winning 30 seats of state legislative assembly and can have a significant impact on another 50 seats of West Bengal. They have a problem of getting the full citizenship rights. Political parties used this weak point of Matua. At present promises of citizenship rights for Matua refugees have been seen as the magic wand to secure the Matuas political support. The central government had passed the citizenship amendment Act 2003, which denied citizenship to those refugees migrated after 1971. The Matua Mahasangha organized huge protests against this Act and to urge the withdrawal of the law. Since 2009 various leaders of different political parties have visited the week-long annual gathering of *Baruni Mela* in Thakurnagar in North 24 Parganas. They want to acquire the sympathy of Matua population. TMC leader Mamta Banerjee has been able to secure Matua sympathy for generous donations and promised to give land rights and official recognition. The support of Matuas were helped to TMC party to win the 2011 assembly election. BJP has already used the refugees card pushing through the citizenship Act in Parliament to meet the long-standing demand for permanent citizenship for Matua refugees. BJP has passed National Register of Citizens (NRC) in parliament on 10th December in 2019. But this NRC issues grew fear of the Matua. Because the NRC experienced in Assam, which saw Bengali Hindu refugees being predominately excluded from voter lists and they were sent to detention camps. In order to remove this fear BJP amended the citizenship Act 1955. This amendment was passed in Parliament on December 11, 2019(CAA). The Citizenship Amendment Act, 2019 enables refugees of six minority communities to apply for Indian citizenship. As a result, large numbers of Matua have been voted BJP for acquiring permanent citizenship rights. At present Matua Votes are divided between BJP and TMC. The Matua Mahasangha has been able to be breaking the silence issue around the invisible caste question about West Bengal politics. As a result, they have been able to change the pattern of the erstwhile upper caste and urban centered political character of the state. The Matua Mahasangha today has more than seven million

10th International CEO Communication, Economics, Organization & Social Sciences Congress followers capable of influencing the electoral results in about 74 constituencies. What followed in the state politics vis-à-vis the Matua community was what Gopal Guru (2010) calls “a politics of compensation.”^{xxix} However, the Matua community has reached politically higher position. They have gradually been changed their socio-economic condition.

Conclusion

The aim of Bangladeshi majoritarianism is to occupy the land of minority people. Actually, it is a conflict for land grab. The majoritarian demonstrated threat in various ways toward their neighbor minority Hindu people so that they could buy their land. After 1971, Matua community migrated to West Bengal mainly due to religious persecution, insecurity and political instability in Bangladesh. Although there was no huge migration during this time but Matua people has been gradually migrated to India. After 1971, those Matua people came to India, they did not get government rehabilitation. They took shelter their relative house and managed to living place. Then they were engaging like cultivation, masons, day laborers. Educated refugees were engaging teaching tuition and some practice *Chandshi* (village doctor) doctor outside West Bengal. Always they are struggling for survive. They were to wait long time for getting voter card, ration card and pan cards. Sometimes they expense a lot of money to get all these documents via the brokers. There are many refugees Matua those who have been living long time India but they did not get voter card. Many of them died without giving vote. As a result, many of them deprived of government emolument. However, many of them has become self-establishment. According to the census of India 2011, the literacy rate among the *Namasudras* in West Bengal is 79.53 percent, it is above the state average of 77.1 percent.^{xxx} Many of them achieved higher education and white-collar occupation. On the other hand, millions of Matuas has been remained stateless refugees, living inhospitable environment, struggling with terrible poverty and fearing deportation as illegal immigrants. The Matuas have been able to united through culturally and socially. Cultural and spiritual festivals had made them strongly united. They are not communal. There is no religious bigotry among them. They did not follow Brahmanical rituals. They have own spiritual rituals. At present they have made a good place in the field of politics. They have been sent representatives both state Legislative Assembly (Bidhan Sabha) and House of the People (Lok Sabha) and their problems, suffering and demands are presented Parliament by these representatives. In future they will become a model among the scheduled castes.

References

- ¹ . Rup Kumar Barman, *Partition of India and Its Impact on the Scheduled Castes of Bengal*, (New Delhi: Abhijeet Publications, 2012), 169.
- ¹ . Mahitosh Mandal, “Dalit Resistance during the Bengal Renaissance: Five Anti-Caste Thinkers from Colonial Bengal, India”, *A Global Journal on Social Exclusion*, April 2022, Vol. 3, No. 1), 14.
- ¹ . Sekhar Bandyopadhyay, *Caste, Protest and Identity in Colonial India, The Namasudras of Bengal 1872-1947* (Church Road, Richmond Surrey, TW9 2QA: Curzon Press, 1997), 36.
- ¹ . Rup Kumar Barman, *Partition of India and Its Impact on the Scheduled Castes of Bengal*, (New Delhi: Abhijeet Publications, 2012), 83.
- ¹ . Kalyan Sinha Roy, Hari Buddha and Namasudra Movement in Bengal, in Biswajit Chatterjee and Debi Chatterjee (eds.), *Dalit Lives and Dalit Visions in Eastern India* (Kolkata: Centre for Rural Resources, 2007), 41.
- ¹ . Carola Erika Lorea, *Religion, Caste and Displacement: The Matua Community* (USA: Oxford University press, 2020), 11.
- ¹ . Carola Erika Lorea, *Religion, Caste and Displacement: The Matua Community* (USA: Oxford University press, 2020), 14.
- ¹ . Pranati Datta, *Immigration from Bangladesh to West Bengal* (Kolkata-700108: Population Studies Unit Indian Statistical Institute, 2009), 5.

10th International CEO Communication, Economics, Organization & Social Sciences Congress

¹ . Sekhar Bandyopadhyay and Anasua Basu Ray Chaudhury, *In Search of Space, The Scheduled Caste Movement in West Bengal after Partition* (Sector-III, Salt Lake City, Kolkata-700106: Mahanirban Calcutta Research Group, February 2014), 5.

¹ . This story is told by Sudipto Mondal, 25 January 2021, North 24 Parganas, WB. <https://photos.app.goo.gl/ro8AVwR4SEJSfHqK8>

¹ . This story is told by Mr. Sanjoy Mondal 23 April 2021, Gabordanga, North 24 Parganas, WB. <https://photos.app.goo.gl/7ft5qptru72R81qQA>

¹ . This story is told by Nirmal Kanta Raha, 18 April 2021, Bagdah, North 24 Parganas, WB. <https://photos.app.goo.gl/7kZRzbLFkM9gY2jL9>

¹ . Sekhar Bandyopadhyay and Anasua Basu Ray Chaudhury, *In Search of Space, The Scheduled Caste Movement in West Bengal after Partition* (Sector-III, Salt Lake City, Kolkata-700106: Mahanirban Calcutta Research Group, February 2014), 5.

¹ . Times of India, May 14, 2013, 21:49 IST. <https://m.timesofindia.com/world/south-asia/jamaat-leader-held-for-inciting-anti-hindus-attacks-in-bangladesh/articleshow/18975225.cms>

¹ . Carola Erika Lorea, “An Untouchable Kirtan: Sonic Liberation on the Andaman Islands” *University of California Press*, (2003), 107.

¹ . Carola Erika Lorea, “An Untouchable Kirtan: Sonic Liberation on the Andaman Islands” *University of California Press*, (2003), 108.

¹ . Sekhar Bandyopadhyay and Anasua Basu Ray Chaudhury, *In Search of Space, The Scheduled Caste Movement in West Bengal after Partition* (Sector-III, Salt Lake City, Kolkata-700106: Mahanirban Calcutta Research Group, February 2014), 13.

¹ . Mahitosh Mandal, “Dalit Resistance during the Bengal Renaissance: Five Anti-Caste Thinkers from Colonial Bengal, India”, *A Global Journal on Social Exclusion*, April 2022, Vol. 3, No. 1), 15.

¹ . Manosanta Biswas, *Caste and socio-cultural mobility in West Bengal: A hybrid cultural Elocution of Matua reforms movement. Contemporary Voice of Dalit* (Kolkata: SAGE Publications India Pvt Ltd, 2018), 236.

¹ . Manosanta Biswas, *Caste and socio-cultural mobility in West Bengal: A hybrid cultural Elocution of Matua reforms movement. Contemporary Voice of Dalit* (Kolkata: SAGE Publications India Pvt Ltd, 2018), 236.

¹ . Kapil Krishna Thakur, *Harichand Thakur's Matua Movement and Dalit Awakening in Bengal* (Kolkata: MD Publications Pvt Ltd, Contemporary Voice of Dalit vol. 2, No. 1, 2009), 41.

¹ . Sekhar Bandyopadhyay Anasua Basu Ray Chaudhury, *In Search of Space The Scheduled Caste Movement in West Bengal after Partition*, (Mahanirban Calcutta Research Group, February 2014), 12.

¹ . Sekhar Bandyopadhyay Anasua Basu Ray Chaudhury, *Caste and Partition in Bengal, The story of Dalit Refugees 1946-1961*, (Great Clarendon Street, Oxford, OX2 6DP, United Kingdom, 2022), 153.

¹ . Sekhar Bandyopadhyay Anasua Basu Ray Chaudhury, *In Search of Space The Scheduled Caste Movement in West Bengal after Partition*, (Mahanirban Calcutta Research Group, February 2014), 12.

¹ . Manosanta Biswas, *Unabingsha-O- Bingsha Shatake Banglar Matua Andolon: Dharmiya, Samajik-O-Rajnaitik Prekshapat* (Kolkata: Calcutta University History Department, September 2013), 283.

¹ . Rup Kumar Barman, *Partition of India and Its Impact on the Scheduled Castes of Bengal*, (New Delhi: Abhijeet Publications, 2012), 193.

¹ . Manosanta Biswas, *Unabingsha-O- Bingsha Shatake Banglar Matua Andolon: Dharmiya, Samajik-O-Rajnaitik Prekshapat* (Kolkata: Calcutta University History Department, September 2013), 285.

¹ . Dilip Halder, *Atrocities on Dalits Since The Partition of Bengal* (New Delhi: Mittal Publication 2008), 40.

¹ . Praskanva Sinharay , “A New Politics of Caste”, *Economic and Political Weekly*, Vol. 47, NO. 34, (August 25, 2012), 27.

¹ . Carola Erika Lorea, *Religion, Caste and Displacement: The Matua Community* (USA: Oxford University press, 2020), 17.



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**The Dynamics of Local-Global Interaction in Early Modern Historical
Contexts**

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ABSTRACT

Here in this paper, I tried to explore the complex interface between local, regional, and supra-regional/global dynamics in early modern history, challenging traditional spatial hierarchies. By adopting a multilevel analytical framework, this study investigates how local and regional actors navigated, influenced, and were shaped by global processes.

Through a comparative analysis of (specific regions/case studies), this paper reveals the intricate web of connections and interactions between micro-level localities and macro-level global networks. It argues that early modern history was characterized by a dynamic interplay between scales, where local agency and regional specificity played crucial roles in shaping global outcomes.

By transcending traditional spatial boundaries, this study also contributes to a more nuanced understanding of early modern historical processes, highlighting the reciprocity between local, regional, and global forces. This paper also makes an attempt to analyze and contextualize the question – ‘How best do we broach the interface between ‘the local and regional’ and ‘the supra- regional, at times even global’ dynamic of early modern history?’.

Keywords: Early Modern History, Local-Regional-Global Dynamics, Multilevel Analysis, Globalization, Regionalization.

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Sanjay Subrahmanyam's seminal article, "*Connected Histories: Notes towards a Reconfiguration of Early Modern Eurasia*," presents a compelling critique of Victor Lieberman's "Strange Parallels." Subrahmanyam challenges Lieberman's Eurocentric perspective, highlighting the need for a more inclusive and connected understanding of early modern history. Sanjay Subrahmanyam in his article '*Connected Histories: Notes towards a Reconfiguration of Early Modern Eurasia*' writes that "a good part of the dynamic in early modern history was provided by the interface between the local and regional (which we may call the 'micro'-level), and the supra-regional, at times even global (what we may term the 'macro'-level)"^{xxxix}

Lieberman's "Strange Parallels" aims to recreate the history of the globe in the second millennium CE from a Southeast Asian perspective. However, Subrahmanyam argues that Lieberman's approach remains entrenched in Eurocentric assumptions. The Western European trajectory is posited as the default path to modernity, marginalizing non-European experiences.

In reaction to Victor Lieberman's concept, Sanjay Subrahmanyam outlined one of the early critiques of Strange Parallels. Subrahmanyam's criticism was broad in scope. His criticism was that Lieberman's perspective remained essentially Eurocentric, in the sense that the Western European trajectory remained the default road to modernity. A second criticism was that Lieberman did not include South Asia in his Endeavour to recreate the history of the globe in the second century C.E. from the perspective of Southeast Asia in his initial plan. Subrahmanyam's final criticism was addressed at Lieberman's preference for "certain chosen national entities" in that prospectus, which he subsequently tacitly reified by considering their nature as fixed and immutable. Ultimately, in response to Lieberman's "highly materialist conception," Subrahmanyam envisioned the broad outlines of an alternate conception of early modern world history, in which the movement of people and ideas across national boundaries would aid in revealing the "global and connected character of the early modern period."^{xxxix}

According to Subrahmanyam, the concept of "connected histories" is a required correction to at least three main historiographic tendencies. First, it tries to move away from comparative history, which Subrahmanyam sees as an extremely simple, isolated, and "mechanistic" framework for writing global histories. Second, Subrahmanyam's linked history technique aims to broaden the geographic and thematic scope of the term "early modern period." He contends that the cultures that existed in the Old and New Worlds previous to European imperial rule were participants in a nascent modernity that occurred naturally and chaotically on a global scale, rather from being created by European nations. Finally, Subrahmanyam uses the concept of connected histories to oppose what he sees as a veiled type of "exoticism" at work in post-colonial studies. Subrahmanyam, never one to back down from a scholarly debate, singles out the Subaltern School for "seeing the Indian position as one of mostly responding and adapting to European endeavours."^{xxxix}

In his article '*Connected Histories: Notes towards a Reconfiguration of Early Modern Eurasia*' Sanjay Subrahmanyam attempts to argue In modern terminology, how may the local and particular have interacted with the supralocal. Subrahmanyam writes, 'Imagine the sixteenth



10th International CEO Communication, Economics, Organization & Social Sciences Congress and seventeenth century in the Bay of Bengal. Although not a closed sea, the Bay's littoral sections are a significantly more tightly knit unit of interaction throughout this time period than the Indian Ocean as a whole. Within this zone, we can see the development of commercial exchange networks (trade between the Coromandel coast of south-eastern India and Bengal, as well as Burma, Mergui, and the Malay coast), as well as a significant nexus through which military elites, courtiers, and religious specialists crossed the Bay on a regular basis. However, reading Lieberman's description of Siam, one is left with little or no sense of how this Bay of Bengal linkage meant for polities like Ayutthaya or Arakan. After all, Shah Sulaiman's ambassador, Muhammad Rabi', makes it plain in his *Safina-yiSulaimani*, published in the 1680s, that the Persian influence in Ayutthaya was played out through the economic networks of the Bay of Bengal. According to the conventional chronicles, the Arakan monarch Thirithudhamma frequently conducted his diplomatic communication in Persian, and he bragged in his letters that his strength stemmed not only from Firangis (Franks, here Portuguese and Luso-Asians), but also Telangas (viz. troops from the Deccan). It's almost as if a pair of blinders forces Southeast Asian historians to write about agriculture on the one hand and European trade on the other, as if all foreign interaction in the early modern world was restricted to relations with Europeans. Even while Southeast Asianists may fear that this is the thin end of a redesigned 'Greater India' concept, it makes little sense to me to speak about mainland Southeast Asia in this era as if it were separated from the Indian world.^{'xxxiv}

In this context, Subramanyam uses another example from further west. In his article '*Connected Histories: Notes towards a Reconfiguration of Early Modern Eurasia*' he writes "During the course of a campaign in Afghanistan in mid-1581—that is in the year 989 of the Hegiran calendar which is followed by most Muslims the world over—the Mughal ruler Jalal al-Din Muhammad Akbar began quizzing the Portuguese Jesuit Antonio Monserrate (then on a mission to his court) on matters pertaining to the millennium, that is about 'the Last Judgement, whether Christ would be the Judge, and when it would occur'. The underlying purpose was complex, and surely lay in part in Akbar's desire to tease out both the theological differences and the commonalities between his own heterodox brand of Islam and the Jesuit version of Christianity. Monserrate, himself a strong believer in portents like some other influential members of his order, reports in his *MongoliceaeLegationisCommentarius* that he stated that the Day of Judgement was a divine mystery, which would, however, be known by certain signs, namely 'wars and rebellions, the fall of kingdoms and nations, the invasion, devastation and conquest of nation by nation and kingdom by kingdom: and these things we see happening very frequently in our time'. The hint in the last phrase was rather broad, and must have found an echo in a court where millenarian verses attributed to Nasir-i Khusrau and others, enjoyed wide circulation. Later, Akbar is reported to have asked if Muhammad was mentioned in the Gospel, to which Monserrate responded by insisting that he was not, being a false prophet. Monserrate now writes that Akbar wondered aloud, somewhat disingenuously, 'Surely Muhammad cannot be he who is to appear at the end of the world as the adversary of all mankind (that is he whom the Musalmans calls Dijal)', the reference being to the idea of the *masih al-dajjal*, the Anti-Christ who appears in some Islamic legends as riding on an ass at the end of time.'^{'xxxv}

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When situated in its larger regional and supra-regional perspective, this seemingly minor episode begins to take on significance. Subramanyam wished to emphasize the notion of millenarian conjuncture through this occurrence, in other words, a set of apocalyptic beliefs and worries shared by both Portuguese mariners and the South Asian merchants and courtiers with whom they engaged. During this time, fears about portents, omens, and signs, as well as currencies and gems, traveled between Europe and the Indian Ocean. Subramanyam goes on explaining that

‘For a millenarian conjuncture operated throughout most of the Old World in the sixteenth century, providing the setting for talks such as those between Akbar and Monserrate. It was a period when many Muslims in southern and western Asia, as well as North Africa, were waiting for signs that the end of the world was near, and when the Most Catholic Monarch, Philip II of Spain, wrote gloomily: ‘If this is not the end of the world, I think we must be very close to it; and, please God, let it be the end of the whole world, and not just the end of Christendom.’ We prefer to focus on such phenomena as international bullion movements and their influence, weapons and the so-called “Military Revolution,” or the circulation of renegades and mercenaries during the pinnacle of supra-local connections in the early modern world. However, in that society, ideas and mental constructs also flowed across political boundaries, allowing us to realize that we are dealing with related histories rather than distinct and comparable ones, even if they found special local expression. The fact that Akbar and Monserrate could and did talk about the coming End of the World (or qiyamat, from an Indo-Persian perspective) illustrates a number of factors. First, it emphasizes the prominent presence of European Catholic missionary orders, which, aided in part by the Counter-Reformation, made their way to Asian and African courts and thus were a part of early modern Eurasia’s circulation, alongside mercenaries, renegades, diplomats, Buddhist monks, and Sufis. At the start of the seventeenth century, Augustinians and Jesuits could be found in both Burma and Cambodia, and they give unique insights into local history (particularly elite politics) at the period. Any discussion of early modern state-building activity that ignores this aspect of elite circulation ignores one of the period’s central themes: a shift in the type and magnitude of elite migration across political borders. Furthermore, the conversation between Akbar and Monserrate demonstrates the permeability of what are often assumed to be closed ‘cultural zones,’ as well as the existence of vocabularies that cut across local religious traditions, in this case, Akbar’s heterodox Sunni-inflected Islam and Monserrate’s zealous Counter-Reformation Christianity. These languages were partly ‘secular’ (in the sense that they crossed sectarian lines) and depended on a corpus of tale and myth dating back to the Middle Ages.’^{xxxvi} Hence, the discussion of Messianism symbolizes one of the numerous intellectual currents present in Akbar’s court at this critical juncture.

As per Subramanyam the idea of “early modern” is not direct, but rather collective. The heritage of Genghis Khan and Timor, anti-reform, and ambitions for conversion overseas, the so-called “Voyages of Discovery,” then became the modified sphere of global interaction. Subramanyam writes that ‘indeed, recent research has shown that millenarian aspirations aided Columbus’ westward voyage, and that there may even have been a curious—and ironic—parallel between that millenarianism and the apocalyptic vision of some of the indigenous Americans, the

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Spaniards encountered in the aftermath of 1492. On the approach of the millennium, it now appears that Columbus was significantly inspired by Franciscan apocalyptic philosophy, to the point that he requested to be buried in the Franciscan habit. Thus, historians now believe that the Great Discoveries to the West, long regarded as heralding the Birth of Modernity and the emergence of a truly universal sensibility, were the result of an embarrassingly "mediaeval" view of the world, which had as much in common with Joachim of Fiore as with Copernicus. This strange collective mental realm included not just Columbus, but also the Portuguese ruler Dom Manuel and several of his major ideologues and agents, such as Duarte Galvao and Afonso de Albuquerque.^{'xxxvii}

Subramanyam traced the historical rhythms of the northern and southern shores of the early modern Mediterranean were linked together not only by climate and geography, economic forces and political rivalries, but also by certain common cultural traits, including a shared sense of millenarian expectancy, by quoting Ottomanist historian Cornell Fleischer's forthcoming work *A Mediterranean Apocalypse*. Subramanyam Comments, "Drawing on primary materials from the Ottoman domains, and linking them to an array of secondary millenarian materials from the European Mediterranean, ranging from writings on Savonarola in Florence, to Carlo Ginzburg's celebrated miller, to the millenarian expectations at the court of Philip II of Spain set out by Richard Kagan and others, Fleischer skillfully suggests that the entire Mediterranean was the space over which a millenarian conjuncture operated in the Age of Charles V and Philip II. While this is undoubtedly valid, I shall argue that it may be equally fruitful to see Ottoman millenarianism in relation to similar processes further east (notably in Safavid Iran, Mughal India and the Deccan), while at the same time suggesting that, in the far west of Eurasia, Portugal, too, should be brought into the picture for a rounded understanding of the Mediterranean."^{xxxviii}

Subramanyam emphasized on the issue of mujaddid intervention in the context of emphasizing on the concept of 'Connected History.' 'Throughout the year 1000 A.H., expectations in the Ottoman Empire, Iran, and North Africa were not consistently apocalyptic. Rather, they speculated optimistically about the possibility of a re-ordering of the known world through the intercession of a mujaddid (or 'Renewer'); as a result, at least one celebrated religious reformer of the late sixteenth and early seventeenth centuries in India, Shaikh Ahmad Sirhindi of the Naqshbandi Sufi order, assumed the title of mujaddid-i alf-i sjini ('Renewer of the The concept of the mujaddid was similar to, but not identical to, another belief with ancient roots in Islamic history: that of the Imam Mahdi, the Concealed or Expected One, who would appear to change the Islamic world. It is believed that the Day of Judgement would begin once the Mahdi's intervention had brought all mankind to Islam. It has been said, albeit incorrectly, that Shi'as are the only ones who believe in the Mahdi. Even if certain orthodox Sunnis have reasoned in a similar manner at various times, this appears to be erroneous. Consider Morocco in the mid-sixteenth century, when the king Muhammad al-Shaikh, the second of the Sa'di dynasty of Sayyids from the southern Atlas, began referring to himself as 'al-Mahdi.' In Indian context Selim is characterised as the mujaddid of the period, as well as a World Conqueror, in a subsequent retrospective narrative from the 1550s by Lutfi Pasha, titled *Tawdrik Ji-i Al-i 'Osmdn*. Lutfi Pasha quotes two letters addressed to Selim, apparently written by Sunni 'ulama

10th International CEO Communication, Economics, Organization & Social Sciences Congress from Transoxania, in which he is referred to as mahdi-yidkhir-i zamdn ('Last Messiah of the Age') and qudrat-i ildhi ('Divine Force') with apparent acceptance. Thus the lexicon used by Selim and Suleyman's entourages must be viewed in the perspective of events to their east, particularly their long-standing conflict with the Safavids, a dynasty with rather overt messianistic pretensions.^{xxxix}

As a result, Subramanyam concluded that ' Millerarianism was a force to be reckoned with, as well as a formidable and complicated political strategy, in the sixteenth century, not just in the Mediterranean but also further east. It was used to construct a state at times, as as with Shah Isma'il, or to consolidate a period of rapid territorial expansion, such as with Sultan Selim, but it was also used to challenge the state in important ways at other times.'^{xl}

S.Subramanyam attempted to answer the central question 'What underpins these materialisms?' in the closing section of the paper 'Connected Histories: Notes towards a Reconfiguration of Early Modern Eurasia¹'. He writes, "There is, first of all, the option of geographical determinism: some states are too small, others too large, others have mountains to their north, some to the south, still others are islands and so on. Since such arguments are used fitfully and opportunistically for the most part, once the outcome is known, there is obviously quite a lot of room for manoeuvre once geography has been disposed of. The second is residual cultural explanation, of the type favoured by Weber, and still the ghost in many machines. Here the 'failure' to be the same (as western Europe, naturally) is eventually laid at the door of 'culture' because no other reason exists. There is, of course, a profound circularity in this type of reasoning, since no two cultures are the same by definition."^{xli}

Subramanyam has indicated that the process of broaching the notion of historical connectivity in the context of early modern history is as follows: "The most common way to approach the history of South Asia has been to make a relatively sharp distinction between what is "indigenous" and what is "foreign". It is interesting to contrast this for example to approaches to Southeast Asia or Central Asia, where historians have always accepted the importance of circulation, and movement, or what my late friend and colleague Denys Lombard used to call the idea of being a "crossroads". I believe that by bringing South Asian history into conversation with other histories, be they of West Asia, Central Asia, Europe or Southeast Asia, there is much to be gained. At the same time, it is also important to understand the extent to which different Indian regions were actually connected (or sometimes not connected) to one another through historical processes. In short, the political boundaries we find today have a history and a contingency. They were not etched in stone, and they are not necessarily the best way of defining the geographical matrices within which we study history. Obviously, the nature of the networks and connections that were operative in the colonial period were different from what obtained in the centuries between 1400 and 1800, which are usually my main focus."^{xlii}

References

¹. Sanjay Subramanyam. "Connected Histories: Notes towards a Reconfiguration of Early Modern Eurasia." *Modern Asian Studies* 31, no. 3 (1997):745.



10th International CEO Communication, Economics, Organization & Social Sciences Congress

¹. RamyaSreenivasan. "A South Asianist's Response to Lieberman's 'Strange Parallels.'" *The Journal of Asian Studies* 70, no. 4 (2011):984.

¹. Ben Breen, "Explorations in Connected History: From the Tagus to the Ganges, by Sanjay Subrahmanyam (2004)," *Not Even Past*, May 9, 2016, <https://notevenpast.org/explorations-in-connected-history-from-the-tagus-to-the-ganges-by-sanjay-subrahmanyam-2004/>.

¹. Sanjay Subramanyam. "Connected Histories: Notes towards a Reconfiguration of Early Modern Eurasia." *Modern Asian Studies* 31, no. 3 (1997):745-746.

¹. Sanjay Subramanyam. "Connected Histories: Notes towards a Reconfiguration of Early Modern Eurasia." *Modern Asian Studies* 31, no. 3 (1997):746-747.

¹. Sanjay Subramanyam. "Connected Histories: Notes towards a Reconfiguration of Early Modern Eurasia." *Modern Asian Studies* 31, no. 3 (1997):748.

¹. *Ibid*,749.

¹. Sanjay Subramanyam. "Connected Histories: Notes towards a Reconfiguration of Early Modern Eurasia." *Modern Asian Studies* 31, no. 3 (1997):750-51.

¹. *Ibid*,751-752

¹. Sanjay Subramanyam. "Connected Histories: Notes towards a Reconfiguration of Early Modern Eurasia." *Modern Asian Studies* 31, no. 3 (1997):755.

¹. *Ibid*,760.

¹. Zutshi, Vikram. "Explorations in Connected History: A Conversation with Sanjay Subrahmanyam." *The Hindu*, 2020.



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The Role of Indian Judiciary in Advancing Environmental Jurisprudence:
A Global Perspective

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ABSTRACT

India has emerged as a pivotal actor in shaping environmental jurisprudence, with its judiciary playing a transformative role in addressing ecological concerns. The Supreme Court and High Courts of India have not only interpreted constitutional provisions to safeguard the environment but have also embraced international principles like sustainable development, the precautionary principle, and the polluter pays principle. This research paper explores the contributions of the Indian judiciary in advancing environmental protection, with a focus on how its decisions resonate within the global legal framework.

The paper critically examines landmark judgments, including *MC Mehta v. Union of India*, *Indian Council for Enviro Legal Action v. Union of India*, and *Vellore Citizens Welfare Forum v. Union of India*, which underscore the judiciary's proactive stance in environmental governance. By invoking Article 21 of the Constitution (right to life) to include the right to a healthy environment, Indian courts have set a precedent for integrating human rights with ecological sustainability.

Furthermore, the study highlights the judiciary's innovative approaches, such as the recognition of public interest litigation (PIL) as a tool for environmental justice and the application of international environmental norms even in the absence of domestic legislation. The role of specialized tribunals like the National Green Tribunal (NGT) in enforcing environmental laws and mitigating disputes is also analyzed.

On the global stage, India's judicial interventions have influenced other jurisdictions, inspiring courts in developing countries to adopt similar progressive stances. However, the paper also critiques the challenges of implementation and the need for balancing economic growth with environmental protection.

By offering a comparative analysis, the research underscores how India's judiciary has become a beacon of environmental jurisprudence, contributing to the global discourse on sustainable development and ecological justice. The paper concludes with recommendations for strengthening judicial and institutional mechanisms to address emerging challenges, such as climate change and biodiversity loss while ensuring alignment with global environmental.

Keywords: Environmental Jurisprudence, Indian Judiciary, Sustainable Development, Public Interest Litigation (PIL), Global Environmental Impact.

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Introduction:

Environmental protection has emerged as one of the foremost global challenges in the contemporary world, with rapid industrialization, urbanization, and environmental degradation threatening the very fabric of the planet's ecological balance. As countries confront the harsh realities of climate change, pollution, and loss of biodiversity, there is a growing recognition of the need for a strong legal framework to protect the environment. Within this global context, the judiciary has played a pivotal role in shaping the legal landscape of environmental protection. India, as one of the world's largest and most populous countries, has witnessed a remarkable evolution in environmental jurisprudence, with its judiciary emerging as a key force in advancing the cause of environmental justice.

Historically, environmental law in India was largely a domain of legislative and executive action. However, in recent decades, the Indian judiciary has transcended its traditional role of interpreting the law and has become an active and dynamic participant in the enforcement of environmental rights. The Supreme Court of India, in particular, has played an influential role in interpreting the Constitution to include the protection of the environment as an integral aspect of the right to life guaranteed under Article 21. Through landmark judgments, the judiciary has not only shaped the legal framework for environmental protection but also addressed pressing ecological issues, such as air and water pollution, deforestation, and industrial hazards.

The shift from a passive interpretation of the Constitution to a more activist approach in safeguarding environmental rights has been one of the most significant developments in Indian environmental jurisprudence. Indian courts have recognized the right to a healthy environment as a constitutional right under Article 21, which guarantees the right to life and personal liberty. This progressive interpretation has expanded the scope of fundamental rights and brought environmental concerns to the forefront of legal discourse. In a nation like India, where economic development and environmental protection are often seen as competing interests, the judiciary has consistently navigated the tension between the two by ensuring that environmental safeguards are not compromised in the name of development. The judicial approach has emphasized the idea that environmental sustainability is not just a luxury but a necessity for ensuring the well-being of future generations.

A defining characteristic of India's environmental jurisprudence has been its willingness to embrace international principles of environmental law. The Indian judiciary has often drawn inspiration from global environmental norms, such as the principle of sustainable development, the precautionary principle, and the polluter pays principle, which have been codified in various international treaties and declarations. For instance, in cases involving industrial pollution or hazardous waste disposal, Indian courts have relied on the precautionary principle to take preventive action before harm occurs, rather than waiting for scientific proof of damage. Similarly, the polluter pays principle has been used to ensure that industries bear the costs of environmental restoration, making them accountable for their ecological impact.

The Indian judiciary's approach to environmental issues has also been characterized by its innovative use of Public Interest Litigation (PIL). PIL has allowed citizens, nongovernmental organizations (NGOs), and environmental activists to approach the courts on behalf of the public interest, thereby bypassing the usual procedural barriers to accessing justice. Through PIL, the Indian judiciary has been able to intervene in matters of public concern and provide immediate relief in cases involving environmental degradation. This judicial activism has empowered marginalized communities, grassroots organizations, and environmental advocates to seek redress for environmental harm and has significantly expanded access to justice.

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Furthermore, the creation of specialized environmental tribunals, such as the National Green Tribunal (NGT), has enhanced the judiciary's ability to handle complex environmental disputes. The NGT, established under the National Green Tribunal Act, of 2010, has played an important role in resolving environmental issues more efficiently and ensuring that environmental laws are strictly enforced. By providing a dedicated forum for environmental litigation, the NGT has also served as a model for other countries in the Global South, where legal frameworks for environmental protection are still evolving.

The global significance of India's environmental jurisprudence cannot be overstated. India's judicial approach to environmental protection, while rooted in domestic legal traditions, has had a profound impact on global environmental law. Through its bold and innovative rulings, the Indian judiciary has influenced the environmental policies and legal frameworks of other developing countries, especially in the Global South, which face similar challenges related to economic development and environmental degradation.

Conceptual Framework:

A comprehensive understanding of the role of the Indian judiciary in advancing environmental jurisprudence requires an exploration of several core concepts and principles that form the foundation of environmental law. These concepts not only guide judicial decision-making but also illustrate how the judiciary has innovatively shaped India's environmental landscape while drawing from international norms and global legal frameworks. In this section, we explore the key concepts that have been pivotal to India's environmental jurisprudence, including sustainable development, the precautionary principle, the polluter pays principle, the public trust doctrine, and judicial activism.

- **Environmental Jurisprudence:** Environmental jurisprudence refers to the body of legal principles, norms, and practices that are concerned with the protection, preservation, and management of the environment. In India, environmental jurisprudence has evolved over the years, largely influenced by judicial activism, constitutional principles, and international environmental law. The judiciary, particularly the Supreme Court and High Courts, have played a significant role in transforming environmental law from a predominantly legislative concern to an integrated part of human rights law, emphasizing the need for a clean and healthy environment as a fundamental right under Article 21 of the Constitution.
- **Constitutional Framework for Environmental Protection in India:** The Constitution of India, enacted in 1950, provides the foundation for environmental law in the country. While the original Constitution did not explicitly mention environmental protection, subsequent amendments and judicial interpretations have increasingly recognized the environment as an essential component of citizens' fundamental rights.

Article 21 Right to Life: The landmark interpretation of Article 21 by the Indian judiciary has been central to the development of environmental jurisprudence. Initially, the right to life was understood in a narrow sense, relating only to the right to be alive and free from personal harm. However, the courts expanded this interpretation to encompass the right to a healthy environment, recognizing that without a clean environment, the very right to life becomes compromised. This expansion of the right to life has allowed the judiciary to intervene in environmental matters even when no specific law existed.

Article 48A and 51A(g): These provisions, added through the 42nd Amendment of 1976, directly address the environmental obligations of the state and its citizens. Article 48A imposes a duty on the state to "protect and improve the environment and safeguard

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the forests and wildlife of the country,” while Article 51A(g) enjoins every citizen to “protect and improve the natural environment, including forests, lakes, rivers, and wildlife, and have compassion for living creatures.” These provisions provide a constitutional basis for environmental protection and have been central to judicial decision-making.

- **Sustainable Development:** Sustainable development is a core principle in both national and international environmental law. It refers to the development that meets the needs of the present without compromising the ability of future generations to meet their own needs. This concept has been fundamental in Indian environmental jurisprudence, particularly in balancing the need for economic development with the need for environmental protection.
The Indian judiciary has consistently applied the concept of sustainable development in its judgments, particularly when dealing with issues such as industrial pollution, forest conservation, and urban development. In the case of *Vellore Citizens Welfare Forum v. Union of India* (1996), the Supreme Court adopted the principle of sustainable development as part of India’s legal framework. The court stressed that environmental protection and development must go hand in hand and that the state must ensure that development does not come at the cost of environmental degradation.
- **Precautionary Principle:**
The precautionary principle is an internationally recognized principle in environmental law, which mandates that precautionary measures should be taken to avoid environmental harm when there is scientific uncertainty. The principle emphasizes that the lack of full scientific certainty should not be used as a reason to delay cost-effective measures that prevent environmental degradation.
In India, the precautionary principle has been incorporated into judicial reasoning and has influenced many decisions concerning industrial activities, resource extraction, and pollution control. In *M.C. Mehta v. Union of India* (1987), the Supreme Court applied the precautionary principle in the context of the Ganga pollution case, ordering the closure of tanneries operating along the river even though the exact extent of harm was not conclusively established. The principle has since been cited in numerous cases to prevent harm before it materializes.
- **Polluter Pays Principle:** The polluter pays principle is another foundational concept in environmental jurisprudence. This principle asserts that the costs associated with environmental damage should be borne by those who cause the harm, rather than society at large.
In India, the polluter pays principle was first introduced in judicial decisions in the 1990s and has since become a cornerstone of Indian environmental law. In the *Indian Council for Environmental Action v. Union of India* (1996) case, the Supreme Court held that industries causing environmental damage should be liable for the costs of restoration and compensation. The court’s ruling established that polluting industries must pay for the remediation of the damage they cause, effectively ensuring that environmental costs are internalized into business practices.
- **Public Trust Doctrine:** The public trust doctrine is a legal principle that holds certain natural resources, such as air, water, and forests, in trust for the public, with the government acting as a trustee for their protection. This doctrine posits that the state has a responsibility to manage these resources for the public good, ensuring their preservation for current and future generations.

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The public trust doctrine has been incorporated into Indian environmental jurisprudence through judicial interpretations. In *Vellore Citizens Welfare Forum v. Union of India*, the Supreme Court reinforced the idea that natural resources belong to the public and that the government must act as a trustee to protect these resources.

- **Judicial Activism and the Role of PIL (Public Interest Litigation):** Judicial activism in India refers to the proactive role that the judiciary has played in addressing issues that require urgent attention, including those related to environmental protection. Through the liberal use of Public Interest Litigation (PIL), the Indian judiciary has democratized access to environmental justice, allowing citizens, NGOs, and advocacy groups to bring environmental issues before the courts on behalf of the public interest.

PIL has been instrumental in empowering the judiciary to address environmental concerns without the need for direct legislative or executive action. Landmark PIL cases such as *M.C. Mehta v. Union of India* (1986) and *T.N. Godavarman Thirumulpad v. Union of India* (1997) are prime examples of how the judiciary has stepped in to protect the environment and public health, even when laws or regulations were lacking or insufficient.

- **International Environmental Norms and Their Influence on Indian Jurisprudence:**

Indian environmental jurisprudence is deeply influenced by international environmental law and norms. Principles enshrined in global conventions, such as the United Nations Framework Convention on Climate Change (UNFCCC), the Rio Declaration on Environment and Development, and the Convention on Biological Diversity, have been integrated into Indian legal thinking.

The judiciary has often invoked these international principles in its decisions, reflecting India's commitment to global environmental agreements while addressing domestic concerns.

Global Perspective on India's Environmental Jurisprudence:

India's environmental jurisprudence, while rooted in its unique socioeconomic and legal context, has had a significant impact on global environmental law and policy. The country's judicial approach to environmental issues has inspired and influenced the development of environmental law in other countries, particularly in the Global South. India has successfully integrated international environmental principles into its domestic legal framework, playing an essential role in global environmental governance. In this section, we explore the global perspective on India's environmental jurisprudence, examining how Indian courts have shaped international environmental norms, the role of India in global environmental agreements, and the influence of Indian jurisprudence on other countries.

- **India's Adoption of International Environmental Principles:**

One of the defining characteristics of India's environmental jurisprudence has been the incorporation of global environmental principles into its legal system. India has consistently aligned its domestic legal framework with international environmental norms, reflecting its commitment to addressing global environmental challenges such as climate change, biodiversity loss, and pollution. Indian courts have often drawn on principles enshrined in international treaties and conventions, such as the Rio Declaration on Environment and Development (1992), the United Nations Framework Convention on Climate Change (UNFCCC), and the Convention on Biological Diversity (1992), to guide their decisions.

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- **India's Role in Shaping Global Environmental Norms:**

India's judicial approach to environmental issues has contributed to the evolution of global environmental governance. Through its landmark rulings and progressive legal thinking, the Indian judiciary has set important precedents in environmental law, which have been referenced by other countries facing similar environmental challenges. India's legal and judicial framework provides an example for other nations, especially in the Global South, where development and environmental protection are often seen as conflicting priorities.

India has also played an active role in the formulation of international environmental agreements. The country's involvement in the Paris Agreement on Climate Change (2015) is one such example, where India not only committed to reducing its carbon emissions but also took on a leadership role in promoting climate justice for developing nations. Indian courts have reinforced this commitment by mandating the government to take significant action to address climate change, air pollution, and other environmental challenges. For example, in cases involving air pollution, such as *M.C. Mehta v. Union of India* (1987), the Supreme Court has issued directions to the government to take steps to reduce emissions from industries and vehicles, demonstrating the judiciary's alignment with global environmental goals.

- **India's Contribution to International Environmental Law:**

India has made significant contributions to international environmental law, particularly through its participation in global environmental conferences and its advocacy for environmental justice in developing countries. The Indian government and judiciary have worked together to bring attention to the environmental challenges faced by the Global South, particularly in relation to climate change, deforestation, and access to clean water. At the 1992 Earth Summit in Rio de Janeiro, India was a key player in advocating for the principle of common but differentiated responsibilities (CBDR). This principle acknowledges that while all nations are responsible for addressing global environmental issues, developed countries bear a greater responsibility due to their historical contribution to environmental degradation. This principle was subsequently incorporated into international environmental agreements, including the Kyoto Protocol and the Paris Agreement. The Indian judiciary's recognition of environmental justice has contributed to this broader international understanding, reinforcing the need for equitable solutions to global environmental problems.

India's role in shaping the Paris Agreement and its efforts to strengthen environmental governance at the global level demonstrate the country's growing influence on international environmental law.

- **India's Environmental Jurisprudence and Other Countries:**

India's environmental jurisprudence has not only influenced global environmental law but has also provided a model for other developing nations that face similar environmental and developmental challenges. Many countries in the Global South, including those in Africa, Latin America, and Southeast Asia, have looked to India's judicial activism and innovative legal approaches as a source of inspiration for their own environmental policies and legal frameworks.

For instance, countries like South Africa, Brazil, and Indonesia, which share India's concerns over rapid industrialization, deforestation, and pollution, have drawn from India's legal principles and court rulings in developing their own environmental laws. The use of PIL in India has been particularly influential, as it has inspired similar legal provisions in countries where access to environmental justice was previously limited.

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Moreover, the National Green Tribunal (NGT) of India has become a model for specialized environmental tribunals globally. The NGT, which was established in 2010 to provide fast-track environmental justice, has inspired other nations to create similar institutions that focus on resolving environmental disputes and ensuring the implementation of environmental laws. Countries such as Bangladesh and Pakistan have established their environmental tribunals, drawing on India's experience to address environmental challenges within their jurisdictions.

- **India's Influence on Shaping Global Environmental Policies:**

India has been an active participant in global forums such as the United Nations Environment Programme (UNEP), the Conference of the Parties (COP) to the UNFCCC, and the Convention on Biological Diversity. Through these forums, India has consistently advocated for policies that balance the needs of developing nations with global environmental goals. Indian courts, through their proactive stance, have supported these global efforts by consistently interpreting national environmental laws in line with global standards, ensuring that India's legal commitments on the world stage are reflected in domestic law.

Challenges in Implementing Environmental Jurisprudence:

While India's environmental jurisprudence has made significant strides in promoting environmental protection and sustainable development, the effective implementation of these legal principles remains a major challenge. Despite progressive judicial decisions, the gap between legal theory and practical enforcement persists, resulting in environmental degradation, insufficient compliance, and the inability to fully realize the goals of environmental justice. This section delves into the key challenges that hinder the successful implementation of India's environmental jurisprudence, including institutional weaknesses, political and economic pressures, lack of enforcement mechanisms, and public awareness issues.

- **Institutional and Administrative Weaknesses:**

One of the most significant challenges in implementing environmental jurisprudence in India is the weakness of institutional and administrative structures responsible for enforcement. The environment ministries and regulatory agencies, such as the Ministry of Environment, Forest and Climate Change (MoEFCC), and the Central Pollution Control Board (CPCB), often face resource constraints, inadequate staffing, and a lack of coordination between various levels of government.

- **Political and Economic Pressures:**

The tension between environmental protection and economic development is a constant challenge in India, where rapid industrialization, urbanization, and infrastructure development often take precedence over environmental concerns. Political and economic pressures, driven by the need for economic growth, employment generation, and industrial expansion, frequently lead to the compromise of environmental goals. Politicians, bureaucrats, and industries often resist environmental regulations, citing concerns over job losses, economic stagnation, or the hindrance of development. In such an environment, the enforcement of stringent environmental laws becomes a political challenge, with influential lobbying groups often swaying decisionmakers to dilute or delay action. This is particularly true in areas like mining, real estate development, and

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infrastructure projects, where environmental concerns are often overlooked in favour of economic interests.

- **Inadequate Enforcement Mechanisms and Legal Framework:**

While India has a robust legal framework for environmental protection, the lack of efficient enforcement mechanisms remains a significant challenge. Courts may issue landmark rulings, but the failure to enforce these decisions effectively weakens the impact of judicial activism. Even though specialized tribunals such as the National Green Tribunal (NGT) have been established to expedite environmental cases, there is often a lack of coordination and proper follow-up on the decisions made by the courts and tribunals.

- **Lack of Public Awareness and Participation:**

Another significant barrier to the effective implementation of environmental jurisprudence in India is the lack of public awareness and participation in environmental issues. While there is a growing environmental consciousness among certain segments of the population, many people, particularly in rural areas, remain unaware of their environmental rights or the legal remedies available to them.

Public Interest Litigation (PIL) has been an effective tool for environmental advocacy, but its success is dependent on active public participation, which is often lacking. Many marginalized communities, who are disproportionately affected by environmental degradation, such as industrial pollution or deforestation, are not always aware of their rights or how to engage with the judicial system. In this context, environmental justice is often inaccessible to those who need it the most.

- **Corruption and Lack of Accountability:**

Corruption within governmental and regulatory institutions is another major obstacle to the implementation of environmental jurisprudence. In many cases, local officials may be bribed or pressured by industries to ignore environmental violations, such as illegal dumping, overexploitation of resources, or the failure to adhere to pollution control standards. The lack of accountability among regulatory agencies and law enforcement bodies allows industries to continue harmful practices with little fear of retribution.

Corruption can also extend to the political sphere, where vested interests work to influence policies that favour industries at the expense of environmental protection. The interdependence between political and business interests often leads to a lack of action against major polluters or violators of environmental law. This systemic corruption erodes public trust in the legal and regulatory system, making it difficult to implement and enforce environmental laws effectively.

- **Insufficient Data and Monitoring:** Another significant challenge to implementing environmental jurisprudence in India is the lack of reliable data and monitoring mechanisms. Effective enforcement of environmental laws requires accurate and upto-date information about pollution levels, resource depletion, and ecological damage. However, the lack of comprehensive environmental data and the absence of robust monitoring systems make it difficult for the authorities and courts to assess the scale of environmental harm or the effectiveness of corrective measures.

- **Regional Disparities in Environmental Protection:** India is a vast and diverse country, with considerable regional disparities in terms of environmental conditions,

10th International CEO Communication, Economics, Organization & Social Sciences Congress industrialization, and enforcement of environmental laws. While metropolitan cities and industrial hubs may have more robust environmental regulatory systems, rural areas often lack adequate resources and attention from environmental authorities.

- **Climate Change and Emerging Environmental Challenges:**

India faces numerous emerging environmental challenges, including the impact of climate change, which is exacerbating existing issues like water scarcity, air pollution, and the destruction of ecosystems. The effects of climate change—such as rising temperatures, extreme weather events, and sealevel rise—pose significant challenges for both the judiciary and the government in terms of legal and policy responses.

Emerging Environmental Issues and the Judiciary's Role

As environmental challenges evolve in complexity and scale, the judiciary's role in addressing these issues becomes increasingly critical. India, as a rapidly developing country, faces several emerging environmental issues such as climate change, biodiversity loss, waste management, air and water pollution, and environmental degradation due to urbanization and industrialization. These challenges demand innovative legal and policy solutions, and the judiciary has stepped forward to interpret laws and enforce constitutional rights in this evolving context. This section explores key emerging environmental issues and examines the proactive role of the Indian judiciary in addressing them.

- **Climate Change and Its Impacts:**

The Issue: Climate change poses a significant threat to India, affecting agriculture, water resources, health, and infrastructure. Rising temperatures, unpredictable monsoons, and extreme weather events such as floods, droughts, and cyclones are already impacting millions of lives and the economy.

Judicial Role: Indian courts have actively recognized the urgency of climate change and emphasized the government's responsibility to mitigate its effects. The judiciary has:

Mandated Climate Action: In *M.C. Mehta v. Union of India (Vehicular Pollution Case)*, the Supreme Court directed the transition to cleaner fuels in Delhi to combat air pollution, a contributor to climate change.

Aligned with International Obligations: Courts have stressed India's commitment under the Paris Agreement, urging policymakers to implement measures to reduce carbon emissions.

Promoted Renewable Energy: The judiciary has encouraged renewable energy projects while ensuring environmental safeguards, and balancing energy needs with sustainability.

- **Air Pollution Crisis:**

The Issue: India consistently ranks among the most polluted countries globally, with air quality in cities like Delhi reaching hazardous levels. Air pollution causes severe health issues, including respiratory and cardiovascular diseases, and contributes to premature deaths.

Judicial Role: The judiciary has been instrumental in addressing air pollution through various interventions: **Strict Enforcement:** In *M.C. Mehta v. Union of India (Taj Trapezium Case)*, the Supreme Court ordered the relocation of polluting industries near the Taj Mahal and imposed stricter emission standards.

Vehicular Emission Control: The judiciary mandated the introduction of compressed natural gas (CNG) for public transport in Delhi to reduce vehicular pollution.



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Firecracker Ban: The Supreme Court banned the use of certain firecrackers during festivals to curb air pollution, balancing cultural practices with environmental concerns.

- **Biodiversity Loss and Wildlife Protection:**

The Issue: India, home to rich biodiversity, faces threats such as habitat destruction, deforestation, and poaching. Human-wildlife conflicts are rising due to expanding human settlements into wildlife habitats.

Judicial Role: The Indian judiciary has played a crucial role in conserving biodiversity:
Forest Protection: In T.N. Godavarman Thirumulpad v. Union of India, the Supreme Court expanded the definition of forests and imposed a nationwide ban on deforestation without prior approval.

Wildlife Corridors: Courts have ordered the establishment of wildlife corridors to facilitate safe animal movement, as seen in judgments protecting elephant corridors in Tamil Nadu.

Species Conservation: The judiciary has intervened in protecting endangered species, such as the ban on mining activities in the habitat of the Great Indian Bustard.

- **Water Pollution and Scarcity:**

The Issue: India faces acute water pollution and scarcity, with rivers and groundwater contaminated by industrial effluents, sewage, and agricultural runoff. This has severe consequences for public health and agriculture.

Judicial Role: Indian courts have taken strong measures to address water-related issues:
River Rejuvenation: In M.C. Mehta v. Union of India (Ganga Pollution Case), the Supreme Court directed the closure of polluting industries along the Ganga and mandated the installation of effluent treatment plants.

Groundwater Regulation: Courts have emphasized sustainable groundwater use, holding governments accountable for ensuring equitable access and preventing overextraction.

Wetland Protection: The judiciary has ordered the preservation of wetlands, recognizing their role in water purification and biodiversity.

- **Waste Management Crisis:**

The Issue: India generates immense quantities of solid, electronic, and hazardous waste, with improper disposal leading to pollution and public health hazards. Urban areas face mounting garbage heaps and inadequate recycling infrastructure.

Judicial Role: The judiciary has taken a proactive stance on waste management:

Solid Waste Management: In Almitra H. Patel v. Union of India, the Supreme Court directed urban local bodies to ensure proper waste segregation, collection, and disposal.

E-Waste Management: The judiciary has emphasized implementing stringent e-waste disposal guidelines and holding manufacturers accountable for recycling.

Plastic Ban: Courts have supported bans on single-use plastics and emphasized sustainable alternatives.

- **Urbanization and Environmental Impact**

The Issue: Rapid urbanization leads to unregulated construction, loss of green spaces, and increased pollution. Cities are grappling with environmental challenges due to inadequate infrastructure and planning.

Judicial Role: Indian courts have addressed urban environmental issues with a balanced approach:

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Illegal Construction: Courts have ordered the demolition of buildings violating environmental norms, such as those encroaching on wetlands or violating coastal regulation zones.

Green Spaces: The judiciary has mandated the protection of public parks and urban forests, recognizing their importance for air quality and urban biodiversity.

Sustainable Development: Courts have promoted sustainable urban planning to ensure balanced growth without compromising environmental standards.

- **Emerging Issues: Microplastics and Marine Pollution:**

The Issue: Microplastics and marine pollution are growing concerns, with significant impacts on aquatic ecosystems and human health. Plastic waste is increasingly contaminating oceans, rivers, and even food chains.

Judicial Role: The judiciary is beginning to address these emerging issues:

Marine Protection: Courts have directed the government to implement strict coastal management and prevent pollution in marine ecosystems.

Ban on Single-Use Plastics: Recognizing the global threat of plastic pollution, courts have supported nationwide bans on single-use plastics.

Environmental Research: The judiciary has encouraged government collaboration with research institutions to address microplastics and develop innovative solutions.

- **Role in Addressing Global Environmental Challenges:**

The Issue: India, as a party to various international agreements, faces pressure to align domestic environmental policies with global goals, such as the UN Sustainable Development Goals (SDGs).

Judicial Role: Indian courts have integrated global environmental principles into their decisions:

Sustainable Development: Courts have emphasized balancing economic growth with environmental protection, reflecting the SDGs.

Climate Justice: Indian courts have highlighted the need for equitable climate action, recognizing the disproportionate impact of climate change on vulnerable populations.

Recommendations for Strengthening Environmental Jurisprudence

To address the growing complexity of environmental issues and bridge the gap between legal frameworks and practical enforcement, it is essential to strengthen India's environmental jurisprudence. While judicial interventions have been instrumental, a more comprehensive approach is required, involving legislative reforms, institutional strengthening, public participation, and technological advancements. This section outlines recommendations to enhance the effectiveness of environmental jurisprudence in India.

- **Strengthening Legal and Policy Frameworks:**

Codification of Environmental Principles: Incorporate environmental principles such as the precautionary principle, polluter pays principle, and sustainable development explicitly into statutory law. This will provide clarity and consistency in judicial interpretation.

Unified Environmental Code: Consolidate fragmented environmental laws into a single comprehensive code to address overlapping regulations and gaps in enforcement.

Climate Change Legislation: Enact specific laws addressing climate change mitigation and adaptation, with clear targets for emission reductions, renewable energy adoption, and climate resilient infrastructure.

- **Enhancing Institutional Capacity:** **Strengthening Regulatory Bodies:** Empower institutions like the Ministry of Environment, Forest and Climate Change (MoEFCC) and



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the Central Pollution Control Board (CPCB) with more resources, technical expertise, and autonomy to ensure efficient enforcement of environmental laws.

Capacity Building for Judiciary and Tribunals: Conduct specialized training programs for judges and tribunal members on emerging environmental issues, scientific advancements, and global best practices.

Establishing Environmental Courts: Expand the reach and capacity of the National Green Tribunal (NGT) by setting up regional and local environmental courts to expedite the resolution of cases.

- **Leveraging Technology for Environmental Governance:** RealTime Monitoring Systems: Use advanced technologies like satellite imagery, IoT sensors, and AIbased tools to monitor pollution levels, deforestation, and ecological changes in real time.

Digital Case Management: Implement digital platforms for filing, tracking, and resolving environmental cases to reduce delays and improve transparency.

Data Sharing Platforms: Develop centralized databases for environmental data, enabling better coordination among regulatory agencies, researchers, and policymakers.

- **Promoting Public Participation and Awareness:** Environmental Education: Integrate environmental education into school and college curriculums to raise awareness about legal rights and responsibilities concerning the environment.

Community Engagement: Empower local communities by promoting participatory governance models, such as joint forest management and decentralized waste management systems.

Access to Justice: Simplify legal procedures and reduce costs associated with filing environmental cases to make justice more accessible to marginalized and vulnerable communities.

- **Ensuring Accountability and Transparency:** Regular Audits and Inspections: Mandate periodic audits of industries, infrastructure projects, and government departments for compliance with environmental standards.

Independent Oversight Mechanisms: Establish independent oversight bodies to monitor the implementation of judicial directives and environmental policies.

Whistleblower Protection: Introduce strong protections for whistleblowers exposing environmental violations, encouraging greater accountability.

- **Encouraging Sustainable Economic Practices:** Incentivizing Green Businesses: Offer tax benefits and subsidies to industries adopting eco-friendly technologies and practices.

Green Public Procurement: Promote the adoption of environmentally sustainable practices in public procurement and infrastructure development.

Corporate Accountability: Mandate environmental, social, and governance (ESG) reporting for companies to ensure transparency and accountability in their environmental impact.

- **Fostering Global Cooperation:** Aligning with International Commitments: Ensure that domestic environmental policies align with international agreements like the Paris Agreement, Convention on Biological Diversity, and the Sustainable Development Goals (SDGs).

Knowledge Sharing: Collaborate with other countries to share best practices, technologies, and expertise in tackling common environmental challenges.

Cross Border Environmental Governance: Strengthen cooperation with neighbouring countries to address transboundary environmental issues such as river pollution and climate change.

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- **Strengthening Environmental Jurisprudence through Precedents:** Developing Progressive Jurisprudence: Encourage courts to set progressive legal precedents by interpreting constitutional provisions broadly in favour of environmental protection.
Ensuring Consistency in Judgments: Create a repository of landmark environmental judgments to guide consistent judicial interpretation and application across different courts.
Regular Review of Laws: Periodically review and update environmental laws and regulations to reflect changing environmental realities and challenges.
- **Addressing Socio-Economic Dimensions of Environmental Issues:** Equitable Distribution of Resources: Ensure that environmental laws address socioeconomic disparities, particularly in resource distribution and access to natural resources.
Climate Justice for Vulnerable Communities: Prioritize policies and legal protections for communities disproportionately affected by climate change and environmental degradation.
Resettlement and Rehabilitation: Develop sustainable and inclusive resettlement policies for communities displaced due to environmental projects or disasters.
- **Integrating Environmental and Human Rights Frameworks:** Right to a Healthy Environment: Recognize and enforce the right to a clean and healthy environment as a fundamental human right under the Indian Constitution.
Intersectional Approaches: Address the intersection of environmental issues with gender, poverty, and health to ensure comprehensive legal solutions.

Conclusion:

Environmental jurisprudence in India has emerged as a beacon of hope in the fight against environmental degradation and the pursuit of sustainable development. The Indian judiciary, through its proactive stance and innovative interpretation of constitutional and statutory provisions, has significantly contributed to advancing environmental protection and ensuring ecological balance. However, as the nation grapples with evolving environmental challenges such as climate change, biodiversity loss, pollution, and resource scarcity, the need for a stronger and more holistic approach to environmental governance becomes increasingly apparent.

This study highlights the critical role played by the judiciary in shaping India's environmental jurisprudence, drawing inspiration from constitutional mandates, international principles, and public interest. Through landmark judgments and the establishment of the National Green Tribunal (NGT), Indian courts have reinforced the idea that environmental protection is not just a policy goal but a fundamental right. Moreover, the judiciary has actively fostered a balance between economic development and ecological sustainability, advocating for principles such as the "polluter pays," "precautionary principle," and "sustainable development."

Despite these achievements, the effective implementation of environmental jurisprudence remains hindered by several challenges, including weak institutional frameworks, insufficient enforcement mechanisms, and sociopolitical resistance. Additionally, emerging environmental issues like microplastics, marine pollution, and climate-induced vulnerabilities demand adaptive legal frameworks and innovative solutions.

To strengthen India's environmental jurisprudence, this research underscores the importance of consolidating legal frameworks, enhancing institutional capacities, leveraging technology, and promoting public participation. Recommendations such as establishing independent oversight bodies, incentivizing sustainable practices, and fostering international cooperation are pivotal for ensuring that judicial interventions translate into tangible environmental outcomes.



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India's environmental challenges are not isolated but interconnected with global concerns, making the judiciary's role in this domain critical not only for the nation but for the world. By addressing current challenges and implementing strategic recommendations, India can serve as a global leader in environmental governance, showcasing how legal frameworks and judicial activism can safeguard natural resources while promoting social and economic equity.

In conclusion, the future of India's environmental jurisprudence lies in a collaborative effort between the judiciary, legislature, executive, and civil society. With sustained judicial innovation, robust policymaking, and collective action, India can pave the way for a greener, more equitable future, ensuring that environmental justice becomes a reality for all.

Bibliography

Books and Journals:

Divan, Shyam, and Armin Rosencranz. *Environmental Law and Policy in India*. Oxford University Press, 2001.

Singh, P. Leelakrishnan. *Environmental Law in India*. LexisNexis, 2020.

Rajamani, Lavanya. *Climate Change Law and Policy in India*. Springer, 2012.

Case Laws:

M.C. Mehta v. Union of India (1987).

T.N. Godavarman Thirumulpad v. Union of India (1997).

Vellore Citizens Welfare Forum v. Union of India (1996).

International Instruments:

United Nations Framework Convention on Climate Change (UNFCCC), 1992.

The Paris Agreement, 2015.

Stockholm Declaration, 1972.

Reports and Policies:

Ministry of Environment, Forest and Climate Change (MoEFCC). *National Action Plan on Climate Change (NAPCC)*, 2008.

Central Pollution Control Board (CPCB). *Annual Reports*.

Articles and Online Sources:

Narain, Sunita. "The Role of Judiciary in Environmental Protection." *Down to Earth*, 2019.

"National Green Tribunal and Environmental Protection." *The Hindu*, 2023.

Judicial and Government Websites:

Supreme Court of India: <https://www.sci.gov.in>

National Green Tribunal: <https://www.greentribunal.gov.in>



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India's Path to Global Leadership by 2047

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ABSTRACT

As India approaches its 100th year of independence in 2047, the nation envisions transforming itself into a global leader. This ambitious journey is guided by the framework of Amrit Kaal, a critical 25-year period dedicated to building a prosperous, inclusive, and powerful India. To achieve this vision, the focus lies on key areas such as economic growth, technological innovation, sustainable development, and cultural diplomacy. India aims to become a \$10 trillion economy, a hub for cutting-edge technologies like AI and renewable energy, and a leader in global governance. Emphasis on inclusive development ensures that all sections of society, especially women, youth, and rural communities, contribute to and benefit from this progress. By harnessing its rich cultural heritage and leveraging its demographic advantage, India seeks to strengthen its soft power while actively participating in global institutions to shape the world order. The roadmap also prioritizes sustainability, climate action, and robust defense capabilities to ensure long-term security and environmental responsibility. With collective effort, visionary reforms, and innovation, India is poised to achieve self-reliance and emerge as a beacon of hope, progress, and leadership for the world by 2047. This transformation is not just a dream—it is a shared mission to create a better future for all.

Keywords: Economic Growth, Technological Leadership, Inclusive Development, Sustainability & Climate Action, Global Governance.



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1. Introduction

India's path to global leadership is deeply rooted in its rich history, variegated cultural heritage, and unparalleled resilience. With the centenary of independence in 2047 on the horizon, the nation envisions becoming a beacon of innovation, inclusivity, and sustainability. This vision is embedded in the framework of *Amrit Kaal*, a transformative 25-year period designed to propel India into a position of global prominence.

1.1 The Historical Context

India's journey is a story of resilience, transformation, and ambition. Over thousands of years, India has been a cradle of civilization, home to some of the earliest urban centers, such as the Indus Valley Civilization. Its profound contributions to science, philosophy, art, and governance have left an inerasable mark on human history. From pioneering mathematical concepts like zero to introducing Ayurveda and yoga to the world, India has consistently been at the forefront of knowledge and innovation. However, India's history is also marked by centuries of colonial subjugation. The British Raj systematically drained India's wealth, exploited its resources, and suppressed its growth. By the time India gained independence in 1947, it was economically devastated, with widespread poverty, illiteracy, and a fractured political landscape. In the post-independence era, India's leadership embarked on the colossal task of nation-building. The foundation for economic growth was laid through Five-Year Plans, focusing on industrialization, agriculture, and self-reliance. Landmark reforms, including the Green Revolution and the establishment of public sector enterprises, helped stabilize the economy. However, by the 1990s, it became evident that India needed a paradigm shift to compete in an increasingly globalized world. The 1991 economic liberalization marked a watershed moment in India's history. By opening its markets to foreign investments, reducing trade barriers, and embracing globalization, India began its transformation into a competitive economy. This period saw the rise of a robust IT sector, rapid urbanization, and an expanding middle class. Today, India stands as the world's fifth-largest economy, with a GDP of approximately \$3.7 trillion (as of 2023), and is poised to become a \$10 trillion economy by 2047.

1.1.1 Cultural Legacy as a Soft Power

India's cultural heritage is a significant driver of its soft power. Its ancient texts like the Vedas and Upanishads, classical dance forms such as Bharatanatyam, and spiritual practices like yoga have a global appeal. The nation's diversity is unparalleled, with 22 official languages and numerous festivals, cuisines, and traditions coexisting harmoniously. This cultural plurality not only strengthens India's internal fabric but also enhances its image on the global stage.

1.1.2 Post-Independence Challenges and Triumphs

The challenges India faced post-independence were monumental. Partition in 1947 resulted in one of the largest mass migrations in history, accompanied by communal violence and loss of life. Building a democratic republic from such turmoil was no small feat. The adoption of a



10th International CEO Communication, Economics, Organization & Social Sciences Congress comprehensive Constitution in 1950 established India as a sovereign, socialist, secular, and democratic republic, guaranteeing fundamental rights to all citizens. India's democratic experiment is among the most remarkable in history. Conducting free and fair elections for a population of over a billion people, fostering a multi-party political system, and ensuring a coruscating civil society have been key achievements. Despite these triumphs, challenges such as corruption, socio-economic inequality, and regional disparities persist.

1.1.3 Economic Aspirations: A Global Perspective

As India transitions into a global economic powerhouse, its focus extends beyond GDP growth to encompass equity, sustainability, and technological advancement. With initiatives like Make in India, Digital India, and Atmanirbhar Bharat (Self-Reliant India), the nation is striving to position itself as a leader in manufacturing, digital governance, and technological innovation. These initiatives not only address domestic priorities but also aim to strengthen India's role in global value chains.

1.1.4 Vision 2047

The vision for 2047 is not just an economic aspiration; it is a blueprint for comprehensive national development. This includes achieving self-reliance, ensuring social justice, leveraging demographic advantages, and enhancing India's role in global governance. As a young nation with a median age of 28.4 years, India's demographic dividend is both a challenge and an opportunity. Investments in education, healthcare, and skilling will be pivotal to unlocking this potential. India's historical journey from colonial subjugation to a vibrant democracy and growing economy encapsulates its resilience and ambition. As the nation gears up to celebrate 100 years of independence, its vision for 2047 represents a commitment to equity, sustainability, and leadership in the global order. The following sections will explore the key pillars that underpin this transformative journey.

2.2 Key Strategies for Economic Expansion

India's roadmap to becoming a \$10 trillion economy by 2047 is built on transformative strategies across multiple sectors, focusing on fostering growth, enhancing competitiveness, and ensuring inclusivity. A cornerstone of this economic vision is the emphasis on strengthening domestic manufacturing through initiatives like Make in India 2.0 and the Production Linked Incentive (PLI) schemes. Make in India 2.0 aims to attract foreign direct investment (FDI) while encouraging domestic enterprises to excel in sectors such as electronics, automobiles, pharmaceuticals, and defense. This initiative has already placed India among the top FDI destinations globally, with \$83.6 billion received in 2021-2022. Complementing this is the PLI scheme, which incentivizes industries to boost production in high-priority areas like semiconductors, solar panels, and electric vehicles. These efforts are expected to create millions of jobs and establish India as a global manufacturing hub.

Infrastructure development is another critical strategy driving India's economic growth. Landmark projects such as Bharatmala and Sagarmala are redefining the nation's connectivity and trade potential. The Bharatmala initiative focuses on developing an extensive highway and road network to enhance connectivity between rural and urban regions, significantly reducing



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India's leadership in digital finance is another significant contributor to its economic expansion. Platforms like the Unified Payments Interface (UPI) and schemes such as Jan Dhan Yojana have revolutionized financial inclusion. UPI processes over 9 billion transactions monthly as of 2023, simplifying payments and making them accessible across socio-economic strata. Similarly, Jan Dhan Yojana has brought millions of unbanked individuals into the formal financial system, empowering rural populations and promoting inclusive growth. These advancements reflect India's commitment to leveraging technology to bridge financial gaps and propel economic progress.

2.3 Challenges to Economic Growth

While India's economic strategies are ambitious and transformative, several challenges could impede the journey to becoming a \$10 trillion economy. One of the most pressing issues is the persistent rural-urban income disparity. Rural households, often reliant on agriculture, earn significantly less than their urban counterparts due to limited access to quality education, healthcare, and job opportunities. Vulnerability to climate change and market fluctuations exacerbate these disparities. Bridging this divide will require focused interventions, including rural industrialization, enhanced skilling programs, and improved social infrastructure to ensure equitable growth. Another significant challenge is India's dependency on imports for advanced technologies such as semiconductors, defense equipment, and medical devices. While the Atmanirbhar Bharat initiative seeks to reduce this reliance, achieving technological self-reliance demands substantial investments in research and development (R&D). This involves fostering partnerships with global tech leaders for knowledge transfer, bolstering STEM education to develop a skilled workforce, and creating a robust ecosystem for innovation. Addressing these challenges with a balanced and strategic approach will be critical for sustaining India's economic momentum and realizing its vision of becoming a global economic powerhouse by 2047.

3.1 India's Technological Strengths

India's technological ecosystem is characterized by its strategic initiatives and investments in key areas. Space exploration has become a hallmark of national pride and scientific excellence. Beyond Chandrayaan, India has developed advanced satellite systems, contributed to global communication networks, and is preparing for the ambitious Gaganyaan manned space mission. Similarly, digital governance initiatives under the Digital India campaign have fostered innovation in e-services, empowering citizens through platforms like Aadhaar and the Government e-Marketplace (GeM), while ensuring transparency and efficiency.

In artificial intelligence (AI), India's National AI Mission underscores its focus on developing solutions tailored to domestic needs. AI applications in agriculture help optimize crop yields



10th International CEO Communication, Economics, Organization & Social Sciences Congress through predictive analytics, while in healthcare, AI-powered diagnostics improve accessibility and early detection of diseases. Education has also seen AI integration, with tools that personalize learning experiences and bridge skill gaps, aligning with the broader goals of inclusive growth.

3.2 Emerging Frontiers in Technology

As a leader in global innovation, India is exploring emerging technological frontiers to address contemporary challenges and seize new opportunities.

Artificial Intelligence (AI):

India's efforts in AI are directed toward creating solutions that cater to critical sectors. Startups and research institutions are developing AI applications for precision farming, improving agricultural productivity, and reducing waste. In healthcare, AI is being used for telemedicine, diagnostics, and data-driven public health policy formulation. AI-based educational tools aim to provide personalized learning experiences, improving access and outcomes in rural and underserved areas.

Clean Energy Innovation:

India's leadership in renewable energy is a pivotal aspect of its technological advancements. Through the International Solar Alliance (ISA), India has championed global efforts to harness solar energy, setting an ambitious target of achieving 500 GW of renewable energy capacity by 2030. Innovations in battery storage, wind energy, and green hydrogen technology further strengthen India's commitment to transitioning to a sustainable energy future.

Space and Defense Technologies:

India is making significant strides toward self-reliance in defense production and space exploration. Programs such as the Defense Research and Development Organization's (DRDO) initiatives are abetting indigenous development of advanced weaponry and aerospace technologies. The Gaganyaan mission, aimed at sending astronauts into space, symbolizes India's growing ambition in space science and its potential to contribute to global scientific advancements.

3.3 Endorsing a Knowledge Economy

Building a knowledge-based economy is central to India's technological leadership. The National Education Policy (NEP) 2020 emphasizes fostering innovation-driven education, prioritizing research, and integrating technology into learning. It aims to develop critical thinking and problem-solving skills among students, aligning education with the demands of a technology-driven global economy. India is also working toward becoming a global hub for research and development (R&D) by establishing partnerships between academia, industry, and international institutions. Initiatives to create world-class R&D centers and innovation parks, along with tax incentives for startups and tech enterprises, are fostering a vibrant ecosystem for invention and entrepreneurship. By investing in human capital and promoting a culture of innovation, India is laying the foundation for sustained technological progress and economic



10th International CEO Communication, Economics, Organization & Social Sciences Congress growth. These strategic interventions ensure that India's technological leadership not only advances national goals but also positions the country as a driving force in global innovation by 2047.

4.1 Empowering Marginalized Groups

Women's Empowerment:

Women's empowerment is integral to India's inclusive development agenda. Programs like "Beti Bachao, and Beti Padhao" ("Save the girl child, educate the girl child") have focused on improving educational outcomes for girls and promoting gender equality. This initiative addresses deeply ingrained social biases and encourages the economic participation of women. Moreover, schemes such as the Pradhan Mantri Mudra Yojana provide financial support to women entrepreneurs and strengthen their independence and contribution to the economy. India's emphasis on women's representation in leadership roles, both in governance and industry, reflects its broader vision of gender-inclusive development.

Youth Engagement and Skilling:

With a demographic dividend of over 65% of its population under the age of 35, India recognizes the potential of its youth as a catalyst for development. The Skill India initiative, launched in 2015, aims to equip millions of young Indians with skills relevant to modern industries, including technology, healthcare, and renewable energy. Complementary programs like Startup India provide platforms for young innovators to create and scale their enterprises. These efforts ensure that India's youth are not only employable but also play a pivotal role in driving innovation and economic growth.

4.2 Regional Development

To reduce disparities between urban and rural areas, India has prioritized the development of backward regions. The Aspirational Districts Programme targets districts with low human development indices, focusing on sectors such as education, health, agriculture, and basic infrastructure. By leveraging data-driven governance and collaborative efforts among state and central governments, this program has demonstrated significant improvements in service delivery in underdeveloped regions. Special economic zones and rural infrastructure projects are further helping bridge the gap between metropolitan hubs and less developed areas. Investments in connectivity, such as rural road schemes under the Pradhan Mantri Gram Sadak Yojana, ensure that even the remotest villages are linked to the national economy. This comprehensive regional development strategy helps integrate marginalized communities into the mainstream, fostering national unity and balanced growth.

4.3 Addressing Healthcare Inequities

Access to quality healthcare remains a critical aspect of inclusive development. India's ambitious Ayushman Bharat program aims to provide universal healthcare coverage to over 500 million people, significantly reducing financial barriers to accessing medical services. This



10th International CEO Communication, Economics, Organization & Social Sciences Congress scheme focuses on expanding secondary and tertiary healthcare, particularly for vulnerable populations.

To address the urban-rural healthcare divide, India is increasingly leveraging technology. Telemedicine initiatives, supported by the eSanjeevani platform, enable rural populations to consult with doctors and specialists remotely, improving access to quality care. Additionally, the government is investing in strengthening primary health infrastructure through the establishment of Health and Wellness Centers (HWCs) to ensure comprehensive care at the grassroots level. These efforts reflect India's dedication to achieving equitable healthcare access for all its citizens, thereby enhancing overall human development.

Through targeted initiatives aimed at empowering marginalized groups, advancing regional development, and addressing healthcare inequities, India is committed to inclusive growth. These efforts not only uplift underserved communities but also contribute to the nation's broader goal of fostering social cohesion and sustainable progress on its path to global leadership.

5. Sustainability and Climate Action

India's commitment to sustainability and climate action underscores its responsibility as a global leader in environmental stewardship. As one of the most biodiverse nations and a rapidly growing economy, India recognizes the importance of balancing development with ecological preservation. By committing to ambitious climate targets, promoting sustainable urbanization, and prioritizing biodiversity conservation, India aims to lead by example in global efforts to combat climate change and ensure long-term sustainability.

5.1 India's Climate Commitments

Net Zero by 2070:

India's pledge to achieve net-zero carbon emissions by 2070, announced at COP26 in Glasgow, marks a bold step toward global climate leadership. This long-term vision emphasizes reducing dependency on fossil fuels, increasing energy efficiency, and promoting sustainable practices across industries. Achieving this target involves transformative shifts in energy production, industrial operations, and consumption patterns.

Renewable Energy Milestones:

India's renewable energy initiatives are central to its climate action strategy. The National Solar Mission, a cornerstone of India's renewable energy framework, aims to establish 500 GW of non-fossil fuel capacity by 2030. With solar parks, wind energy farms, and hydropower projects proliferating across the country, India has already become the world's fourth-largest producer of renewable energy. Additionally, the International Solar Alliance (ISA), an India-led initiative, fosters global collaboration to harness solar power, particularly in developing countries.



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5.2 Green Urbanization

India's rapid urbanization has necessitated sustainable solutions to manage its burgeoning cities. The Smart Cities Mission focuses on developing 100 smart cities with infrastructure that integrates green energy, efficient water management systems, and waste-to-energy technologies. These cities are designed to optimize energy usage, reduce greenhouse gas emissions, and improve overall quality of life. Efforts are also being made to integrate public transportation systems with electric vehicles (EVs) and promote non-motorized transport options such as cycling and pedestrian pathways. Water conservation initiatives, like rainwater harvesting and wastewater recycling, are key components of urban planning, ensuring the sustainable use of limited resources.

5.3 Biodiversity and Conservation Efforts

India's rich biodiversity, spread across varied ecosystems, plays a vital role in maintaining ecological balance. Conservation programs like Project Tiger and Project Elephant have been instrumental in protecting endangered species and their habitats. These initiatives have not only increased the populations of these iconic species but also contributed to the preservation of the ecosystems they inhabit.

Other efforts, such as the establishment of biosphere reserves, national parks, and community-driven conservation programs, reflect India's holistic approach to biodiversity management. The government's commitment to afforestation is evident in campaigns like Green India Mission, which seeks to enhance forest cover and improve the quality of existing forests.

Through its ambitious climate commitments, green urbanization efforts, and robust conservation initiatives, India is positioning itself as a global leader in sustainability. These efforts demonstrate a harmonious blend of economic growth and ecological responsibility, ensuring a resilient and prosperous future for both its citizens and the planet.

6. Global Governance: Leading the World Order

India's vision for 2047 emphasizes not only economic and technological advancement but also a robust role in shaping the global governance framework. By actively engaging in multilateral diplomacy, promoting cultural diplomacy, and building strategic alliances, India aspires to influence global decision-making processes and contribute to a fairer, more inclusive international system. These efforts reflect India's rising stature on the global stage and its commitment to fostering a peaceful, just, and sustainable world order.

6.1 Strengthening Multilateral Engagement

India has long been an advocate for reforms in global institutions to reflect the changing dynamics of international power. One of the most prominent areas of focus is the reform of the United Nations Security Council (UNSC). India has called for the expansion of the UNSC to include permanent members from the developing world, advocating for a seat at the table to better represent the interests of the Global South. This aligns with India's broader goal of ensuring equitable global governance that accounts for the diverse political, economic, and social realities of different countries. Similarly, India has been pushing for reform within the



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World Trade Organization (WTO) to address the challenges faced by developing nations in global trade. India's advocacy for a more transparent, inclusive, and fair global trade system includes pushing for trade policies that consider the developmental needs of poorer nations, equitable access to markets, and support for technology transfer to boost innovation in developing economies. India's proactive participation in multilateral platforms like the G20 and its leadership in climate negotiations under the Paris Agreement further highlight its commitment to global governance. Through these platforms, India has been working towards ensuring that global policies address pressing issues like climate change, economic inequalities, and international security.

6.2 Cultural Diplomacy

As a nation with a rich and diverse cultural heritage, India has increasingly recognized the importance of cultural diplomacy in building soft power and fostering international goodwill. One of the most notable examples of India's cultural diplomacy is the promotion of Yoga as a global wellness practice. The declaration of June 21 as the International Day of Yoga by the United Nations is a testament to India's efforts to share its ancient traditions with the world, fostering health, mindfulness, and cultural exchange. Apart from yoga, India has been promoting Ayurveda, its ancient system of medicine, through international outreach and partnerships with global health organizations. Indian art forms, such as dance, music, and literature, are also part of India's cultural diplomacy toolkit, with performances, festivals, and exhibitions being organized around the world. These efforts contribute not only to cultural exchange but also to strengthening India's position as a global leader in soft power.

6.3 Building Strategic Alliances

To assert itself as a leading global power, India has strategically strengthened partnerships with key countries and regional organizations. Initiatives like the Quadrilateral Security Dialogue (Quad), comprising India, the United States, Japan, and Australia, focus on ensuring a free, open, and inclusive Indo-Pacific region. The Quad partnership emphasizes shared values of democracy, freedom, and the rule of law and aims to address regional security challenges, climate change, and economic cooperation.

India's engagement with BRICS (Brazil, Russia, India, China, and South Africa) has been another significant strategic alliance. BRICS serves as a platform for promoting multipolarity in global governance and providing a counterbalance to the influence of the West. Through BRICS, India advocates for reforms in international institutions, promotes inclusive economic growth, and pushes for greater representation of the Global South in global decision-making processes. India has also cultivated strong bilateral relations with other countries, including the United States, Russia, France, and the Middle Eastern nations, aligning on issues such as defense, trade, technology, and climate change. These partnerships enable India to play a central role in shaping regional and global policies, enhancing its ability to act as a leader in the emerging world order. Through its active participation in global governance, promotion of cultural diplomacy, and strategic alliances, India is positioning itself not just as an economic powerhouse but as a key influencer in shaping the future of the world order. These efforts



10th International CEO Communication, Economics, Organization & Social Sciences Congress underscore India's commitment to promoting a global system that is inclusive, equitable, and responsive to the needs of all nations.

7.1 Challenges

Addressing Socio-Economic Inequalities

One of the most pressing challenges for India is bridging the socio-economic divide that persists across various sections of society. While the country has made significant strides in poverty alleviation and wealth creation, income inequality remains a critical issue. Rural-urban divides, regional disparities, and caste-based discrimination continue to hinder equitable access to resources, education, and employment opportunities. To achieve inclusive development, India will need to focus on policies that uplift marginalized communities and promote socio-economic mobility. Furthermore, the economic benefits of growth must be distributed more equally, ensuring that all citizens, including women, youth, and people in rural areas, benefit from the nation's progress. India's commitment to inclusivity will be key in addressing these inequalities and realizing its goal of becoming a developed, globally competitive nation.

Managing Geopolitical Tensions with Neighbors

India's geopolitical position in South Asia presents both opportunities and challenges. The ongoing tensions with neighboring countries, such as Pakistan and China, continue to affect regional stability and security. These geopolitical tensions can potentially divert resources away from internal development priorities and limit India's ability to fully capitalize on opportunities in trade, infrastructure, and economic cooperation. Navigating these complex relationships while maintaining peace and security will be critical for India's future growth and international standing.

Adopting Green Technologies Without Disrupting Economic Growth

As India seeks to become a global leader in sustainability and climate action, one of the major challenges is transitioning to green technologies without stalling economic growth. India's energy needs are growing rapidly, and fossil fuels still play a significant role in the energy mix. While India is committed to renewable energy and has set ambitious targets for solar and wind energy, the shift to clean energy will require massive investments, infrastructure development, and technological advancements. Balancing the immediate economic demands with long-term sustainability goals is a delicate challenge that India must address if it is to secure both environmental and economic well-being.

7.2 Opportunities

Leveraging the Demographic Dividend

India's youthful population presents a significant opportunity for economic growth and global leadership. With a median age of 28 years, India has a vast labor force that can drive productivity, innovation, and consumption in the coming decades. This demographic advantage provides an opportunity to build a robust, skilled workforce that can meet the demands of a modern, technology-driven economy. By investing in education, skill development, and job



10th International CEO Communication, Economics, Organization & Social Sciences Congress creation, India can harness its demographic dividend to become a global hub for talent and innovation.

Becoming a Leader in AI and Green Technologies

India's focus on becoming a leader in technological innovation, particularly in Artificial Intelligence (AI) and green technologies, offers tremendous opportunities for global leadership. The Indian government has already initiated several AI-focused programs, such as the National AI Mission, aimed at promoting AI research, development, and application across sectors like healthcare, agriculture, and education. If India can successfully leverage its talent pool and invest in cutting-edge AI and automation technologies, it has the potential to become a global leader in this field. Similarly, India's push for renewable energy leadership, particularly through initiatives like the International Solar Alliance (ISA), provides an opportunity for India to be at the forefront of clean energy solutions. By investing in solar, wind, and other sustainable energy technologies, India can not only meet its own energy needs but also help lead the global transition to a low-carbon economy.

Expanding Influence in Global Governance

India's increasing influence in global governance presents an opportunity for it to shape international norms and policies in favour of emerging economies. By actively participating in multilateral forums such as the United Nations, World Trade Organization, G20, and BRICS, India can advocate for fairer global trade policies, climate action, and international security frameworks. As a representative of the Global South, India can work to ensure that the voices of developing nations are heard in discussions that shape the future of global governance. Moreover, strengthening relationships with other global powers and regional organizations, such as the Quad and BRICS, will enhance India's diplomatic and strategic influence in shaping global affairs.

8. Conclusion

India's path to global leadership by 2047 is marked by its unwavering vision of economic, technological, and social transformation. By encouraging innovation, prioritizing inclusive development, and strengthening its global presence, India is poised to emerge as a dominant player in the 21st century. However, the realization of this vision will require addressing the persistent challenges of socio-economic inequalities, geopolitical tensions, and environmental sustainability while simultaneously seizing the vast opportunities presented by its demographic dividend, technological advancements, and leadership in global governance. Through sustained reforms, collaborative efforts, and a commitment to equity and sustainability, India can secure a future where it not only becomes a global economic and technological powerhouse but also a beacon of progress, peace, and prosperity for the world. With its rich cultural heritage, growing influence in international institutions, and a strong commitment to a sustainable future, India's journey toward global leadership by 2047 will undoubtedly have far-reaching implications for both the nation and the world at large.



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- Bhatnagar, S. (2020). India's demographic dividend: Key to achieving sustainable development goals. *Indian Journal of Economics*, 101(4), 23-45.
- Chandra, P. (2022). India's manufacturing sector and Make in India 2.0: Transforming India's industrial landscape. *Economic and Political Weekly*, 57(13), 12-18.
- Chatterjee, P., & Suresh, R. (2021). India's space and defense programs: Advancing self-reliance and technological innovation. *Journal of Indian Defense Studies*, 45(3), 89-102.
- GoI (Government of India). (2019). National Education Policy 2020: Transforming education in India. Ministry of Human Resource Development. https://mhrd.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
- GoI (Government of India). (2020). Aspirational Districts Programme: Bridging regional disparities. Ministry of Rural Development. <https://rural.nic.in/>
- Goswami, S., & Pandey, M. (2022). India's green transition: Renewable energy leadership and climate action strategies. *Environmental Sustainability*, 8(2), 56-74. <https://doi.org/10.1016/j.envsust.2022.02.006>
- Indian Space Research Organisation (ISRO). (2021). Chandrayaan-2: India's Moon mission and its contribution to global space exploration. ISRO Annual Report, 2021. <https://www.isro.gov.in/>
- Kumar, A. (2021). India's role in global governance: Advocacy for reforms in the UNSC and WTO. *International Relations Review*, 29(1), 32-47.
- Mohan, C. R. (2021). The Quad: A new strategic partnership for the Indo-Pacific. *Strategic Studies Quarterly*, 16(4), 56-70.
- Muralidharan, A. (2021). The role of digital India in transforming governance and economic growth. *Journal of Digital Governance*, 5(1), 1-15. <https://doi.org/10.2139/ssrn.3328942>
- Niti Aayog. (2021). Transforming India: A roadmap for the next 25 years (Amrit Kaal). National Institution for Transforming India. <https://niti.gov.in/>
- Prakash, A. (2022). AI in India: Advancing artificial intelligence research for economic development. *Technology and Innovation Journal*, 6(1), 18-31.
- Sharma, R., & Desai, S. (2020). Addressing India's socio-economic inequalities: A roadmap for inclusive growth. *Development Studies Review*, 34(2), 78-95. <https://doi.org/10.1016/j.devstud.2020.05.004>
- World Bank. (2021). India's economic transformation: Challenges and opportunities. World Bank Group. <https://www.worldbank.org/en/country/india>
- World Economic Forum. (2021). India's leadership in renewable energy: Advancements and global impact. <https://www.weforum.org/agenda/2021/12/india-leadership-renewable-energy-advancements/>



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Stock Share's Diversification Pattern under Cyclical Analysis: Evidence
from Argentina

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ABSTRACT

In this article we determine the pattern of diversification and concentration in the Argentine's Stock Market during the cycles of the S&P Merval Index. Using the five stocks with the highest daily market share, we estimate their standardized cycle and the extent of the cyclical component within each phase of the Index. The first results show that the stock market tends to concentrate during the bearish phase, while during bullish phases the diversification – concentration – diversification pattern takes place. Also, the extension of the cyclical component for the fluctuations of the concentration parameter is a coincidental signal of crisis (2022) or changes in the Government (2023).

Keywords: Stock Markets, Cyclical Component, Argentina, Business Cycles, Market Share,
JEL Code: C1, C2, E3, G4.

This article aims to empirically determine the existence of behavioural patterns into the equity's concentration and diversification during bullish and bearish phases of the S&P Merval Index. This index is the main reference for the Argentine's Stocks markets. Some questions that allowed the development of this article were: Do all stocks have the same weighting when the market is bullish? Are there greater diversification of the stocks shares during the bearish period, or do they tend to concentrate? In other words: are there economies of scale in cyclical phases? Do turning points unbalance the share of each stock? To what extent can the extension of the cyclical phase of the share concentration coefficient coincide with an inflection point in the cycle of the S&P Merval index? From how many standard deviations with respect to its mean does the extension of the cyclical component of the share's concentration coincide with a turning point of the index cycle? Are there recurring signals in one of the cyclical phases of the Index that are in turn signals of behavioural changes in concentration and diversification? Are these correlations positive or negative?

Using standardized series for the index in domestic currency (ARS Pesos) and the 5 stocks with the highest daily market share (β_i), we determine the amplitude, maturity, and extension of the cyclical component. This allows us to analyse, within each phase of the index, the concentration and diversification of shares, and, if clearly evident, what are the *cyclical* relationships exist between β_i and the index's fluctuations? In the first part we define the method of calculating the participation of each share into the stock's market operations, as well as the concentration coefficient. In the second, the decision rule to determine the turning points of the standardized series. We continue with the results, and, finally, the conclusions.

1. LITERATURE REVIEW

The pioneering works of J.M. Jorrat taught in the *Economic Cycles Program* at the National University of Tucumán (Argentina) starting in 1995, provide the basic conceptual framework for the standardization of time series. The author's works presented at the 7th CEO Congress (2023) were analysed to determine the extension of the time interval for the mean and standard deviation of the standardized series. Also, the criteria for determining turning points, moving trends, and the cyclical component $c_{it} = y_{it} - t_{it}$, and the extension of the cyclical component: $c'_{i(a,b)}$.

2. METHODOLOGY

The methodology has 4 procedures: 1) Transform the original series into standardized series; 2) Establish the criteria to determine bullish and bearish movements; 3) Determine the turning points, amplitude, maturity, and growth rate of each oscillating phase; 4) Calculate the extension of the cyclical component in each phase.

2.1. Time Series Standardization

Let $z_{it} = \frac{x_{it} - \mu_{it}}{\sigma_{it}}$ the standardized variable with mean μ_{it} and standard deviation σ_{it} . Denoting $\Theta_t = \sum_{i=1}^n z_{it} \forall i = 1, 2, 3, \dots, n$, the cumulative standardized variable so that Θ_t corresponds to the time series on which we determine economic cycles. Then we assign the turning points. To do it, 2 stages are required:

- a) A reference value on the time series (Θ_t) that shows that it is in bullish or bearish periods, and;

- b) A decision rule that determines the point at which the phase change occurs from bullish to bearish and from bearish to bullish continuously (Moore & Moore: 1985).

Additionally, the time interval that we use for μ_{it} and σ_{it} is 14 days.

For the first stage we adopted the first differences criterion. Let $n-m = 1$, $\Theta_{t-1} = \sum_{i=1}^m z_{it} \quad \forall i = 1, 2, 3, \dots, m$, and $\alpha = \Theta_t - \Theta_{t-1}$ then:

$\alpha > 0 \Rightarrow \Theta$ is increasing in t and a succession of positive values will indicate that the standardized series is in an upward phase.

$\alpha < 0 \Rightarrow \Theta$ is decreasing in t and the continuous succession would indicate a bearish phase.

$\alpha = 0 \Rightarrow \Theta$ is null at t is constant and the phase does not have cyclic behaviour.¹

The second stage requires meeting two conditions: *one necessary and the other sufficient*. In the necessary condition we must adopt a *uniform decision rule* that allows us to reach the conclusion whether we are in the presence of any of the phases. This condition is met by answering the following question: How many continuous sequences with the same signature are required to determine the existence of a cyclic phase?

The necessary condition is accomplished when at least four (4) continuous sequences have at least the same signature. That is, for a phase to be considered bullish (bearish) it must contain at least 4 continuous positive (negative) sequences of the first differences (α) from the standardized series (Θ_t).

The sufficient condition is the one that satisfies the condition of alternating growth rate of each phase. Let r_t be the monthly periodic rate of growth between two turning points, when the time in which the cyclical phase ends. Then, the growth rate at t must be strictly greater (lower) than the growth rate at the previous ($t-1$) and subsequent ($t+1$) moments of time for the phase to be bullish (bearish). Symbolically, if we have the relationship $r_{t-1} < r_t > r_{t+1}$, then the phase in t is bullish. While a relationship $r_{t-1} > r_t < r_{t+1}$, will be typical of a bearish phase also in t .

2.2. The Stocks Concentration Coefficient

Prior to its transformation into standardized values, we must calculate the participation of each share within market operations. A common estimator is to weight the number of shares traded (volume) in terms of the capital of each market-day. In this work we use a standardized vector with two variables: traded amount (v_i) and the number of operations of the day (u_i) of each stock share. So:

$$\beta_i = \left[\left(\frac{v_i}{\sum v_i} \right) \left(\frac{u_i}{\sum u_i} \right) \right]^{1/2}, \quad 0 \leq \beta_i \leq 1$$

¹ But it can be a maximum if the preceding phase is bullish and then becomes bearish. The reverse would be a minimum.

$$\sum_{i=1}^n \beta_i = 1, \quad \forall_i = 1, 2, 3, n \text{ (shares)}$$

In this article we will calculate the sum of β_i for the five (5) shares with the highest participation, thereby:

$$\sum_{i=1}^5 \beta_i = \varepsilon_t \Rightarrow 0 \leq \varepsilon_t \leq 1$$

Then ε_t will be the indicator of stock concentration and diversification.

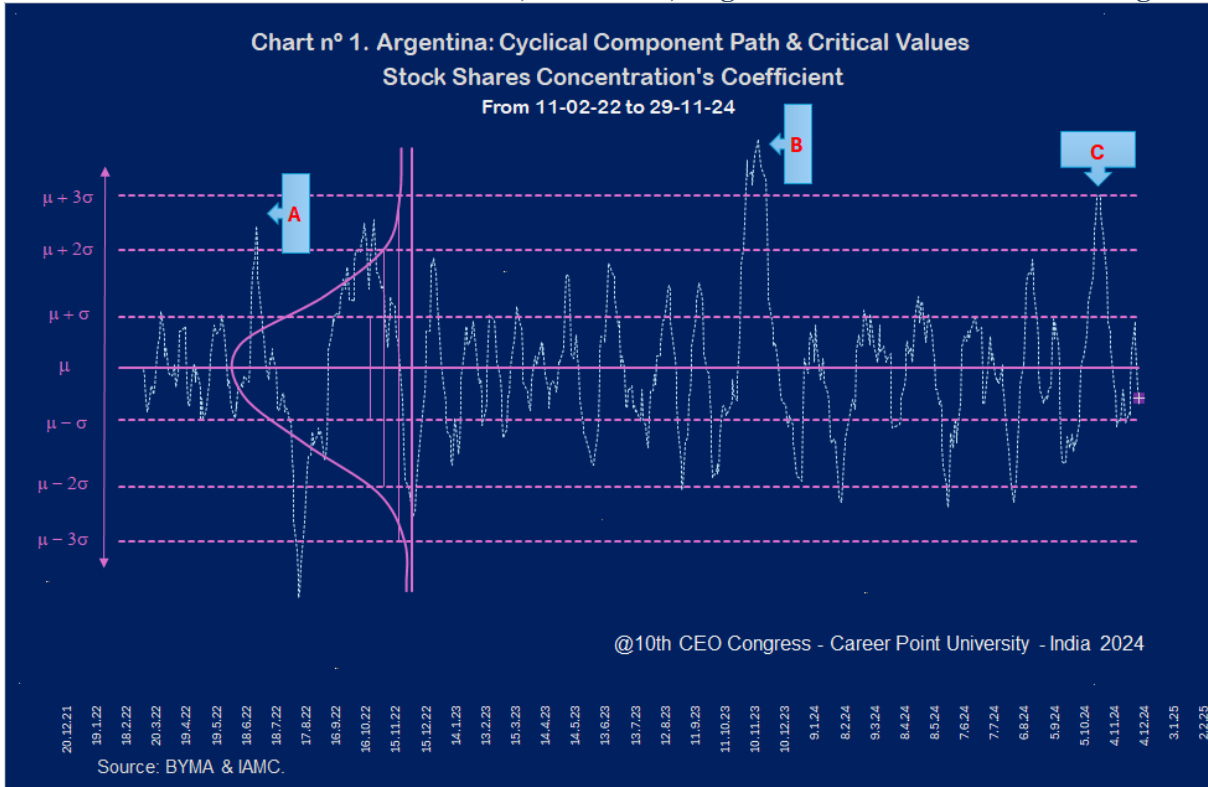
$$\frac{\lim}{\varepsilon_t \rightarrow 0} = \text{diversification} \quad ; \quad \frac{\lim}{\varepsilon_t \rightarrow 1} = \text{concentration}$$

2.3. The extension of the cyclical component

In an additive series, the cyclical component is the difference between the value of the variable and the moving trend of the respective phase ($c_{it} = y_{it} - t_{it}$). Let [a,b] be two consecutive turning points, then we define the extension of the cyclic component as the sum of the first difference of the cyclic component between both, expressed as:

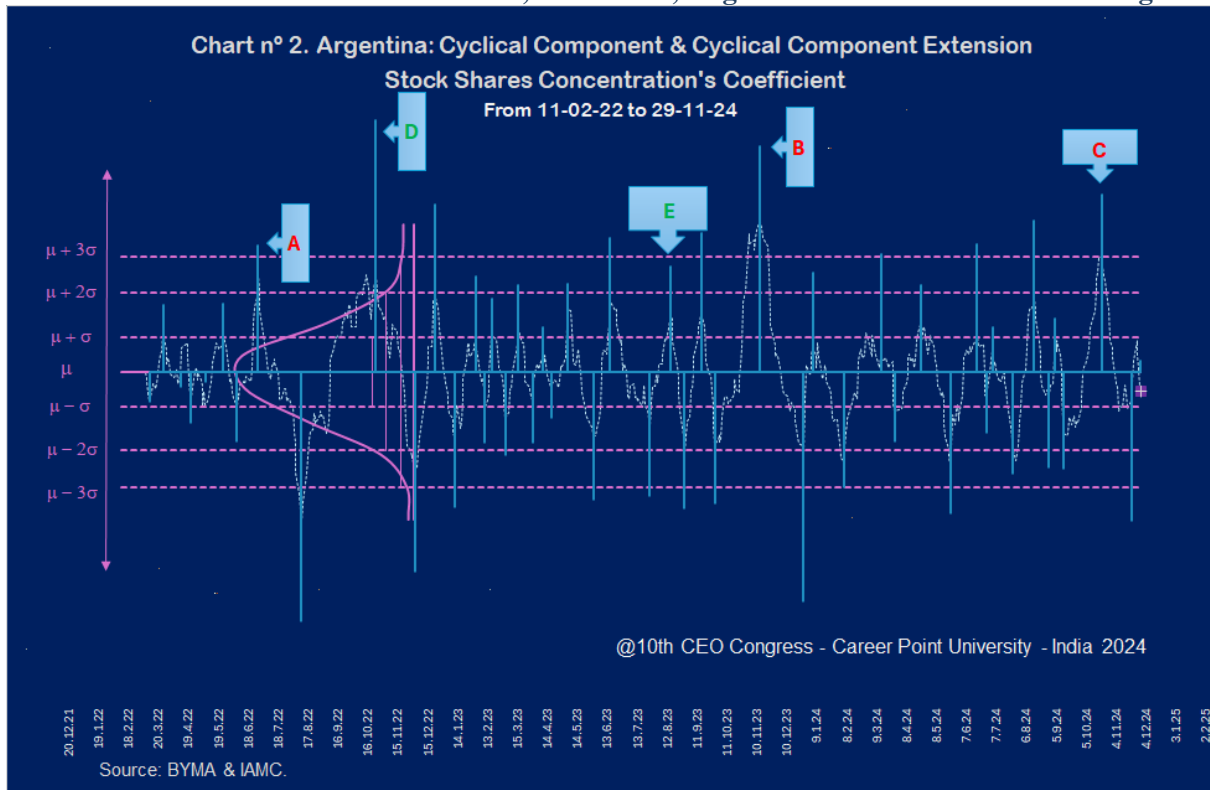
$$c'_{i(a,b)} = \sum_{t=a}^b \Delta c_{it}$$

This way of exposing cyclical values has the advantage of being able to compare with the origin and establish critical points to contrast with events that have determined them. In the case of the concentration coefficient (ε_t), we can see the differences between using the value of the cyclical component (c_{it}) or its extension ($c'_{i(a,b)}$) in the following graphs:



In the graph n°. 1 we can see three critical points: A, B, C. All of them with values that exceed the critical value of $m + 2s$. Point A corresponds to the end of the policy maker cycle (July'22), B shows the end of Argentine's Government (October-November'23), and C, the aversions risk for expected changes before US Government's elections (November'24).

In graph n°. 2 we include $c'_{i(a,b)}$ being able to observe the existence of greater amplitude compared at the critical points with respect to c_{it} while maintaining the measurement scale of c_{it} . Mainly those referring to the proximity of elections in Argentina & the United States.



At least, two new critical points (D, E) appeared and are clearer with the extension of the cyclical component ($c'_{i(a,b)}$) than the cyclical component value (c_{it}). What happened on October 24th (2022) at D point, and on August 15th (2023) at E? The point E shows the concentration of stock shares before the primary election in Argentina (also called PASO). But this market behaviour was lesser relevant for the market's investors than the general elections for a new Government in Argentina (B) or the United States (C). Critical points that go unnoticed or are not relevant enough when we use the c_{it} values, i.e. those that do not exceed the value of $m + 2s$, can be it when we use $c'_{i(a,b)}$

3. RESULTS

To arrive at the results, we must transform the results corresponding to the amplitude of the standardized series of the Stock Index to the scale of the amplitude of the extension of the cyclical component for comparison.

3.1. The Cycle of S&P Merval Index

The results of measuring fluctuations following the methodology described in 2.1. for the S&P Merval Index (local currency) were the following:

Measuring Business Cycles for the S&P Merval Index of Argentina - Amplitude, Maturity & Growth Rate - From: February 11th (2022) to November 29th (2024)						
Start date	End date	Index Value	Δ	Δ %	Length	Rate
-(1)-	-(2)-	-(3)-	-(4)-	-(5)-	-(6)-	-(7)-
11.02.22	08.04.22	53,72	6,95	14,87%	1,87	7,71%
08.04.22	12.05.22	44,75	-8,97	-16,70%	1,13	-14,89%
12.05.22	03.06.22	47,89	3,14	7,03%	0,73	9,70%
03.06.22	21.07.22	36,19	-11,71	-24,44%	1,60	-16,07%
21.07.22	14.09.22	56,85	20,66	57,10%	1,83	27,94%
14.09.22	20.10.22	49,42	-7,43	-13,07%	1,20	-11,02%
20.10.22	08.11.22	53,51	4,09	8,27%	0,63	13,37%
08.11.22	23.11.22	53,12	-0,39	-0,73%	0,50	-1,45%
23.11.22	26.01.23	82,22	29,10	54,77%	2,13	22,72%
26.01.23	10.02.23	78,89	-3,32	-4,04%	0,50	-7,92%
10.02.23	27.02.23	80,08	1,19	1,51%	0,57	2,67%
27.02.23	23.03.23	64,06	-16,02	-20,00%	0,80	-24,35%
23.03.23	05.07.23	105,89	41,83	65,30%	3,47	15,60%
05.07.23	11.07.23	101,05	-4,85	-4,58%	0,20	-20,88%
11.07.23	26.07.23	106,20	5,16	5,10%	0,50	10,47%
26.07.23	16.08.23	98,68	-7,52	-7,08%	0,70	-9,96%
16.08.23	04.09.23	107,03	8,34	8,45%	0,63	13,67%
04.09.23	09.10.23	87,02	-20,00	-18,69%	1,17	-16,25%
09.10.23	20.10.23	99,37	12,34	14,18%	0,37	43,57%
20.10.23	16.11.23	81,01	-18,35	-18,47%	0,90	-20,30%
16.11.23	03.01.24	121,05	40,04	49,43%	1,60	28,53%
03.01.24	19.01.24	111,57	-9,48	-7,83%	0,53	-14,18%
19.01.24	06.02.24	122,53	10,95	9,82%	0,60	16,89%
06.02.24	21.02.24	115,87	-6,65	-5,43%	0,50	-10,56%
21.02.24	04.03.24	121,61	5,74	4,95%	0,40	12,84%
04.03.24	11.03.24	114,12	-7,49	-6,16%	0,23	-23,84%
11.03.24	12.04.24	147,59	33,47	29,33%	1,07	27,26%
12.04.24	19.04.24	139,58	-8,01	-5,43%	0,23	-21,26%
19.04.24	21.05.24	168,61	29,02	20,79%	1,07	19,37%
21.05.24	12.06.24	151,04	-17,57	-10,42%	0,73	-13,93%
12.06.24	27.06.24	154,19	3,15	2,09%	0,50	4,22%
27.06.24	07.08.24	139,12	-15,08	-9,78%	1,37	-7,25%
07.08.24	24.09.24	189,02	49,90	35,87%	1,60	21,12%
24.09.24	07.10.24	183,38	-5,64	-2,98%	0,43	-6,75%
07.10.24	29.11.24	274,92	91,54	49,92%	1,77	25,76%

Source: BYMA.

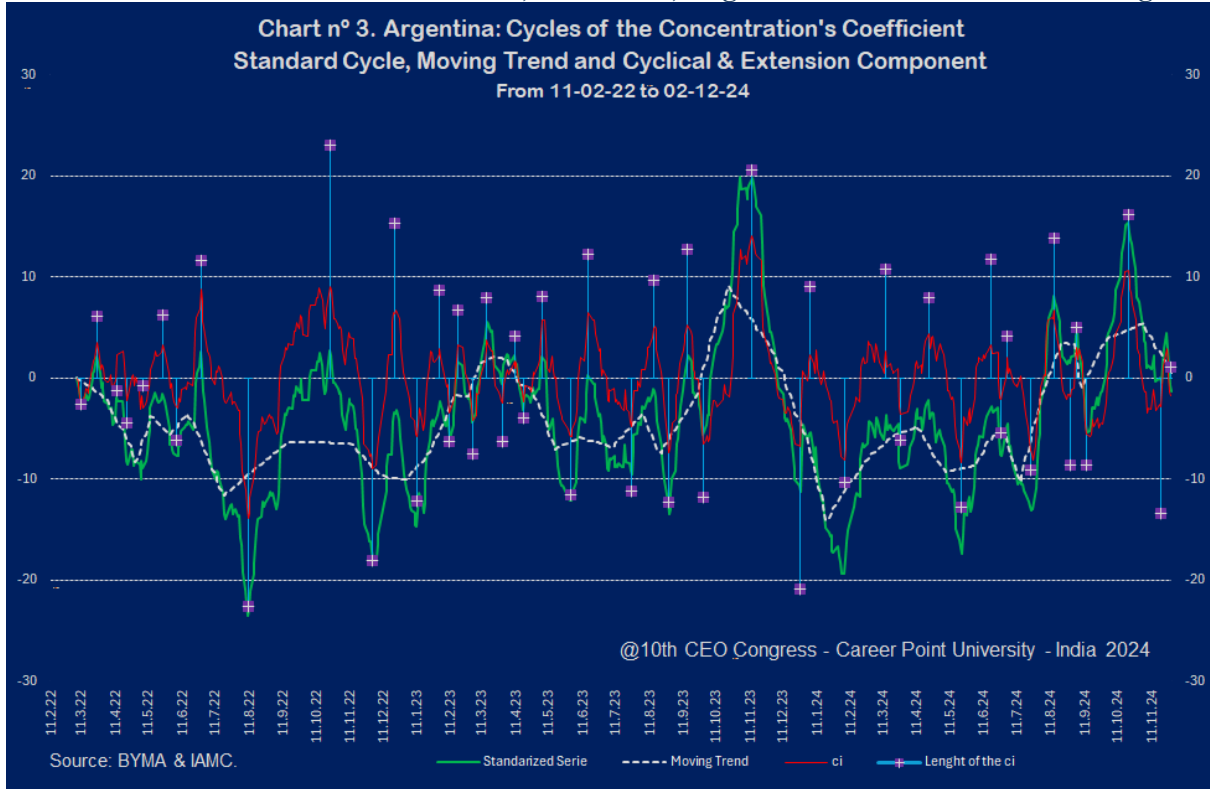
The necessary condition of alternating growth rate is met. Following the results of Table 2, we use descriptive measures. These show that the index has on average, 1 turning point by month. Every month a cycle take place. The amplitude, duration and growth rate of the upswing are greater than downswing. Although when we take the growth rate weighted by the duration of the phases, the result changes. In absolute terms, the weighted bearish rates are higher than those corresponding to the bullish phase. The first important conclusion for our work is that, with shorter terms, the rate at which the index falls is greater than the rate at which it rises (mode & median), but the other measure (weighted average) is lower. An asymmetry that allows us to state a preliminary proposition: *“there is more time to concentrate and diversify the stock portfolio when the index rises than when it falls. Being the downswing a period of stock’s concentration. The phenomenon: $\varepsilon_t \rightarrow 0$ or $\varepsilon_t \rightarrow 1$, can occurs every month.”*

Table 2. Descriptive Statistics for the S&P Merval Index Standardized Cycles (Argentina)								
Upswing: 18 turning points					Downswing: 17 turning points			
	Amplitude	Maturity	Rate	Rate (*)	Amplitude	Maturity	Rate	Rate (*)
Mode	9,00%	0,43	14,14%	3,53%	-6,00%	0,53	-12,00%	-11,51%
Median	15,63%	0,93	16,71%	10,17%	-8,50%	0,68	-13,50%	-23,85%
Average (μ)	25,56%	1,13	18,50%	18,75%	-10,69%	0,68	-14,50%	-14,49%
σ^2	0,0397	0,70	0,0101	0,0310	0,0044	0,1392	0,0031	0,0025
σ	0,1992	0,84	0,1005	0,1760	0,0661	0,3731	0,0559	0,0505
cv	0,7796	0,74	0,5432	0,9384	0,6182	0,5487	0,3855	0,3483
As1	0,63	0,76	0,46	-1,00	-0,46	0,29	-0,27	-0,10
As2	0,43	0,20	0,23	-1,68	-0,33	0,13	-0,06	-4,85
As3	1,50	0,70	0,53	1,46	-0,99	0,00	-0,54	5,56
K	-1,16	-0,35	-0,60	-2,00	-1,18	-0,83	-0,76	-1,31

Source: BYMA & IAMC.
(*) Weighted by maturity.

3.2. The Extension of the Cyclical Component of the Concentration Coefficient

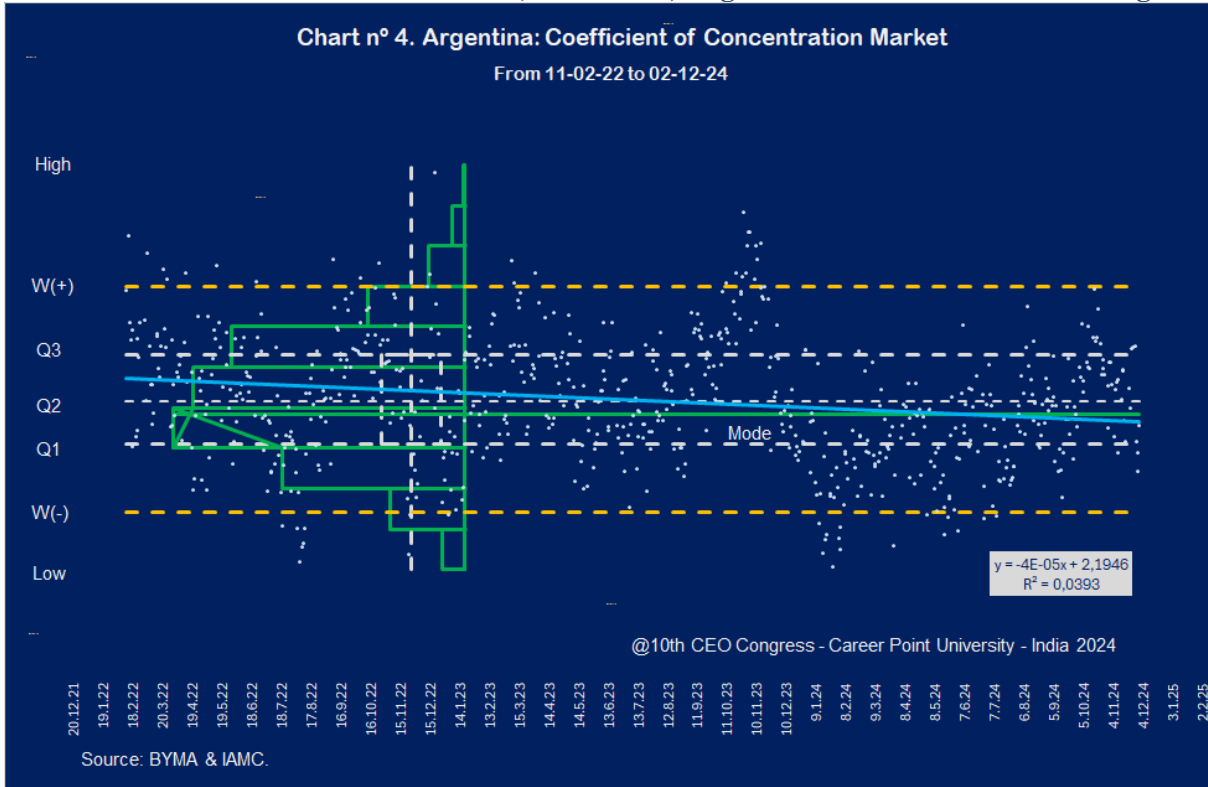
If we take the standardized series of the concentration coefficient and repeat the procedure used on the stock index, we see the main results in graph n^o. 3.



We can see that, except for the government crisis (July-August 2022), and the end of the political cycle (November 2023), c_{it} fluctuates in values close to ± 10 units of σ_{it} throughout the entire time interval, without capturing relevant effects such as the expectations of a next market-oriented government in the primary elections (August 2023), which was reflected in greater diversification ($\varepsilon_t \rightarrow 0$) and in values of $c'_{i(a,b)}$ greater than (c_{it}) that differ from their respective values with greater significance. That is, there are relevant facts not captured using c_{it} , which may be captured when we use $c'_{i(a,b)}$.

We should not only use the value of the cyclic component (c_{it}) to look for the causes of phase changes. In this work, it is a necessary parameter to induce behavioural patterns of the stock's market in Argentina. But it is the extension of the cyclical component ($c'_{i(a,b)}$) that indicates that the magnitude to which the concentration coefficient (ε_t) reaches initiates significant changes (concentration – diversification, and vice versa).

To conclude, the graph also shows us the cyclical behaviour of ε_t , which reaches an amplitude of [75 % - 39 %], with $\mu_{it} \cong 0.54$; $\sigma_{it} \cong 0.05$. As we see in graph n°. 4, given the amplitude and frequency distribution, we must evaluate the hypothesis that $\varepsilon_t \neq k$.

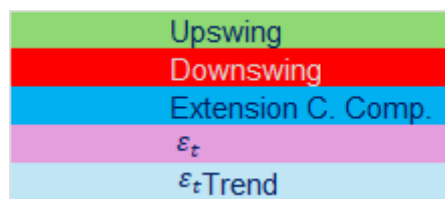
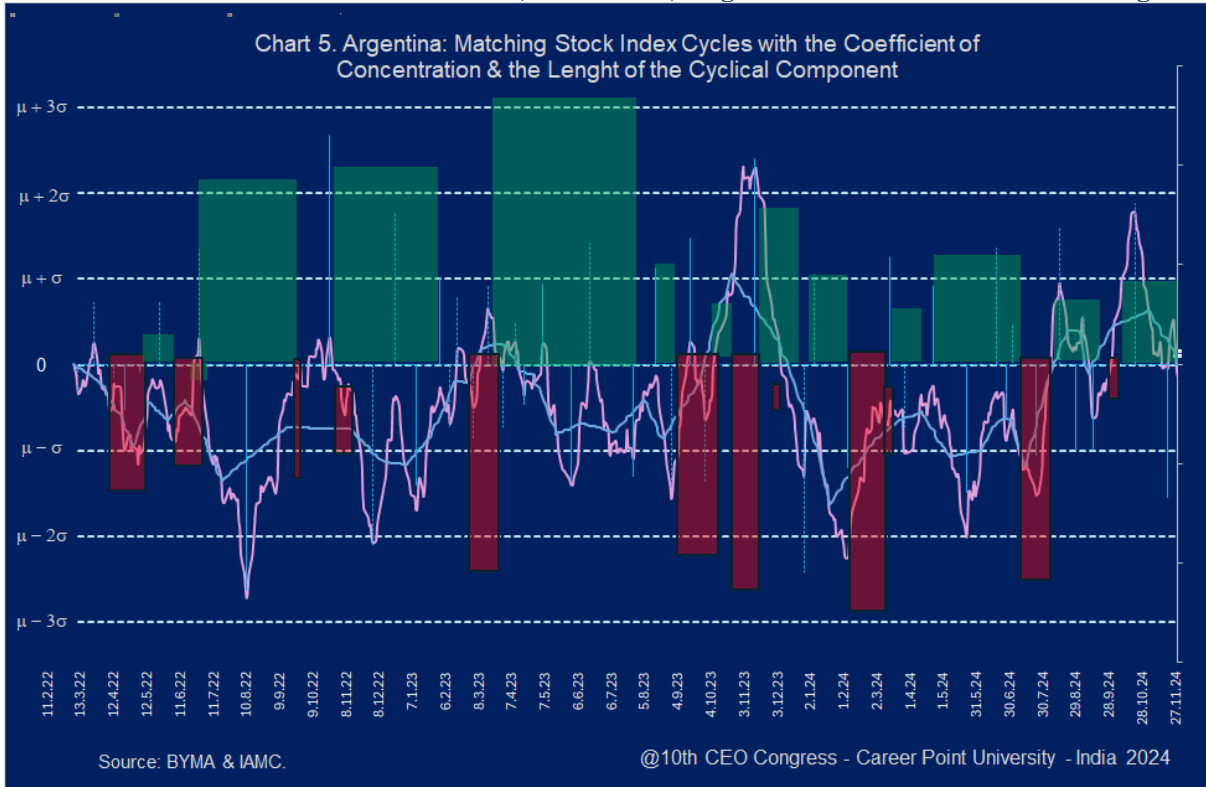


Although μ_{it} is a significant value because that its coefficient of variation is 10.4%, in a simple linear regression analysis where ε_t is the dependent variable as a function of time and although we cannot reject the existence of an association between the variables ($\frac{\beta_i}{se(\beta_i)} = 5.23 > 2t$, with $\alpha = 0.05$), the coefficient of determination and correlation are low ($r^2 = 0.0386$ & $\rho_i \cong 0.20$).

Concluding that cyclical behaviour empirically exists. So, *what is the cause that determines the behaviour of ε_t ?* A first answer is the stock index cycle. By evaluating the trajectory of ε_t within the phases of the stock index when $\varepsilon_t \rightarrow 0$ or $\varepsilon_t \rightarrow 1$ we will be able to establish behavioural patterns of concentration and diversification as these cycles change.

3.3. Concentration and diversification during stock index cycles

Using the amplitude scale of $c'_{i(a,b)}$, we match the amplitude and the maturity of the index cycles with Θ_{β_t} and $c'(\beta_t)_{i(a,b)}$



In graph n^o. 5 we observe that in a context of high inflation such as Argentina had between 2022 and the end of 2024, the upward amplitude of the index is biased towards the use of these financial assets as a hedge against inflation. Therefore, the increases responded to some extent to this phenomenon.

Within the bearish cycles of the index, ϵ_t has a generally monotonous behavior: *it tends to concentrate or diversify*. There are no changes during the bearish phase. Their behavior then is dichotomous. Proposition that we validate with the frequency in which extensions of the cyclical component take place during bearish phases: one or none.

Also in these phases, $c'(\beta_t)_{i(a,b)}$ reaches significant values at the end of the cycle. For example, on June 28 (2022) the downswing and concentration of ϵ_t ends. Faced with imminent changes in economic policy, the stock market began to diversify as it began the upswing.

In a similar way, given the uncertainty regarding the change of government in mid-November 2023, where $c'(\beta_t)_{i(a,b)}$ exceeded the limit of $m + 3s$, ϵ_t reverses the behaviour and passes to diversify at the beginning of a new bullish phase.

Another case of analysis occurs at the end of December 2023, after the change in expectations regarding the economic policy of the new government. The end of a very short-term bearish

10th International CEO Communication, Economics, Organization & Social Sciences Congress phase continued the diversification of the previous bullish phase. In this case, $c'(\beta_t)_{i(a,b)}$ was less than $m - 3s$.

On the contrary, it is during the upswing where ε_t is most frequently concentrated and diversified. For example, during the up that took place between June 28 and September 22, (2022), it diversifies and concentrates significantly with $c'(\beta_t)_{i(a,b)}$ less than $m - 3s$.

We validate these conclusions through the parameters obtained from the Least Square Regression (LSR), with $\varepsilon_t = f(t)$ and comparing the phases in Tables 3 and 4. Some relationships that we highlight are:

1. The σ_y is, on average, lower in the bearish phases than in the bullish ones (2.72 vs. 3.14). The upswing presents a temporal trajectory with greater dispersion. Empirically, the unidirectional trajectory of concentration or diversification is smaller in the downswing.
2. The results are similar for σ^2 (3.81 vs. 5.26). The variance in LSR tells us that ε_t has a lower degree of dispersion in the lows.
3. Also, the number of signatures of β_t in each phase allows us to confirm our hypothesis of ε_t ; 72.2% of the cases in the upswing are negative, while only 35.3% are negative in the downswing. Dispersion and diversification are a dominant behaviour during rallies. Concentration during the downswing.
4. The phases are biased by the effect of high inflation. That is why the duration of the bearish phases is short. In this, 2/3 parts that exceed a ρ_i greater than 75% tend towards concentration.
5. The conclusion is that: a) There are less dispersion and tendency to concentration in the downswing, and; b): Tendency towards diversification with rejection of the null hypothesis that $\beta_t = 0$ implies a fluctuating pattern between concentration and dispersion in the upswing.

Table N° 3. Parameter from the Least Square Regression of the Concentration Coefficient into Equities Stock Index's Cyclical Phases
Downswing

Turning points	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	μ
Start	8.4.22	3.6.22	14.9.22	8.11.22	26.1.23	27.2.23	5.7.23	26.7.23	4.9.23	20.10.23	3.1.24	6.2.24	4.3.24	12.4.24	21.5.24	27.6.24	24.9.24	
End	12.5.22	21.7.22	20.10.22	23.11.22	10.2.23	23.3.23	11.7.23	16.8.23	9.10.23	16.11.23	19.1.24	21.2.24	11.3.24	19.4.24	12.6.24	7.8.24	7.10.24	
Maturity (days)	1,13	1,60	1,20	0,50	0,50	0,80	0,20	0,70	1,17	0,90	0,53	0,50	0,23	0,23	0,73	1,37	0,43	
n. (population)	23	33	25	11	12	19	5	16	26	19	13	10	6	6	17	29	10	16
Dependent variable																		
σ_y^2	5,607	18,569	2,969	11,072	1,100	11,060	0,383	3,376	8,735	21,009	10,604	11,656	0,703	0,746	17,888	15,829	9,957	9,02
σ_y	2,368	4,309	1,723	3,327	1,049	3,326	0,619	2,319	2,955	4,584	3,256	3,414	0,838	0,864	4,229	3,979	3,155	2,72
Parameters																		
β_1	(4,069)	(2,376)	(3,156)	(0,105)	(3,323)	(4,024)	(8,604)	(7,650)	(3,186)	8,643	(3,806)	(18,706)	(4,501)	(4,906)	(17,818)	(9,504)	(4,297)	
$\beta_2^* = 0$	(0,212)	(0,221)	0,164	(0,837)	(0,109)	0,492	0,085	0,453	0,073	0,688	(0,809)	1,100	(0,141)	0,284	0,807	0,099	1,019	
2t Test	3,494	3,185	4,688	4,546	1,284	6,213	0,384	9,543	0,946	6,491	12,637	12,604	0,661	1,560	14,054	1,127	13,321	
Null Ho)	Reject	Reject	Reject	n.a.	n.a.	n.a.	n.a.	n.a.	Not Rej.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	Not Rej.	n.a.	
Degree of Association																		
r2	0,368	0,247	0,489	0,697	0,141	0,694	0,047	0,867	0,036	0,713	0,936	0,952	0,099	0,378	0,929	0,045	0,957	
ρ	0,606	0,497	0,699	0,835	0,376	0,833	0,217	0,931	0,190	0,844	0,967	0,976	0,314	0,615	0,964	0,212	0,978	
Variance Test																		
σ_i	3,715	14,442	1,584	3,732	1,038	3,581	0,487	0,767	8,771	6,395	0,745	0,629	0,792	0,579	1,347	15,679	0,483	3,81
$\hat{\sigma}$	2,786	10,831	1,188	2,799	0,779	2,685	0,365	0,576	6,579	4,796	0,559	0,472	0,594	0,435	1,010	11,759	0,362	
Chi-Square	12,34	19,28	13,09	3,33	3,94	8,67	0,35	6,57	13,09	8,67	4,57	2,17	0,71	0,71	7,26	16,15	2,17	
$\sigma_{err} = \sigma \sqrt{\frac{\chi^2}{n-1}}$	2,782	11,210	1,170	2,152	0,621	2,485	0,144	0,508	6,347	4,438	0,460	0,309	0,299	0,218	0,907	11,908	0,237	
Null Ho)	Reject	Not Rej.	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Not Rej.	Reject	

(**) If the result of the Test-Hypothesis is Reject, then it implies that the volatility of ϵ_t is low.

Table N° 4. Parameter from the Least Square Regression of the Concentration Coefficient into Equities Stock Index's Cyclical Phases

	Upswing																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Turning points																			μ
Start	11.2.22	12.5.22	21.7.22	20.10.22	23.11.22	10.2.23	23.3.23	11.7.23	16.8.23	9.10.23	16.11.23	19.1.24	21.2.24	11.3.24	19.4.24	12.6.24	7.8.24	7.10.24	
End	8.4.22	3.6.22	14.9.22	8.11.22	26.1.23	27.2.23	5.7.23	26.7.23	4.9.23	20.10.23	3.1.24	6.2.24	4.3.24	12.4.24	21.5.24	27.6.24	24.9.24	29.11.24	
Term(*)	1.87	0.73	1.83	0.63	2.13	0.57	3.47	0.50	0.63	0.37	1.60	0.60	0.40	1.07	1.07	0.50	1.60	1.77	
n. (population)	38	15	39	14	44	10	67	12	13	8	31	13	9	21	22	9	35	38	
Dependent variable																			
σ_y^2	1,973	4,643	23,656	4,811	19,651	6,336	17,815	0,516	15,764	3,654	69,091	2,145	1,429	2,760	20,336	3,488	15,458	27,809	
σ_y	1,405	2,155	4,864	2,193	4,433	2,517	4,221	0,718	3,970	1,912	8,312	1,464	1,196	1,661	4,510	1,868	3,932	5,273	
Parameters																			
β_1	0,454	(1,183)	(18,521)	2,185	(13,953)	(4,584)	0,692	(8,513)	(2,757)	1,105	13,936	(14,676)	(7,112)	(5,578)	(0,503)	(2,753)	7,429	13,416	
$\beta_2^* = 0$	(0,069)	(0,331)	0,238	(0,425)	0,141	0,534	(0,126)	(0,010)	(0,817)	0,753	(0,854)	(0,340)	0,300	(0,003)	(0,677)	(0,411)	(0,325)	(0,374)	
diversific diversific concentra																			
2t Test	3,894	3,415	4,096	4,800	2,900	2,368	5,756	0,164	4,448	9,054	14,075	7,053	2,498	0,041	19,459	1,999	9,120	7,660	
Null Ho)	Reject	n.a.	Reject	n.a.	Reject	n.a.	Reject	n.a.	n.a.	n.a.	Reject	n.a.	n.a.	Not Rej.	Reject	n.a.	Reject	Reject	
Degree of Association																			
r2	0,296	0,473	0,312	0,658	0,167	0,412	0,338	0,003	0,643	0,932	0,872	0,819	0,471	0,000	0,950	0,363	0,716	0,620	
p	0,544	0,688	0,559	0,811	0,408	0,642	0,581	0,052	0,802	0,965	0,934	0,905	0,686	0,009	0,975	0,603	0,846	0,787	
Variance Test																			
σ^2	1,194	1,624	4,089	1,336	4,094	2,047	3,461	0,752	2,479	0,539	3,021	0,651	0,929	1,704	1,035	1,593	2,127	3,297	
$\hat{\sigma}$	0,896	1,218	3,066	1,002	3,071	1,535	2,596	0,564	1,859	0,404	2,266	0,488	0,697	1,278	0,776	1,195	1,595	2,472	
Chi-Square	24,075	6,571	24,884	5,892	28,965	2,733	48,305	4,575	4,575	2,167	18,493	5,226	2,733	10,851	11,591	2,733	21,664	24,075	
$\sigma_{err} = \sigma \sqrt{\frac{x}{n-1}}$	0,964	1,112	3,309	0,899	3,360	1,128	2,961	0,485	1,531	0,300	2,372	0,450	0,543	1,255	0,769	0,931	1,698	2,659	
Null Ho) (**) $\hat{\sigma} > \sigma_{err}$	Reject	Not Rej.	Reject	Not Rej.	Reject	Not Rej.	Reject	Not Rej.	Not Rej.	Not Rej.	Reject	Not Rej.	Not Rej.	Not Rej.	Not Rej.	Nbr.Rej.	Reject	Reject	

(*) Monthly.

(**) If the result of the Test-Hypothesis is Not Rejected, then it implies that the volatility of ϵ_t is high.

CONCLUSION



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1. In this work, we jointly use the cycles of the S&P Merval Index of Argentina and the concentration coefficient to state the first patterns of market behaviours during bullish and bearish phases.
2. The period under analysis: 2022-2024, is strongly conditioned by a high inflation context whose effect is greater amplitudes in the upswing and short bearish duration phases.
3. The extension of the cyclical component is a clearer indicator than the value of the cyclical component to determine stylized facts. Like political cycles. Such as internal Government changes or changes of Government.
4. The stock's concentration pattern in Argentina (ex-ante) during the downswing is due to the uncertainty (ex-post) of expected events. Such is the case of the elections in Argentina (November'23) and the United States (November'24).

REFERENCES

Jorrat, J.M. (2005). Construcción de índices mensuales coincidentes y líder de Argentina. **Progresos en Econometría**. Editor: AAEP, Buenos Aires.

Gil Forleo, H.E. (2023). Inflationary Cycle in Bolivia, Paraguay, and Uruguay during the 21st Century. *In 7th CEO Congress Conference Papers*, Uzbekistan.



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Analytical Study of Problems that Occur in State-Owned Pharmaceutical Enterprise, PT Kimia Farma Tbk, Using Financial Ratio Analysis and Altman Z-score

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ABSTRACT

Pharmaceutical Industry has played a vital role in improving the quality of life of the human population in this era. PT. Kimia Farma Tbk has become the first pharmaceutical company in Indonesia to grow into one that provides integrated health services. During the current year, PT Kimia Farma Tbk has shown good financial performance and reached 289.889 million in profits in 2021. Unfortunately, The internal audit process carried out by PT Kimia Farma Tbk (KAEF) Management found alleged violations of the integrity of the provision of financial report data at the subsidiary, one group member from this state-owned enterprise, namely PT Kimia Farma Apotek (KFA) in the 2021-2022 period which led to the allegation of financial engineering. It resulted in KAEF's consolidated losses in 2023 reaching 1.82 trillion. This condition is further exacerbated by an increase in business expenses of 4.66 trillion rupiahs in 2023, this business expense increased by 35.53 percent year on year compared to 2022 of 3.44 trillion rupiahs. Based on this fact of situation, this research aims to analyze PT Kimia Farma Tbk's financial performance condition by using Z-score Altman and financial ratio analysis to predict Kimia Farma Tbk's financial sustainability and potential future growth. The data methodology used in this research is an observation method and data study based on secondary data that referred to the financial report on the company's official website collected from 2018-2023.

Keywords: PT Kimia Farma Tbk, Financial Performance, Pharmaceutical Industry, Analytical Study, Z-score Altman, Financial Ratio Analysis

1. OVERVIEW

PT Kimia Farma Tbk is Indonesia's first pharmaceutical company, founded by the Dutch East Indies government in 1817, and is a member of a state-owned Pharmaceutical Enterprise. (Company Profile: Sejarah Kimia Farma, 2024). In the last five years, PT Kimia Farma Tbk (KAEF) has knowledgeable a major downturn in financial terms, specifically in 2023, The company seasoned negative economic performance. Loss of as much as 1.8 trillion compared to the previous year 2022 amounted to 126.02 billion. (Gideon, 2024). This situation is caused by various factors including factory inefficiency, too much capacity but low utilization; the dominance of low-magnitude products, impairment of assets and debt in 2023, and there was a problem that has never happened in Kimia Farma, namely the alleged data integrity that occurred in a subsidiary, namely Kimia Farma Apotek (KFA) which was found by Kimia Farma management from the result of the internal audit process, according to Lina Sari, Director of Finance and Risk Management PT Kimia Farma Tbk. (Kiki Safitri and Aprillia Ika, 2024). Based on this situation, the study uses the Altman-Z score to analyze company bankruptcy and the company's economic performance assessed through the evaluation of financial metrics (Liquidity, activity, solvency, and profitability ratio) to provide an overview or financial information to various parties in the company.

2. LITERATURE REVIEW

A state-owned enterprise (SOE) is a legal organization created by the government to carry out business activities on its behalf. It can be completely or partially owned by the government and is typically assigned to undertake specific commercial activities. (Kenton, 2020) PT Kimia Farma Tbk is among the members of BUMN's enterprise that operates in the well-being sector, especially in pharmaceuticals which is under the parent holding company, PT. Biofarma (Persero). (Company profile: History, n.d.) Currently, PT Kimia Farma Tbk and its business group have a network of 10 factories, 1,234 pharmaceutical outlets (Kimia Farma Pharmacies), 419 health clinic outlets, 72 clinical laboratory outlets, 72 clinical laboratory outlets, 8 opticians, and 3 beauty clinics. (About Us: Company Profile PT Kimia Farma Tbk (KAEF), 2023). The purpose of establishing a state-owned company under Law no 19 of 2003 concerning Government-Owned Enterprise is to support the development of the national economy overall and state revenue in certain; strive for profit; offer public advantages in the shape of excellent quality together with sufficient goods and /or services to fulfill the demands of the large population; pioneer business operation that the private enterprises and cooperatives have not yet implemented; actively offer guidance and support to financially disadvantaged associations, collaboratives and communities. (<https://kitabhukum.wordpress.com/wp-content/uploads/2013/11/uu-no-19-th-2003.pdf> page 3 article 2)

Derived from the purpose of establishing a publicly owned company above, the fiscal health circumstances of the state-owned enterprise itself is an essential element.

Financial Ratio

A Financial Ratio is a technique used to evaluate a company's balance sheet and income statement to gain insights into its liquidity, operational effectiveness, and profitability. It does not depend on just one metric; instead, it evaluates multiple financial data points of a company. It is an essential part of fundamental equity analysis. (bloomenthal, 2024)

Altman-Z Score

The Altman Z-score is an approach for determining the level of financial health of a company that can be used to assess the success or potential failure of its management. It is a proportion model designed to forecast corporate default or identify trouble in the economy. (Lily Rahmawati Harahap, 2020)

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Ministerial Regulation of BUMN Firm KEP-100/MBU/2002**

A regulation from a state-owned company institution is used as a benchmark for measuring the financial health of a state-owned enterprise. This evaluation method consists of three aspects such as economic, operational, and administration. In the financial aspect, the total weight for infrastructure is 50 and for non-infrastructure is 70. There are eight indicators to measure economic health, such as Return on Investment (ROI), Return on Equity (ROE), cash ratio, current ratio, Collections Period (CP), Inventory Turnover, Total Asset Turnover (TATO), and Total Equity to the Total Asset (TETA). (KEP-100/MBU/2002)

3. RESEARCH METHOD

This research utilized secondary data from yearly summary of PT Kimia Farma Tbk in five years period from 2019-2023. The data source is accessed via the personal website of Kimia Farma (www.kimiafarma.co.id) or can be accessed via market data, WallStreet Journal (<https://www.wsj.com/market-data>) where the analysis results are based on Ministerial Regulation of BUMN Firm No. Kep-100/MBU/2002 or Kementrian Badan Usaha Milik Negara Nomor: KEP-100/MBU/2002, Chapter II Article 3. This regulation was used to validate the financial health condition level of Kimia Farma Enterprise whether in the level of a Healthy level (AAA, AA, A), Unhealthy level (BBB, BB, B), or Not Healthy level (CCC, CC, C). Each score is AAA (the total points more than 95 points), AA (the total points more than or equal to 80 and less than or equal to 95), and A (the total points are more than 65 and less than or equal to 80). BBB (the total points are more than 50 and less than or equal to 65), BB (the total points more than 40 and less than or equal to 50), and B (the total points more than 30 and less than or equal to 40). CCC (the total points more than 20 and less than or equal to 30), CC (the points more than 10 and less than or equal to 20), and C (the points less than or equal to 10). (KEP-100/MBU/2002)

This study also used financial ratios to provide an overview of the company’s health as well as its strengths and weaknesses, providing detailed information about company Profitability, Liquidity, Activity, and Solvency. It combined this information with the Z-score Altman analysis to predict the possibility of corporate bankruptcy based on economic ratios.

Altman-Z score

Altman-Z score is a formula to predict the probability of corporate bankruptcy based on financial ratios, it was published in 1968 by Edward L. Altman. (Altman, Edward I, 2020).

The formula of Altman Z-Score in service companies, especially in shipping companies and healthcare industries is written below:

$$Z = 6.56X1 + 3.26X2 + 6.72X3 + 1.05X4$$

X1 = Working capital/Total assets

X2 = Retained Earnings/Total assets

X3 = Earnings before interest and taxes/Total assets

X4 = Book value of equity/Book value of total liabilities

The result criteria are shown in Table 1

Table 1: Result Criteria of Altman-Z Score Model

Z score Value	Result
$Z > 2.6$	Safe Zone
$Z < 1.1$	Distress Zone
$1.1 \leq Z \leq 2.6$	The z value of anything between 1.1 and 2.6 = Grey Zone (Have a risk for financial Distress)

The Variable and Weight Score

Table 2. The Variable and Weight Score

Indicators	Weight Score
ROE	20
ROI	15
Cash Ratio	5
Current Ratio	5
Collection Ratio	5
Inventory Turn Over	5
Total Assets Turnover	5
Total Equity to Total Assets	10
Total weight score	70

References: Regulation of BUMN Ministry No Kep-100/MBU/2002

Health Level Assessment

Table 3. Health Assessment Chapter II Article 3 No. Kep-100/MB

Indicator	Range Value	Description
AAA	TS>=95	Healthy
AA	80<TS<=95	Healthy
A	65<TS<=80	Healthy
BBB	50<TS<=65	Unhealthy
BB	40<TS<=50	Unhealthy
B	30<TS<=40	Unhealthy
CCC	20<TS<=30	Not Healthy
CC	10<TS<=20	Not Healthy
C	TS<=10	Not Healthy

References: Regulation of BUMN Ministry No Kep-100/MBU/2002

Profitability Ratio

- Profitability ratios are used to assess how effectively a company converts expenses into profits, showing how efficiently it generates profits and creates value for shareholders. (Hayes, Corporate Finance: Financial Ratio, 2024)

➤ *ROE (Return on Equity)*

ROE measures a corporation's profitability and its efficiency in generating those profits. (Fernando,2024) A Higher ROE indicates that a company is more effective at turning its equity financing into profits.

Formula: $ROE = (\text{net income} : \text{shareholder's equity}) \times 100 \%$

Table 4 ROE Assessment Score List

ROE (%)	Score	
	Infra	Non-Infra
15 < ROE	15	20
13 < ROE <= 15	13.5	18
11 < ROE <= 13	12	16
9 < ROE <= 11	10.5	14
7,9 < ROE <= 9	9	12
6,6 < ROE <= 7,9	7.5	10
5,3 < ROE <= 6,6	6	8.5
4 < ROE <= 5,3	5	7
2,5 < ROE <= 4	4	5.5

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1 < ROE ≤ 2,5	3	4
0 < ROE ≤ 1	1.5	2
ROE < 0	1	0

References: Regulation of BUMN Ministry No Kep-100/MBU/2002

➤ *Total Shareholder's equity to total assets*

A financial ratio that assesses financial leverage, helping investors and other stakeholders evaluate a business's leverage position and its ability to settle debt. It assesses the percentage of a company's assets that are owned by investors versus the portion of its assets financed through leverage.

Formula: TETA = (Total shareholder's equity: total assets) x 100%

Table 5 Total Equity to Total Assets Assessment Score List

Total Equity to Total Assets=x (%)	Score	
	Infra	Non-Infra
x < 0	0	0
0 ≤ x < 10	2	4
10 ≤ x < 20	3	6
20 ≤ x < 30	4	7.25
30 ≤ x < 40	6	10
40 ≤ x < 50	5.5	9
50 ≤ x < 60	5	8.5
60 ≤ x < 70	4.5	8
70 ≤ x < 80	4.25	7.5
80 ≤ x < 90	4	7
90 ≤ x < 100	3.5	6.5

References: Regulation of BUMN Ministry No Kep-100/MBU/2002

➤ *ROI (Return on Investment)*

Return on Investment (ROI) is utilized to measure the profitability or efficiency of an investment.

Formula :

ROI = (EBIT + Depreciation + Amortization)/(Total Assets - Total Fixed Assets) x 100

Table 6. ROI Assessment Score List

ROI (%)	Score	
	Infra	Non-Infra
18 < ROI	10	15
15 < ROI ≤ 18	9	13.5
13 < ROI ≤ 15	8	12
12 < ROI ≤ 13	7	10.5
10,5 < ROI ≤ 12	6	9
9 < ROI ≤ 10,5	5	7.5
7 < ROI ≤ 9	4	6
5 < ROI ≤ 7	3.5	5
3 < ROI ≤ 5	3	4
1 < ROI ≤ 3	2.5	3
0 < ROI ≤ 1	2	2
ROI < 0	0	1

References: Regulation of BUMN Ministry No Kep-100/MBU/2002

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Liquidity Ratio

- The liquidity ratios evaluate a company’s ability to cover short-term liabilities and manage its cash flow.
- Liquidity ratios are a key group of financial metrics used to assess a debtor’s ability to settle current debt obligations without needing to raise external capital. (Hayes, Corporate Finance: Financial Ratio, 2024)

➤ *Current Ratio*

The current liquidity ratio evaluates a company’s capacity to meet short-term obligations or debts that are due within one year.

Formula : Current Ratio = (Current Assets : Current Liabilities) x 100%

Table 7. CURRENT RATIO Assessment Score

List

CURRENT RATIO =x (%)	Score	
	Infra	Non-Infra
125 <= x	3	5
110 <= x < 125	2.5	4
100 <= x < 110	2	3
95 <= x < 100	1.5	2
90 <= x < 95	1	1
x < 90	0	0

References: Regulation of BUMN Ministry No Kep-100/MBU/2002

➤ *Cash Ratio*

A liquidity measure shows a company’s ability to meet its short-term obligations using only cash and cash equivalents.

Formula: Cash Ratio = (cash and cash equivalent: current liabilities) x 100%

Table 8. CASH RATIO Assessment Score List

CASH RATIO=x (%)	Score	
	Infra	Non-Infra
x >= 35	3	5
25 <= x < 35	2.5	4
15 <= x < 25	2	3
10 <= x < 15	1.5	2
5 <= x < 10	1	1
0 <= x < 5	0	0

References: Regulation of BUMN Ministry No Kep-100/MBU/2002

➤ *Average Collection Period*

The time it takes for a business to receive payments owed by its clients about accounts receivable (AR)

Formula : Average collection period = (Account Receivable : Sales Revenue) x 365 days

Table 9. AVERAGE COLLECTION PERIOD Assessment Score List

AVERAGE COLLECTION PERIOD = x (days)	Score	
	Infra	Non-Infra
x <= 60	4	5
60 < x <= 90	3.5	4.5
90 < x <= 120	3	4
120 < x <= 150	2.5	3.5
150 < x <= 180	2	3

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180 < x <= 210	1.6	2.4
210 < x <= 240	1.2	1.8
240 < x <= 270	0.8	1.2
270 < x <= 300	0.4	0.6
300 < x	0	0

References: Regulation of BUMN Ministry No Kep-100/MBU/2002

Activity Ratio

- Indicator of how effectively a company uses its assets to generate revenue and cash.
- Activity ratios can assist in comparing businesses within the same industry or monitor the financial condition of a single company over a period. (Kenton, Corporate Finance: Financial Ratio, 2020)

➤ *Inventory Turn Over*

A financial ratio indicates the frequency with which a company has sold and restocked inventory during a particular period.

Formula : Inventory Turn Over = (COGS: Inventory) x 365

Table 10. Inventory Turn Over Assessment Score List

INVENTORY TURNOVER = x (Days)	Score	
	Infra	Non-Infra
x <= 60	4	5
60 < x <= 90	3.5	4.5
90 < x <= 120	3	4
120 < x <= 150	2.5	3.5
150 < x <= 180	2	3
180 < x <= 210	1.6	2.4
210 < x <= 240	1.2	1.8
240 < x <= 270	0.8	1.2
270 < x <= 300	0.4	0.6
300 < x	0	0

References: Regulation of BUMN Ministry No Kep-100/MBU/2002

➤ *Total Assets Turnover*

The Assets turnover ratio indicates how effectively a company uses its assets to generate revenue. A greater asset turnover ratio signifies greater efficiency in asset utilization,

Formula : Total Assets Turn Over = (Sales : Total Assets) x 100 %

Table 11. Total Assets Turn Over Assessment Score List

TATO = x (%)	Score	
	Infra	Non-Infra
120 < x	4	5
105 < x <= 120	3.5	4.5
90 < x <= 105	3	4
75 < x <= 90	2.5	3.5
60 < x <= 75	2	3
40 < x <= 60	1.5	2.5
20 < x <= 40	1	2
x <= 20	0.5	1.5

References: Regulation of BUMN Ministry No Kep-100/MBU/2002

Solvency Ratio

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- Solvency ratios are frequently used by potential lenders to assess a company's creditworthiness, as well as by prospective bond investors (Hayes, Corporate Finance: Financial Ratios, 2024)
 - *Interest Coverage Ratio*
The interest coverage ratio measures a company's ability to pay interest on its outstanding debt.
Formula: $ICR = \frac{EBIT}{\text{Interest Expense}}$
 - *Debt-to-Assets Ratio*
It shows the ratio of a company's funding that comes from equity compared to debt.
Formula : $DAR = \frac{\text{Debt}}{\text{Assets}}$
 - *Equity Ratio*
Demonstrates the extent to which a company is financed through equity rather than debt.
Formula: $SER = \frac{TSE}{\text{Total Assets}}$

4. RESULT AND DISCUSSION

4.1 Z-Score Altman

Table 12. Z-score Altman Calculation on 2019-2023

Variable	2019	2020	2021	2022	2023	Average
X1	0.0026	0.0395	0.182	0.2513	0.2003	0.13514
X2	0.1346	0.1294	0.1286	0.0994	0.1428	0.12696
X3	0.0273	0.0372	0.0555	0.0274	-0.0892	0.01164
X4	0.6776	0.6795	0.6869	0.8479	0.5712	0.69262
Zscore	1.35	1.64	1.63	1.56	1.78	2.10588

Table 12 shows that, on average, over five years, PT Kimia Farma Tbk's Z-score was 2.1, which means that the financial performance is at risk of economic distress. From 2019 until 2023, there was no significant progress, with the Z value between 1.1 and 2.6. All years showed a grey area condition or proneness to bankruptcy.

4.2.1 ROE

Table 13. ROE

Years	Net income	Total Shareholder's Equity	ROE (%)	Score based on KEP-100/MBU/2002
2019	-12,724	7,241,894	-0.175699893	0
2020	17,639	6,993,397	0.252223633	2
2021	302,274	7,139,643	4.233741099	7
2022	-175,017	7,137,633	-2.452031367	0
2023	-1,466,125	5,662,093	-25.89369337	0

Table 13 shows in 2019, the ROE (Return on Equity) in negative percentage which means the company couldn't optimize capital from investors however, the situation stabilized in 2020 and the highest percentage was in 2021 but after 2021, PT Kimia Farma Tbk's ROE sharply decreased to negative results until 2023 which described profitability was low.

4.2.2 TETA

Table 14. Total Shareholder's Equity to Total Assets (TETA)

Years	Total Equity	Total Assets	Total equity to total assets (%)	Score based on KEP-100/MBU/2002
2019	7.241.894	18.352.877	39.4591758	10

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2020	6.993.397	17.562.817	39.81933536	10
2021	7.139.643	17.760.195	40.20025118	10
2022	7.137.633	19.797.323	36.05352602	10
2023	5.662.093	17.585.298	32.19787916	10

Table 14 shows there was a significant amount of TETA's percentage in 2019 and 2020 increased in 2021, but after 2021 the percentage TETA amount was decreasing again and continued until 2023, A lower ratio suggests a greater level of financial risk, the company was leveraged. For the investor is hard to choose a company with a low equity-to-asset ratio due to the difficulty of having some kind of return, especially in a state of bankruptcy (Kristi Waterworth, December 2023).

4.2.3 ROI

Table 15. ROI

Years	EBIT + Depreciation+ Amortization	Total Assets - Fixed Assets	ROI (%)	Score based on Kep-100/MBU/2002
2019	451.086	9.073.066	5.0	4
2020	737.460	8.160.405	9.0	6
2021	1.302.210	8.196.788	16.0	13.5
2022	510.533	9.892.948	5.16	5
2023	-868.445	7.696.798	-11.3	1

Table 15 shows the value of ROI (Return on Investment) growth significantly in 2019 and 2020, achieving the highest level in 2021, 16 percent ROI, after that decreased sharply in 2022 and achieved the bottom level in 2023.

4.3 Liquidity Ratio

4.3.1 Current Ratio

Table 16. Current Ratio

Years	Current Assets	Current Liabilities	Current Ratio (%)	Score Based on Kep-100/MBU/2002
2019	7.344.787.123	7.392.140.277	99	2
2020	6.093.103.998	6.786.941.897	90	1
2021	6.303.473.591	5.980.180.556	105	3
2022	8.179.802.709	8.691.263.905	94	1
2023	5.886.662.752	9.409.735.166	63	0

Table 16 shows in 2019, the company achieved a good percentage of the current ratio then decreased in 2020 and rose high in the year 2021, after that back to decreased in 2022 and the lowest in 2023. It indicates that the company was less capable of paying short-term obligations within a year. The greater risk the company faces in meeting its obligations, there are indications that the company may go bankrupt.

4.3.2 Cash Ratio

Table 17. Cash Ratio

Years	Cash+cash equivalents	Current Liabilities	Cash Ratio (%)	Score Based on Kep-100/MBU/2002
2019	1.360.268	7.392.140	18	3
2020	1.249.994	6.786.941	18	3
2021	748.481	5.980.181	13	2
2022	2.153.024	8.030.857	25	4
2023	832.672	9.409.735	9	1

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Table 17 shows the company cash ratio in the 2019 - 2023 period was under 100%, which means that the company was struggling to pay its short-term debts.

4.3.3 Average Collection Period

Table 18. Average Collection Period

Years	Account Receivable	Sales revenue	revenue per day	average collection period (days)	Based on Kep-100/MBU/2002
2019	796.992.812	9.400.535.000	0.084781644	31	5
2020	412.835.690	10.006.173.000	0.0412581	15	5
2021	812.712.175	12.857.626.593	0.063208569	23	5
2022	590.299.128	9.232.675.971	0.063935865	23	5
2023	601.094.893	9.965.033.049	0.060320411	22	5

Table 18 shows after 2019, there were significant days to collect accounts receivable from its customers ($\pm < 25$ days) due to the term payment protocol in the company.

4.4 Activity Ratio

4.4.1 Inventory Turn Over

Table 19. Inventory Turn Over

Years	COGS	Inventories	Inventory Turn Over (days)	Score Based on Kep-100/MBU/2002
2019	5.817.356	2.914.776	183	2.4
2020	6.241.430	2.562.940	150	3.5
2021	8.271.940	2.757.048	122	3.5
2022	5.140.904	2.986.764	212	1.8
2023	6.461.732	2.504.062	141	3.5

Table 19 shows that the company in five years had a longer period (big amount of days in inventory turnover). It indicated poor sales, stockpiled, and poor cash flow. To effectively manage inventories and maintain a balance between excess stock and being understocked, many experts suggest that a good inventory turnover range is between 30 and 60 days. (Kenton, Corporate Finance: Financial Ratio, 2020)

4.4.2 Total Assets Turn Over

Table 20. Total Assets Turn Over

Years	Sales	Total Assets	Total Assets Turn Over (%)	Score Based on Kep-100/MBU/2002
2019	9.400.535	18.352.877	51.22104289	2.5
2020	10.006.173	17.562.817	56.97362217	2.5
2021	12.857.627	17.760.195	72.39575354	3
2022	9.232.676	19.797.323	46.63598205	2.5
2023	9.965.033	17.585.298	56.66684181	2.5

Table 20 shows a fluctuating percentage of TATO in years. An increasing percentage of TATO in a year, namely 2019, 2020, and the highest in 2021. In 2019, 51.2 % means every US\$100 of assets generated sales of US\$ 51.2 in 2019, and the higher in 2021 that every US\$100 of assets generated sales of US\$ 72.4 and decreased in 2022 that every US\$ 100 of assets generated sales of US\$ 46.6 and rose again in 2023.

5. Solvency Ratio

5.1 ICR

Table 21. ICR (Interest Coverage Ratio)

Years	EBIT	Interest Expenses	Interest Coverage Ratio
2019	291.430	497.970	0.585236058
2020	493.102	596.377	0.826829338
2021	910.435	606.813	1.500355134
2022	0	525.608	0
2023	-1.561.883	622.817	-2.507771946

Table 21 shows from 2019-2023 the ratio falls to 1.5 and below, which indicates that Kimia Farma facing challenges in paying the interest on its debts.

5.2 Debt to Asset Ratio

Table 22. Debt-to-Assets Ratio

Years	Total Liabilities	Total Assets	Debt-to-Assets Ratio
2019	10,939,950	18,352,877	0.596089104
2020	10,457,145	17,562,817	0.595413879
2021	10,528,322	17,760,195	0.592804415
2022	11,794,567	19,797,323	0.595765751
2023	11,418,561	17,585,298	0.649324282

Table 22 shows $DER \geq 0.5$ interpreted that the company possesses more assets than liabilities.

5.3 Equity Ratio

Table 23. Equity Ratio

Years	Total Shareholder Equity (TSE)	Total Assets	Shareholder equity ratio	x100%
2019	7,241,894	18,352,877	0.394591758	39.45918
2020	6,993,397	17,562,817	0.398193354	39.81934
2021	7,139,643	17,760,195	0.402002512	40.20025
2022	7,137,633	19,797,323	0.36053526	36.05353
2023	5,662,093	17,585,298	0.321978792	32.19788

Table 23 shows the lower the Equity ratio percentage (<50%) indicates a leveraged firm, the greater the amount of debt a company holds compared to its equity.

6. Performance of Financial Assessment of PT Kimia Farma Tbk

Table 24. Financial Ratio calculations for PT Kimia Farma Tbk for the period 2019-2023

Indicator	2019		2020		2021		2022		2023	
	Ratio	Score	Ratio	Score	Ratio	Score	Ratio	Score	Ratio	Score
ROE	-0.18	0	0.25	2	4.2	7	-2.45	0	-25.9	0
ROI	5	4	9	6	16	13.5	5.2	5	-11.3	1
Cash Ratio	18	3	18	3	13	2	25	4	9	1
Current Ratio	99	2	90	1	105	3	94	1	63	0
Average Collection Period	31	5	15	5	23	5	23	5	22	5
Daily Sales Inventory	183	2.4	150	3.5	122	3.5	212	1.8	141	3.5
Total Assets Turn Over (TATO)	51.2	2.5	56.97	2.5	72.39	3	46.63	2.5	56.66	2.5

Total Shareholder's Equity to Total Assets	39.5	10	39.8	10	40	10	36	10	32	10
	Total 28.9		Total 33		Total 47		Total 29.3		Total 23	

Table 25. Summary of Test Result for PT Kimia Farma Tbk

Years	Total Score	Weight	Total Weight	Value	Level	Category
2019	28.9	70	41.29	40<TS<=50	BB	Unhealthy
2020	33	70	47.14	40<TS<=50	BB	Unhealthy
2021	47	70	67.14	65<TS<=80	A	Healthy
2022	29.3	70	41.86	40<TS<=50	BB	Unhealthy
2023	23	70	32.86	30<TS<=40	B	Unhealthy

5. CONCLUSION AND RECOMMENDATIONS

From the data and explanations presented above can conclude that PT Kimia Farma Tbk during five years from 2019 to 2023, using the Z-score Altman analysis is in a grey area which indicates the company is exposed to risk for financial distress. And from The Regulation Ministry of BUMN enterprise No. KEP-100/MBU/2002 about financial health assessment, PT Kimia Farma Tbk has achieved health condition levels with rating (BB, BB, A, BB, B). The description in Chapter II Article 3, level A is healthy, B is unhealthy, and C is not healthy. The study also examines four types of ratio measurements that include liquidity, profitability, activity, plus solvency percentages which from the four ratios interpret the company's condition as not in a good state until 2023. May PT Kimia Farma Tbk can immediately improve the conditions being faced by strengthening financial governance and its transparency, restructuring debt, operational efficiency, expanding revenue streams, and rebuilding investor confidence.

References

- About Us: Company Profile PT Kimia Farma Tbk (KAEF). (2023, April 5). biofarma.co.id: <https://www.biofarma.co.id/en/kimia-farma-tbk-kaef> adresinden alındı
- al., H. e. (2020). Penggunaan Metode Altman Z-Score Dalam Analisis Risiko Keuangan PT. Bank Tabungan Pensiunan Nasional Syariah, Tbk. *Jurnal Ilmu Manajemen*, 4. November 27, 2024 tarihinde alındı
- Company profile: History. (tarih yok). November 27, 2024 tarihinde Kimia Farma Web Site: <https://www.kimiafarma.co.id/id/sejarah-kimia-farma> adresinden alındı
- Company Profile: Sejarah Kimia Farma. (2024, November 24). Kimia Farma Web site: <https://www.kimiafarma.co.id/id/sejarah-kimia-farma> adresinden alındı
- Daryanto, W. M. (2017). Financial Performance Analysis and Evaluation Of Palm Oil Agroindustry: An Indonesia Experience. *Jurnal Ilmiah Manajemen dan Bisnis*, Vol 3, No 1, 4-5.
- Gideon, A. (2024, June). *Saham*. www.liputan6.com: <https://www.liputan6.com/saham/read/5609503/kimia-farma-cetak-rugi-rp-182-triliun-di-2023-ini-penyebabnya> adresinden alındı
- Hayes, A. (2024, June 13). *Corporate Finance: Financial Ratio*. November 23, 2024 tarihinde Investopedia Web site: <https://www.investopedia.com/terms/l/liquidityratios.asp> adresinden alındı
- Hayes, A. (2024, June 25). *Corporate Finance: Financial Ratio*. November 23, 2024 tarihinde Investopedia Web site: <https://www.investopedia.com/terms/p/profitabilityratios.asp> adresinden alındı
- Hayes, A. (2024, June 15). *Corporate Finance: Financial Ratios*. November 23, 2024 tarihinde Investopedia Web site: <https://www.investopedia.com/terms/s/solvencyratio.asp> adresinden alındı
- Kenton, W. (2020, October 18). *Corporate Finance: Financial Ratio*. November 23, 2024 tarihinde Investopedia Web site: <https://www.investopedia.com/terms/a/activityratio.asp>
- Kenton, W. (2020, September 29). *Economy Government and Policy*. Investopedia Website: <https://www.investopedia.com/terms/s/soe.asp>



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Kiki Safitri and Aprillia Ika. (2024, June 26). *Money*. Kompas.com:
<https://money.kompas.com/read/2024/06/26/130000226/kimia-farma-buka-bukaan-penyebab-rugi-di-2023-mulai-dari-operasional-hingga>
Management Accounting. (2023, September 11). November 27, 2024 tarihinde Mekari Journal Web site:
<https://www.jurnal.id/id/blog/rumus-rasio-keuangan-untuk-analisis-rasio-keuangan-perusahaan/>



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Financial Analysis and Evaluation of the Potential Bankruptcy of PT.
CIPTA KOPI 1690 using the Altman Z-Score Model

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ABSTRACT

Established in 2004, PT. Cipta Kopi 1690 started its business as a company engaged in the food and beverage industry by focusing its business as a supplier of green beans, coffee, and coffee powder. The initiators of the formation of this company were IGN Abdi Pangestu and Sofwan Ardyanto. PT. Cipta Kopi 1690 entered Magelang City with a touch on training and discussion between professionals and coffee farmers so that the spirit built was a partnership between private companies and farmers. Only red coffee fruits are picked or harvested and the coffee is processed eight hours from the time of the first picking. The production process of coffee fruits into mature coffee beans in this company also uses a simple machine made by the nation's children which has been certified by the Jember Cocoa and Coffee Research Center, Indonesia as a standard of SCAA provisions regarding fruit and coffee bean processing machines. This study aims to find out, analyze, and evaluate the potential for bankruptcy of the company using the Altman Z-Score method. The data collection technique was carried out with interview techniques and secondary data from financial reports for the period 2020-2024. The data analysis technique used is a descriptive analysis using the Altman Z-Score method. The bankruptcy area in the Altman Z-Score method means PT. Cipta Kopi 1690 is in a condition of financial difficulties while the gray area means that the management is in a vulnerable condition in terms of bankruptcy.

Keywords: Bankruptcy, Coffee industry, Altman Z-Score.

1. INTRODUCTION

Starting from the hobby of Indonesian coffee lovers, a coffee company was founded to introduce a type of Indonesian coffee typical of Temanggung and its surroundings which has unique characteristics. The Cipta Kopi company was formed to appreciate coffee farmers who focus on creating new types of coffee in Indonesia. Cipta Kopi's financial performance showed positive growth in 2019, driven by the company's strategic focus on cost reduction and its successful launch into the coffee market in Indonesia. The company highlighted its achievements during the first eight months of 2019 at the Komunitas Juang event in Semarang, where it introduced itself to coffee entrepreneurs in Central Java. The growing enthusiasm for coffee, particularly among young people, helped Cipta Kopi establish a unique identity in the market with coffee products that resonated well with this demographic (Maharani et.al., 2024). In year 2020 to 2022, Cipta Kopi's financial performance surged, but from 2022 to 2023, it experienced a decline. The company's financial standing in 2019 was sound, with a strong liquidity position that ensured it could address its short-term financial needs. While cash flow ratios were not reveal, Cipta Kopi's increasing profits from 2021 onwards indicated a positive trend. However, the company's financial performance in 2022 was less favorable than in 2021, which had an impact on its financial health, though the precise extent of this impact remains unclear. Nonetheless, the profits from 2019 to 2021 continued to show an upward trajectory. To evaluate Cipta Kopi's financial performance, financial ratio analysis is considered an effective tool (Riyanto, 1995). Bankruptcy prediction research has advanced with various predictive models being developed, although many are used inappropriately or with incorrect data. This paper focuses on the use of solvency models to predict bankruptcy, particularly the Altman Z-Score method (Taffler, 1983). The Altman Z-Score method offers several advantages:

- (1) It delivers advance warnings of impending financial difficulties, providing investors and analysts the chance to take preventive steps before the issue intensifies,
- (2) It relies on simple financial ratios, easily calculated from financial statements, making it available to a wide variety of users, and
- (3) The use of several financial ratios gives a more thorough understanding of a company's financial status, helping to prevent errors that might arise from relying on just one ratio (Laborda & Ryoo, 2021).

The Altman Z-Score method is useful when evaluating a company's performance potential to handle financial difficulties, identifying whether it falls into the "difficulty" zone, the "safe" zone, or the "gray area." Baza and Rao (2017) financial distress refers to a scenario where a company faces significant difficulty in fulfilling its financial obligations to creditors. If not resolved, this situation may escalate to insolvency or bankruptcy. However, some companies facing financial difficulties avoid bankruptcy through mechanisms such as acquisitions or privatizations. On the other hand, financially stable companies may be wrongfully classified as bankrupt to avoid taxes or legal challenges (Theodossiou et al., 1996). A company's failure occurs when it cannot meet its obligations to creditors or suppliers, leading to a cessation of activities (Dimitras et al., 1996).

The research is valuable available to more than just students and academic researchers, moreover for entrepreneurs and business professionals interested in understanding bankruptcy risks. By analyzing Cipta Kopi's profitability in the preceding five years using profitability ratios, the study provides important insights that can guide future decision-making and help improve financial planning for continued growth and stability.

2. LITERATURE REVIEW

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A. Bankruptcy

In situation which a company lacks sufficient funds to continue its operations or fails to generate profits from its business activities, a bankruptcy occur. Refer to the Bankruptcy Law No. 4 of 1998, when a debtor owes two or more creditors and fails to pay a legally due debt, they may be declared bankrupt through a court ruling, at the debtor's request or one or more creditors's request.

Several indicators can provide insights into forecasting a company's potential bankruptcy. A major source is analysis of cash flows, both present and future, as well as a review of the company's business strategy. Another key source is company's profit and loss statements, which can be analyzed using financial ratios to assess the risk of bankruptcy. The first major study on bankruptcy prediction was conducted by Beaver (1966), who found that financial ratios were effective in forecasting bankruptcy and could reliably distinguish between companies likely to go bankrupt and those that were not. Similarly, Altman (1968) identified five financial ratios that could detect bankruptcy risk in companies before they failed, leading to the creation of the Altman Z-Score formula (Supardi & Mastuti, 2003).

From the method which developed by Edward Altman, serves to assess the risk of a company's insolvency and as a broad indicator of its financial health. From predict of Altman had found that five financial ratios could be combined into a single mathematical formula to what happen next with this company. One of the key strengths of the Z-score is its ability to function as a versatile tool, regardless of the company's size. Even a financially successful company should take note if its Z-score is low, as this may indicate underlying financial risks. Healthy financial performance suggests the company is on a solid growth trajectory, while poor financial health signals a higher risk of bankruptcy.

By calculating the Z-Score, the potential for bankruptcy can be predicted, providing a score presenting the likelihood going bankrupt. However, it does not guarantee bankruptcy will happen, as the company can still take corrective actions to improve its financial situation and avoid the risk of insolvency.

B. Coffee Industry

Coffee is a widely enjoyed beverage made from roasted coffee beans, the seeds of fruit from specific species in the *Coffea* genus. The global coffee market is divided into several key segments based on product type, distribution channels, and geographic regions. The product types in the coffee market include whole-bean coffee, ground coffee, instant coffee, and coffee pods and capsules. In terms of distribution, the market is split into on-trade and off-trade channels. Off-trade distribution includes supermarkets, hypermarkets, convenience stores, specialty retailers, and other outlets. Market size is calculated in USD value across all segments, which include regions such as North America, Europe, South America, Asia-Pacific, and the Middle East & Africa.

The global coffee market is experiencing strong growth, driven by increased exposure to coffee culture around the world and favorable government policies. The product segmentation highlights a wide range of coffee options available for consumers. Additionally, the demand for certified and sustainable coffee products is rising, with industry leaders focusing on quality and innovation to meet these consumer expectations.

Europe and North America continue to dominate the coffee market, while the Asia-Pacific region is emerging as a key player due to shifting consumer preferences. Trends like the rise of specialty coffee shops and the growing popularity of coffee pods are transforming the market to cater to changing consumer needs. Market forecasts suggest steady growth, driven by the growing awareness of coffee's health benefits and its broad product offerings (Credence Research, 2024).

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 Industry statistics and data provide valuable insights into the market's worth, projected growth, and future trends, offering a thorough review of the coffee sector for stakeholders. The market report, available for free PDF download, includes comprehensive analysis and detailed industry insights.

To sum up, the global coffee market is experiencing dynamic expansion, shaped by factors such as product innovation, quality, and sustainability. The segmentation of the market and the focus on research and development affirm that the coffee industry continues to adapt and meet the evolving demands of consumers around the world.

C. Altman Z-Score

The Z-Score analysis by Prof. Edward Altman, is built to predict a company's risk of insolvency or financial hardship. The Multiple Discriminant Analysis combines five financial ratios to distinguish between companies that are at risk of bankruptcy and those that are not (Mujilan, 2012).

The model is based on a simple regression analysis, where the five financial ratios are assigned values and combined to produce a unified value then used to categorize companies into two categories: distressed and non-distressed. Although the model is widely used and offers several advantages, it also has several drawbacks that should be taken into account when assessing a company's financial health.

- 1) It is assumed by the model that the financial ratios and metrics it relies on are suitable for all industries and types of businesses. Yet, every industry has its own set of distinguishing traits, and using the same model for all industries may not always yield accurate results.
- 2) The method uses prior financial information from balance sheets and does not take into consideration current market conditions or any recent changes in the company's financial situation.
- 3) It is presumed by the model that financial ratios are linearly related to the risk of bankruptcy, but in reality, capital relationships are frequently more complex and non-linear.
- 4) The Z-Score model focuses only on financial factors, ignoring non-financial elements such as the quality of management, industry trends, or competitive pressures, all of which can have a significant impact on a company's financial stability and future prospects.

3. RESEARCH METHOD

Altman Z-score

Edward Altman (1968) a professor who developed the Altman Z-Score method which is a statistical technique that can predict a broad financial model designed to predict the possibility of a company's bankruptcy. While the explanation of the bankruptcy theory explained by Brigham & Ehrhardt (2005), occurs when a company fails to meet its debt obligations due to insufficient funds to continue its operations. With the Altman Model has undergone three revisions over the years to improve its accuracy in predicting bankruptcy, with each version tailored to different types of companies based on their specific characteristics. The Z-Score formula uses various financial figures from the company's balance sheet and income statement, making it a practical tool for anyone with access to the report. The initial formula for the Altman Z-Score is as follows:

$$Z = 1.2a + 1.4b + 3.3c + 0.6d + 1.0e$$

The information below shows the meaning of the letters in the formula as follows:

a = Total Assets / Working Capital (the aim is to measure the company's liquidity by showing the proportion of assets that are easily accessible)

b = Total Assets / Retained Earnings (the aim is to show the cumulative profitability of the company over time)

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c = Total Assets / Profit before tax and interest (the aim is to measure the company's ability and generate profits that do not depend on taxes and leverage)

d = Book value of total liabilities / Market value of equity (this value reflects the impact of share price fluctuations on the company and its effect on financial health)

e = Total Assets / Sales (describes the efficiency of asset turnover to generate income)

Tabel 1. Zone of Altman Z-Score

Z-Score	Points	Factor	Risk	Interpretation
$Z > 2.99$	Non-distress zones	1	Minimal Risk	Proceed with transaction – offer terms required
$1.81 < Z < 2$	Grey zones	2	Low Risk	Proceed with transaction
$2 < Z < 2.99$	Grey zones	3	Slightly higher than average risk	Proceed with transaction but monitor closely
$Z < 1.81$	Distress zones	4	Significant level of risk	Take suitable assurances before extending credit

Source : Author Analysis, 2024.

Model Altman Z-score

With the growth of bond markets and investments in emerging markets, Altman revised his Z-Score model to be applicable to a wider range of companies, including manufacturing, non-manufacturing, and publishing companies in emerging markets. In the updated version, Altman removed variable of X_5 , which measures sales in relation to total assets, due to its large variability across industries with different asset sizes. This adjustment was made to minimize the influence of industry-specific factors, particularly those related to asset turnover, which can fluctuate significantly across industries. He also modified variable X_4 ratio by replacing the market value of equity with the book value of equity. The revised formula is as follows:

$$Z = 6,56 X_1 + 3,26 X_2 + 6,72 X_3 + 1,05 X_4$$

Information:

X_1 = total assets / working capital

X_2 = total assets / retained earnings

X_3 = total assets / EBIT

X_4 = total debt / book value

The classification of healthy and bankrupt companies is based on these Z-Score values which are:

a. If the Z value < 1.21 , it is included in the bankrupt company.

b. If the Z value = $1.21 - 2.60$, it is included in the gray area

c. If the Z value > 2.60 , it is included in the company that is not bankrupt.

Discriminant analysis is a precise and valuable tool for companies, which can provide early warning of potential bankruptcy as well as insight into the sustainability of the company's business. The sooner a company receives bankruptcy warning information, the better it is for the company's management, as it allows them to take corrective actions and also gain a deeper understanding of the company's future prospects and value.

4. RESULT AND DISCUSSION

Based on calculations from the Altman Z-Score, it explains that from 2019 to 2022, PT. Cipta Kopi experienced a consistent increase in profitability. But in fact, in 2023, its profitability index actually fell to the average level seen in the 2019-2023 period. The Altman Z-Score for PT Cipta Kopi from 2019 to 2023 were 4.76, 4.93, 6.95, 8.36, 7.53, respectively, with an average score of 6.51. With this score result, it means that the company was initially in the non-distress zone in 2019, 2020, 2021, 2022, while in 2023 it showed a decrease in financial stability but there was no direct risk of bankruptcy.

Table 2. Altman Z-score Result of PT Cipta Kopi 1690 for year 2019-2023

Description	2019	2020	2021	2022	2023	Average 2019-2023
Net Working Capital / Total Assets	0,08	0,05	0,18	0,19	0,31	0,162
Retained Earnings / Total Assets	0,83	0,83	0,88	0,98	1,01	0,906
EBIT/ Total Assets	0,06	0,15	0,25	0,37	0,18	0,202
Total Equity/ Total Liabilities	0,8	0,8	1,03	1,42	1,5	1,11
Sales/Total Assets	1,07	0,85	1,16	1,36	0,95	1,078
Altman Z-Score	4,76	4,93	6,95	8,36	7,53	6,51
	Non Distress Zone	Non Distress Zone	Non Distress Zone	Non Distress Zone	Non Distress Zone	Non Distress Zone

Source: Author Analysis, 2024.

5. CONCLUSION AND RECOMMENDATION

Conclusion

After analyzing the financial performance for the period between 2019 until 2023, it is evident that:

1. From the above data, found that PT. Cipta Kopi has demonstrated strong profitability, despite experiencing a decrease in income in 2023. This indicates that the company continued to generate more earnings than expenses. Furthermore, the steady increase in the profitability ratio from 2019 to 2022 shows that the company has been actively working to enhance its profitability over the years.
2. Altman Z-score method analyze that PT Cipta Kopi is financially stable and not at risk of bankruptcy. With an average score of 6.51 from 2019 to 2023, the company falls within the non-distress zone. For the past five years, PT Cipta Kopi's has consistently exceeded four, reflecting strong financial performance and a very low risk of bankruptcy.

Recommendation

While PT Cipta Kopi has exhibited strong financial performance over the past five years, the following recommendations are offered to help sustain its financial stability in the future:

1. Strengthen Risk Management Practices: PT Cipta Kopi should enhance its risk management strategies to mitigate the effects of market fluctuations, geopolitical uncertainties, and environmental regulations. A robust risk management framework enables more informed decision-making, helps define corporate culture, and improves productivity through constant monitoring of operations, equipment, and workforce conditions. Enhanced productivity can lead to cost reductions, which would further strengthen the company's financial stability.

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2. **Monitor Financial Performance Continuously:** The company should maintain a system of ongoing financial monitoring to stay aligned with market changes, regulatory shifts, and industry trends. Continuous tracking of financial indicators will provide early warnings when key metrics approach critical thresholds, enabling the company to adapt quickly and return to a safe financial position more efficiently. This proactive approach can facilitate recovery with both short-term and long-term solutions.
3. **Refine Capital Structure and Financial Management:** To strengthen its financial stability, PT Cipta Kopi should focus on optimizing its capital structure by achieving a balanced mix of debt and equity financing, while carefully managing leverage ratios. Additionally, diversifying financial portfolios will promote long-term sustainability. Reducing debt levels can lower risk exposure, which in turn could enhance profitability and bolster the company's financial resilience.

REFERENCES

- Baza, A. U. and Rao, K. S. (2017). 'Financial Inclusion in Ethiopia', 9(4), pp. 191–201. doi: 10.5539/ijef.v9n4p191.
- Credence Research (2024). Specialty Coffee Market By Age Group (18-24, 25-39, 40-59, Above 60); By Application (Home, Commercial); By Distribution Channel (Supermarkets/Hypermarkets, Convenience Stores, Online); By Region – Growth, Share, Opportunities & Competitive Analysis, 2024 – 2032. <https://www.credenceresearch.com/report/specialty-coffee-market>
- Dimitras, A.I. Zanakis, S.H. and Zopounidis, C. (1996) A Survey of Business Failures with an Emphasis on Prediction Methods and Industrial Applications.
- Laborda, J. and Ryoo, S. (2021), "Feature selection in a credit scoring model", Mathematics, Vol. 9 No. 7, pp. 1-22, doi: 10.3390/math9070746.
- Maharani, Alyya Haliza, Martini, Hidayath A.N. (2024). Trend Coffee Shop Pada Konsumen Remaja Berperilaku FOMO Di Kelurahan Pulo Gebang. *Jurnal Manajemen Pariwisata dan Perhotelan Volume 2 Nomor 3 Agustus, 2024.*
- Mujilan, Agustinus. (2012). *Sistem Informasi Akuntansi*, Edisi I, Madiun: Wima Pers.
- Riyanto, Bambang. (1995). *Dasar-dasar Pembelian Perusahaan*, Edisi IV, BPFE, Yogyakarta.
- Supardi & Sri Mastuti. 2003. Validitas Penggunaan Z-Score Altman untuk Menilai Kebangkrutan pada Perusahaan Perbankan Go Public di Bursa Efek Jakarta : Kompak.
- Taffler, R.J. (1983) The Assessment of Company Solvency and Performance Using a Statistical Model: A Comparative UK Based Study. *Accounting and Business Research*, 13, 295-307.
- Theodossiou, P., Kahya, E., Saidi, R., Philippatos, G. (1996). Financial distress and corporate acquisitions: Further empirical evidence. *Journal of Business Finance & Accounting*, 23(506), 699-719.



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**Acceptance of Technology in Furniture Company the Role of Perceived
Risk in Emerging Country**

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ABSTRACT

Despite that Furniz, a furniture company has launched an online shopping application, and sales climbed insignificantly by only 3%. According to the Technology Acceptance Model (TAM), how beneficial something appears and how simple it is to use influences people's willingness to utilize technology. Additionally, people are more likely to be concerned about the risk if something is pricey, complex, challenging to grasp, and has an unfamiliar brand. There has been little research into perceived risk in the furniture industry. The study intends to investigate how perceived risk influences how users assess the utility and usability of the company's mobile app. A questionnaire was distributed to 4,100 consumers in Jakarta. The sample size was 115. It was gathered from June to September 2023. The data were analyzed using the statistical software packages SPSS v25 and SmartPLS 4. The results demonstrated that PR had a beneficial effect on PU and PEU. The theoretical result indicates that the external variable, perceived risk, exerts a significant influence on the technology acceptance model (TAM) within the context of furniture retail. All positive effects are statistically significant when $\alpha = 0.05$. The practical significance of this finding is that management should consider perceived risk, as measured by dimensions such as financial risk, psychological danger, social risk, and time delay risk, while using applications to enhance the desire to use mobile apps and, consequently, increase sales.

Keywords: Technology Acceptance Model; Perceived Risk; Furniture industry; Intention to Use Technology.

1 Introduction

The advancement of technology and the widespread usage of the Internet open up new potential for businesses in a range of industries, including but not limited to retail, furniture, medicines, and more. It is well known that the rapid advancement of information technology facilitates and expedites the sharing of information. This provides an opportunity for entrepreneurs to engage in a variety of commercial operations, such as marketing, purchasing, selling, and online marketing. The Furniz Company is a pioneering force in the home furniture retail market, and it is one of the furniture companies that is using social media to promote growth. Furniz takes a contemporary and minimalist approach to lifestyle, sharing information about its products and services over a range of social media channels such as Facebook, Instagram, Twitter, and YouTube. Online applications are expected to make it easier, safer, and more enjoyable for consumers to shop for furniture. As a result, the web application is expected to make purchasing furniture more convenient for buyers while also increasing sales turnover. However, the anticipated level of turnover has not been reached, due to the implementation of online applications. Even though the business employs a variety of sales tactics, it still faces obstacles, such as merchandise that isn't readily available at the store, making it difficult for consumers to quickly assess the state of the products they plan to buy. As a result, consumers are now apprehensive about making purchases online, raising questions regarding product details, prompt delivery, item quality, and other issues. Furthermore, a significant segment of the user base has conveyed concerns regarding the application's usability, security, and general safety. Because offline sales and purchases are seen as more secure than their online business, people tend to avoid Internet transactions in favor of them. The data indicates a drop in the company's performance within the internet business area.

2 Theoretical Framework

2.1 Technology Acceptance Model

Information technology is the key or main factor enabling an organization to carry out its business processes better than previously (Baiyere et al., 2020). One of the factors influencing interest in utilizing online applications is perceived utility, which is the user's subjective perception of the system aimed to improve job performance while carrying out tasks and influences system adoption (Hasan et al., 2021). The Technology Acceptance Model (TAM), is a behavioral paradigm that clarifies how information technology is used. (Davis, 1989) established a mindset around the interest in information technology use based on perceived ease of use and utility, which led to the introduction of TAM. The Technology Acceptance Model (TAM) has been significant in explaining how users behave with technology by emphasizing that a person's reaction to and perception of a given technology influences what they do next (Fig.1).

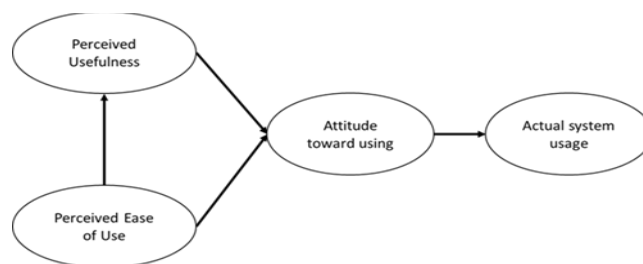


Figure 1. Technology Acceptance Model
Source: (Davis, 1989)

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Most studies on users' adoption of technology have included the Technology Adoption Model (TAM), which has gained much reputation. Several studies have previously supported this theory (Butt et al., 2016; Shukla & Sharma, 2018; Vahdat et al., 2021) which found that TAM can elucidate online customer shopping behavior. TAM consisted of four variables: perceived ease of use, perceived usefulness, behavioral intention, and actual system usage. It is explained in more detail in the paragraph that follows. Companies need to concentrate on the effective and efficient use of new information technology systems to improve performance (Bessen, 2020). Perceived ease of technology use is a fundamental element of the Technology Acceptance Model (TAM) (Davis, 1989). According to Davis (1989), numerous factors impact the prosperous assimilation of technology. The perception of "perceived usefulness" is indicated by quick work performance, increased productivity, and overall ease of use. In addition, "perceived ease of use" is indicated by qualities such as ease of learning, controllability, clarity, flexibility, and a user-friendly design. Further (Davis, 1989) stated that people prefer to use technology or not to the degree they think it would allow them to do their jobs better.

2.2 Research Framework and Hypothesis Development

Many external variables can be used in TAM in e-learning and business application studies (Castiblanco Jimenez et al., 2020) since the first external variable that was added by (Davis, 1989) is the quality of the output. Until now, more than 70 external variables have been proposed in the Technology Acceptance Model. Perception of risk is another element that influences motivation in utilizing technology, in addition to perceived usefulness and simplicity of use. One of the risk factors that need to be taken into account is the perception of risk, particularly when the product's condition is pricey, complex, difficult to understand, and the brand is unknown (Aldammagh et al., 2021). Although technology provides many benefits and ease of use for its users, there are still several users who refuse to use technology because of uncertainty and security issues (Ha, 2020). In this study, perceived risk is used as an external variable because in the online purchasing process, consumers cannot directly feel the condition of the product to be purchased, security in the delivery process is also a factor that can cause risk. According to the findings of prior research, there are only a few studies that place the perceived risk variable as an external variable, additionally, no prior research has been conducted on the furniture retail industry.

Past studies on customer acceptance of online services showed that PEU was a significant precedent for the adoption of modern web technologies by consumers in a variety of studies (Moslehpour et al., 2018; Rahmi et al., 2018). Scholars have proposed that intention to use technology is a form of technology acceptance behaviour relevant to Perceived Ease of Use (F. Abdullah, Ward, & Ahmed, 2016; Lee & Lehto, 2013). Scholars have proposed that intention to use technology is a form of technology acceptance behavior relevant to Perceived Usefulness (Chow et al., 2012; Joo et al., 2018; Lee & Lehto, 2013). Li and Huang (2019) in their research explain that perceived risk also plays an important role in increasing instability in the online shopping environment. The study implies that online sellers do not rely solely on the operational characteristics the perceived benefits and ease of use, but also on the greater level of risk consumers feel towards applications. For this reason, the higher the level of risk perceived by consumers, the lower the level of perception regarding the usefulness of the application. The lower the risk that is felt by consumers, will decreased consumer confidence in using information technology systems it affects the perception of the usefulness of the information system. Based on the literature review, this study will examine the interaction effect of perceived risk (PR), perceived usefulness (PU), and perceived ease of use (PEU), on intention to use digital applications, as shown in Fig.1 below.

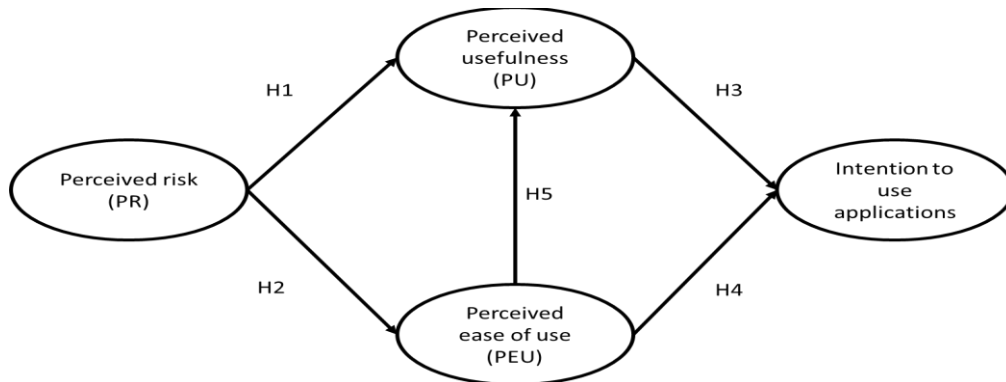


Figure 1 Research Framework

Based on the explanation above, it is hypothesized that

- H1: Perceived Risk has a positive effect on Perceived Usefulness
- H2: Perceived Risk has a positive effect on Perceived Ease of Use
- H3: Perceived Usefulness has a positive impact on the intention to use applications
- H4: Perceived Ease of Use has a positive effect on the Intention to use applications
- H5: Perceived Ease of Use has a positive impact on Perceived Usefulness

3 Methods

This study investigates the link between concept, perceived risk, perceived utility, perceived ease of use, and intent to utilize the program. A cross-sectional strategy was used to gather information at one time from a large number of people. Respondent data will be gathered using a questionnaire. To guarantee effectiveness and timely completion, this will be delivered to them using an online form. Purposive sampling was used to choose the respondents based on the following standards: 1) A Furniz Company client; 2) A Bandung or Jakarta residence. Choosing a suitable sample size is crucial for this study, which will be carried out with SmartPLS4. The sample size gathered in the area will have an impact on the appropriateness and statistical power of the multiple regression model used (F. Hair Jr et al., 2014; Sarstedt et al., 2014).

The sample size required was obtained by using the G Power. The sample size required was 121 to be determined as adequate. The survey feedback was gathered from existing customer's samples through Google Forms and delivered over WhatsApp to those who had agreed to participate. Respondents are invited to indicate their level of agreement with a given statement on a five-point scale. This study employs a scale ranging from 1 to 5, with each meaningful scale comprising the following items: The scale is as follows: 1 indicates strongly disagree, 2 indicates disagree, 3 indicates neutral, 4 indicates agree, and 5 indicates strongly agree. A multi-dimensional measurement variable was measured on a multi-dimensional. The majority of the questionnaire was adapted from the following sources (Bonnin, 2020; Seo & Lee, 2021; Venkatesh & Davis, 2000)

Table 1 Questionnaires

Variable	Dimension	Item	Measurement Item
<i>Perceived Risk (PR)</i>	Financial Risk	FR	I feel that the quality of Furniz's products matches the price
			I have a great experience when making transactions
	Social Risks	SR	My friends and family recommend Furniz products online, even though the products cannot be seen in person
	Performance Risk	PR	I'm sure of Furniz's products are good upon receipt
	Time Risk	TR	I think the response at the time of ordering is good Furniz product delivery process is always on time
	Psychological Risk	PsR	The product I received met my expectations
<i>Perceived Usefulness (PU)</i>	Job Performance	PU1	I feel that purchasing online applications is faster
	Effectiveness	PU2	The transactions through the Furniz apps were very effective
	Increase Productivity	PU3	Ordering Furniz products through the application feels easier
	Time	PU4	The time spent ordering on the Furniz online app is less
	Usage	PU5	I find it easy to get information in the Furniz app
<i>Perceived Ease of Use (PEU)</i>	Easy to use	PEU 1	In my opinion, Furniz online apps is easy to use
		PEU 2	I find it easy to operate the Furniz online application
	It's not bothersome	PEU 3	Furniz online application is clear and easy to understand
		PEU 4	I think it takes a small effort to interact with the Furniz apps
<i>Intention to use (ITU)</i>	Loyalty	ITU1	I will continue to use the Furniz online application
		ITU2	I will use the Furniz online application in a sustainable
	Recommendation	ITU3	I would encourage everyone to use the Furniz online apps on
	Pay a premium price	ITU4	I am willing to buy furniture that is high in price

4 Result and analysis

4.1 Respondent Profile

Two criteria were applied in selecting the respondent: a) y, the individual must have their primary residence in Jakarta or in Bandung b) an existing customer status.

Table 2 Respondent Profile

Variable	Category	Count	Percentage
Gender	Female	45	43
	Male	60	57
Age group	21-30	51	49
	31-40	40	38
	>40	14	13
Education	High School	60	57
	Diploma	1	1
	Bachelor degree	40	38
	Master degree	4	4

Variable	Category	Count	Percentage
n	Housewife	3	3
	Professio	1	3
	Privat employee	97	92
	Entrepreneur	4	4
Income	<6	71	67
	6-20	22	21
	21-50	8	8
	>50	4	4

As demonstrated in Table 2, the male represented the majority of the overall sample at 57 percent. The largest age group among respondents was 31-40, representing 40% of the total. The majority of respondents (60 percent) had obtained a high school diploma, with 40 percent holding a bachelor's degree. The majority of the respondents are private employees (92%) with a mean income of less than 6 IDR million.

4.2 Common Method Variance

Because this study employed a single source of respondents to gather data on both dependent and independent components, common method variance must be checked (Tehseen, Ramayah, & Sajilan, 2017). To test for common method variance, we assessed the collinearity among constructs. The variance inflation factors are assessed (Kock & Lynn, 2012). These variance inflation factors may be employed to evaluate common method variance, resulting in a more conservative test than the usual exploratory factor analysis (Kock, 2014; Kock & Lynn, 2012). All of the constructs in the model have a complete collinearity variance inflation factor of less than 5 (Hair et al., 2014). As a result of testing for common method variance using VIF, we can safely infer that common method bias did not pose a significant risk (Table 3).

4.3 Evaluation of Measurement Model

The research model can be evaluated in two ways: The evaluation process comprises two distinct stages: measurement model evaluation and structural model evaluation. To evaluate the measurement model, it is necessary to meet certain criteria to establish construct validity and reliability. Firstly, construct reliability and validity can be achieved by carrying out composite reliability and/or Cronbach's alpha coefficient tests. Composite reliability is a more suitable measure for PLS as it does not assume equal indicator loadings. (F. Hair Jr et al., 2014). The second criterion is Convergent Validity occurs when a positive correlation of a measure happens with another measurement of the same variable. The average variance extracted (AVE) was used to examine convergent validity. To establish convergent validity, AVE should be higher than .50 (Hair Jr et al., 2014a)

Table 3 Construct Reliability and Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Intention to Use	0,93	0,932	0,957	0,881
Perceived Ease of Use	0,94	0,948	0,960	0,857
Perceived Risk	0,86	0,867	0,919	0,790
Perceived Usefulness	0,89	0,902	0,925	0,712

As can be seen in Table 3, the Cronbach's alpha value in all five variables namely, PR, PU, PEU, BI, and ASU exceeded 0.70, indicating that the model has internal consistency. The

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Composite reliability (CR), is above 0.7 for all five constructs, meaning that the measurement model provided excellent reliability.

The third criterion is the outer loading of the construct should exceed 0.7. for validity to be deemed satisfactory (Hair et al., 2011). A loading lower than 0.4 indicates that an item should be considered for removal, and items with a loading of 0.4–0.7 should be considered for removal if their removal increases the CRs and AVEs above the threshold ((Chin et al., 2020).

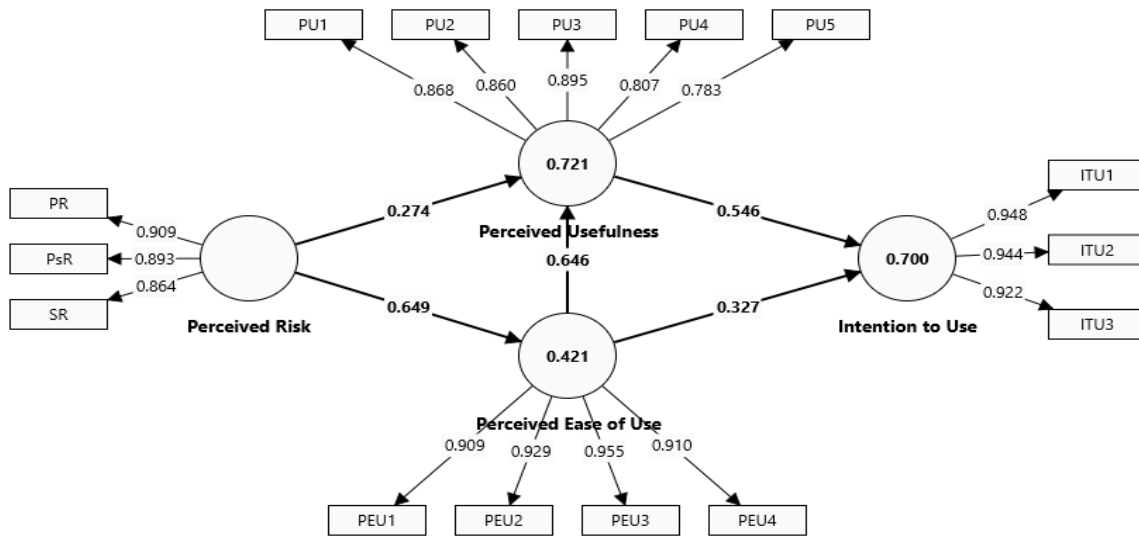


Figure 2 Research Model

As can be seen in Figure 3, all the outer loading value is greater than 0.7 indicating construct validity is established. The fourth criterion to evaluate the measurement model is discriminant validity to show that a construct is established empirically to be distinct from other constructs (Hair Jr et al., 2014b). The method to establish discriminant validity was examining the Fornell-Larcker criterion (Table 4).

Table 4 Fornell-Larcker criterion

	Intention to Use	Perceived Ease of Use	Perceived Risk	Perceived Usefulness
Intention to Use	0,938			
Perceived Ease of Use	0,777	0,926		
Perceived Risk	0,702	0,705	0,826	
Perceived Usefulness	0,816	0,823	0,718	0,844

As shown in Table 4 Fornell-Larcker’s criterion was established, providing evidence for the constructs’ discriminant validity.

4.4 Structural Model

Evaluating the structural model in Table 5 consists of assessing for path coefficient (β), collinearity issues (VIF), effect sizes (f^2), and coefficient of determination (R^2) (Hair et al., 2014). Path coefficient, which shows the correlation between two variables, ranging from -1.00 to 1.00. A correlation of 0 shows no relationship at all, a correlation of 1.0 indicates a

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 perfect positive correlation and a value of -1 shows a perfect negative correlation. As shown in Table 5, the effect of Perceived risk on perceived usefulness shown by path coefficient (β) (0.274), indicates a medium effect. A large effect was shown on the effect of perceived risk on perceived ease of use (0.649).

Table 5 Path coefficient, VIF, and f^2

Relationship	Path coefficient	VIF	f^2
Perceived Risk \square Perceived Usefulness	0,274	1,727	0,155
Perceived Risk \square Perceived Ease of Use	0,649	1,000	0,727
Perceived Usefulness \square Intention to Use	0,546	3,102	0,321
Perceived Ease of Use \square Intention to Use	0,327	3,102	0,115
Perceived Ease of Use \square Perceived Usefulness	0,646	1,727	0,866

The result in Table 5 indicates no collinearity issues because all of the VIF values are below 5 (Hair Jr et al., 2014b). The next criterion in structural model evaluation is the f^2 values, which assess a predictor variable's comparative influence on an independent variable (Hair Jr et al., 2014b), ranging from .02, .15, and .35, correspondingly, indicating small, medium, and large effect sizes (Cohen, 1988; Cohen, 2016). The results show the current study that the model has a medium and large effect size (0.866) and (0.727). The coefficient of determination - R Squared (R^2) measures the dependent variable's variance about the independent variable's change. The R^2 value ranges from 0 to 1 (Table 6), with a higher score showing higher precision levels. R^2 values of 0.25, 0.5, or 0.75 for an endogenous variable can be portrayed as weak, moderate, or substantial (Hair et al., 2011).

Table 6. R^2

Construct	R-square
Intention to Use	0,700
Perceived Ease of Use	0,421
Perceived Usefulness	0,721

As can be seen in Table 6 the R^2 of Perceive Usefulness, has a large precision's level (0.721), and for Intention to use apps is large (0.700).

4.5 Hypothesis Testing

The last step in data analysis used SmartPLS3 to test the hypothesized relationships by assessing the path coefficients' significance using bootstrapping computations. The bootstrapping process obtains the importance of path coefficients by calculating empirical t values considered significant at a particular probability of error if larger than the critical value (t distribution values). This study employed critical values for one-tailed tests: 1.65 (significance level= 5%), The hypothesis was tested using the bootstrapping test at 5000 bootstrap samples (Hair et al., 2014). Using a one-tail examination, the result shows a t-value is >1.65 , and a p-value $<$ of 0.05 (at $\alpha = 5\%$), the result is reported in Table 7.

Table 7 Hypothesis testing

	Path coefficient	T statistics	P values	Remarks
Perceived Risk \square Perceived Usefulness	0,274	2,793	0,003	H1 supported
Perceived Risk \square Perceived Ease of Use	0,649	9,406	0,000	H2 supported

Perceived Usefulness □ Intention to Use	0,546	5,440	0,000	H3 supported
Perceived Ease of Use □ Intention to Use	0,327	3,249	0,001	H4 supported
Perceived Ease of Use □ Perceived Usefulness	0,646	5,409	0,000	H5 supported

As can be seen in Table 7, the effect of perceived risk on the perceived usefulness represented by the path coefficient is small (0.274), with a t-value (2.793) which is >1.65, and a p-value (0.003) smaller than 0.05 (at $\alpha = 5\%$). According to Hair Jr et al. (2016), the effect is significant; therefore, H1 is supported, which means that perceived risk positively affects the perceived usefulness, and the effect is substantial. This finding supports the findings of (Liu et al., 2019), who explain that perceived risk is essential in creating stability in online retail. According to the survey, online merchants rely not only on the operational qualities of the website, perceived benefits, and convenience of use but also on the higher risk customers have with websites and online commodities.

The effect of perceived risk on perceived ease of use shows that the relationship is strong with path coefficient (0.649), t-value, and p-value (9.406) and (0.000), indicating that there is a positive and significant effect, therefore, H2 is supported. This observation backs up previous studies of (Chen & Aklikokou, 2020)). Which stated that risk perception is highly dependent on the characteristics and psychological condition of the person. The lower the risk that is felt by consumers, the greater consumer confidence in using information technology systems, influencing the perception of the usefulness of the information system.

The effect of perceived usefulness on intention to use, shown by the path coefficient (0.546) means that the effect is strong with the t-value, and the p-value showed (5.440) and (0.000). Thus, the result indicates that H3 is supported: there is a positive and significant effect of PU on Intention to Use. The findings of the study are confirmed by a previous study conducted by (Romero-Rodríguez et al., 2023), which found that Perceived Usefulness had a strong positive effect on Intention to Use.

The effect of perceived ease of use on intention to use shows that the relationship is strong with path coefficient (0.327) the t-value, and the p-value (3.249) and (0.001), indicating that there is enough evidence to support H4. The findings confirm (Saoula et al., 2023) study, which indicate that perceived ease of use has a favorable and substantial effect on intention to use. Numerous prior studies (An et al., 2023; Park & Kim, 2023; Sudirjo et al., 2023; Wilson et al., 2021) demonstrate that the perceived usefulness variable has a positive effect on and a considerable interest in online transactions.

Lastly, the effect of perceived ease of use on perceived usefulness has a strong effect (0.646) and a significant effect with t value (5.409) and p-value (0.000). The finding is consistent with the findings of (Liu & Ma, 2024), who found that users will benefit more if the information system is simple to use. According to the findings of (Arpaci et al., 2023; Liu & Ma, 2024) study, perceived ease of use has a positive and substantial effect on perceived usefulness.

5 Conclusion and Recommendation

The study's purpose is to examine the relationship between perceived risk (PR) and perceived usefulness (PU). The findings indicate that PR has a beneficial influence on PU. The indicator that best depicts the variable is that respondents believe in Furniz products as recommended by friends and family online, even though the products cannot be physically seen. The second purpose of this study is to determine the effect of perceived risk (PR) on perceived ease of use (PEU). The test result established that PR had a positive and significant effect on PEU. The third research objective was to examine the relationship between the perceived Usefulness (PU)

10th International CEO Communication, Economics, Organization & Social Sciences Congress on Furniz application Intention to Use application. The findings indicate that PU has a significant effect on the intention to use the apps. Similarly, on the fourth objective, while investigating the influence of perceived ease of use (PEU) on intention to use. The result indicated that PEU has a moderate effect on the intention to use the apps. The fifth objective is to evaluate the relationship between perceived ease of use (PEU) and perceived usefulness (PU) of Furniz mobile applications. The findings indicate that PEU has a significant impact on the PU of Furniz mobile applications.

Several studies have been conducted to assess the intention to use technology, utilizing the Technology Acceptance Model (TAM) as a framework. The study makes an important contribution by looking at perceived risk (PR) as a predictor of perceived usefulness (PU) and perceived ease of use (PEU). The concept of risk is not completely understood. The current study adds to the body of knowledge on this topic by empirically analyzing the role of this external variable in the model. The inclusion of Perceived Risk's effect on PU and PEU into the existing body of knowledge reveals that perceived Risk has a medium effect on PU and a large effect on PEU for clients utilizing mobile apps.

Perceived risk has been found to have a considerable impact on PEU and PU. This means that with higher levels of perceived risk, PEU and PU will rise. This effort has set the stage for all managers to begin working on risk management. All marketing communications and promotional actions should be aimed at improving risk perception. As a result, to improve actual mobile application usage, the management should pursue ways to increase promoting the use of mobile applications among customers.

6 Implications and limitations of the study

There are several restrictions on the study. The data set is the subject of the first restriction. The responder who resides in Jakarta and Bandung provided the sample. As a result, the study's findings are limited to the Jakarta and Bandung regions. The majority of responders are men, in the range age of 21 – 30 years old. Additional older generations may be included in future research. Because these age groups have a history of exhibiting distinct purchasing habits and being non-tech-savvy when it comes to utilizing e-wallets and secure payment methods.

7 References

- Aldammagh, Z., Abdeljawad, R., & Obaid, T. (2021). Predicting mobile banking adoption: An integration of TAM and TPB with trust and perceived risk. *Financial Internet Quarterly*, 17(3), 35-46.
- An, S., Eck, T., & Yim, H. (2023). Understanding consumers' acceptance intention to use mobile food delivery applications through an extended technology acceptance model. *Sustainability*, 15(1), 832.
- Arpaci, I., Masrek, M. N., Al-Sharafi, M. A., & Al-Emran, M. (2023). Evaluating the actual use of cloud computing in higher education through information management factors: a cross-cultural comparison. *Education and Information Technologies*, 28(9), 12089-12109.
- Baiyere, A., Salmela, H., & Tapanainen, T. (2020). Digital transformation and the new logics of business process management. *European journal of information systems*, 29(3), 238-259.
- Bessen, J. (2020). Information technology and industry concentration. *Journal of Law & Economics*, 63(3), 531.
- Bonnin, G. (2020). The roles of perceived risk, attractiveness of the online store and familiarity with AR in the influence of AR on patronage intention. *Journal of Retailing and Consumer Services*, 52, 101938.
- Butt, I., Tabassam, S., Chaudhry, N. G., & Nusair, K. (2016). Using technology acceptance model to study adoption of online shopping in an emerging economy. *Journal of Internet Banking and Commerce*, 21(2), 1.
- Castiblanco Jimenez, I. A., Cepeda García, L. C., Violante, M. G., Marcolin, F., & Vezzetti, E. (2020). Commonly used external TAM variables in e-learning, agriculture and virtual reality applications. *Future Internet*, 13(1), 7.

10th International CEO Communication, Economics, Organization & Social Sciences Congress

- Chen, L., & Aklikokou, A. K. (2020). Determinants of E-government adoption: testing the mediating effects of perceived usefulness and perceived ease of use. *International Journal of Public Administration*, 43(10), 850-865.
- Chin, W., Cheah, J.-H., Liu, Y., Ting, H., Lim, X.-J., & Cham, T. H. (2020). Demystifying the role of causal-predictive modeling using partial least squares structural equation modeling in information systems research. *Industrial Management & Data Systems*, 120(12), 2161-2209.
- Chow, M., Herold, D. K., Choo, T.-M., & Chan, K. (2012). Extending the technology acceptance model to explore the intention to use Second Life for enhancing healthcare education. *Computers & Education*, 59(4), 1136-1144.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences—second edition*. 12 Lawrence Erlbaum Associates Inc. Hillsdale, New Jersey, 13.
- Cohen, J. (2016). *A power primer*.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
- F. Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European business review*, 26(2), 106-121.
- Ha, N. (2020). The impact of perceived risk on consumers' online shopping intention: An integration of TAM and TPB. *Management science letters*, 10(9), 2029-2036.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.
- Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014a). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European business review*, 26(2), 106-121.
- Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014b). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European business review*.
- Hasan, A. A.-T., Sumon, S. M., Islam, M. T., & Hossain, M. S. (2021). Factors influencing online shopping intentions: The mediating role of perceived enjoyment. *Turkish Journal of Marketing*, 6(3), 239-253.
- Joo, Y. J., So, H.-J., & Kim, N. H. (2018). Examination of relationships among students' self-determination, technology acceptance, satisfaction, and continuance intention to use K-MOOCs. *Computers & education*, 122, 260-272.
- Lee, D. Y., & Lehto, M. R. (2013). User acceptance of YouTube for procedural learning: An extension of the Technology Acceptance Model. *Computers & education*, 61, 193-208.
- Liu, G., & Ma, C. (2024). Measuring EFL learners' use of ChatGPT in informal digital learning of English based on the technology acceptance model. *Innovation in Language Learning and Teaching*, 18(2), 125-138.
- Liu, Y., Wang, M., Huang, D., Huang, Q., Yang, H., & Li, Z. (2019). The impact of mobility, risk, and cost on the users' intention to adopt mobile payments. *Information Systems and e-Business Management*, 17, 319-342.
- Moslehpour, M., Pham, V. K., Wong, W.-K., & Bilgiçli, İ. (2018). E-purchase intention of Taiwanese consumers: Sustainable mediation of perceived usefulness and perceived ease of use. *Sustainability*, 10(1), 234.
- Park, D. Y., & Kim, H. (2023). Determinants of intentions to use digital mental healthcare content among university students, faculty, and staff: motivation, perceived usefulness, perceived ease of use, and parasocial interaction with AI Chatbot. *Sustainability*, 15(1), 872.
- Rahmi, B., Birgoren, B., & Aktepe, A. (2018). A meta analysis of factors affecting perceived usefulness and perceived ease of use in the adoption of e-learning systems. *Turkish Online Journal of Distance Education*, 19(4), 4-42.
- Romero-Rodríguez, J.-M., Ramírez-Montoya, M.-S., Buenestado-Fernández, M., & Lara-Lara, F. (2023). Use of ChatGPT at university as a tool for complex thinking: Students' perceived usefulness. *Journal of New Approaches in Educational Research*, 12(2), 323-339.
- Saoula, O., Shamim, A., Suki, N. M., Ahmad, M. J., Abid, M. F., Patwary, A. K., & Abbasi, A. Z. (2023). Building e-trust and e-retention in online shopping: the role of website design, reliability and perceived ease of use. *Spanish Journal of Marketing-ESIC*, 27(2), 178-201.
- Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Hair Jr, J. F. (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *Journal of family business strategy*, 5(1), 105-115.
- Seo, K. H., & Lee, J. H. (2021). The emergence of service robots at restaurants: Integrating trust, perceived risk, and satisfaction. *Sustainability*, 13(8), 4431.



10th International CEO Communication, Economics, Organization & Social Sciences Congress

- Shukla, A., & Sharma, S. K. (2018). Evaluating consumers' adoption of mobile technology for grocery shopping: an application of technology acceptance model. *Vision*, 22(2), 185-198.
- Sudirjo, F., Mustafa, F., Astuti, E. D., Tawil, M. R., & Putra, A. S. B. (2023). Analysis Of The Influence Of Hedonic Motivation, Digital Devices Ease Of Use Perception, Benefits Of Digital Technology And Digital Promotion On Intention To Use Of Digital Wallets Consumers. *Jurnal Informasi Dan Teknologi*, 33-38.
- Vahdat, A., Alizadeh, A., Quach, S., & Hamelin, N. (2021). Would you like to shop via mobile app technology? The technology acceptance model, social factors and purchase intention. *Australasian Marketing Journal*, 29(2), 187-197.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science*, 46(2), 186-204.
- Wilson, N., Keni, K., & Tan, P. H. P. (2021). The role of perceived usefulness and perceived ease-of-use toward satisfaction and trust which influence computer consumers' loyalty in China. *Gadjah Mada International Journal of Business*, 23(3), 262-294.



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A Typology of Action Research for Scholar-Practitioners

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ABSTRACT

Many authors are engaged in important projects involving pure research and applied research; however, few conduct action research that bring about positive change in real life. The objectives of this article are fivefold, which correspond with the research questions: 1) what is action research? 2) What are the different types of action research? 3) In which fields is action research employed? 4) What are the benefits of action research? 5) What are the drawbacks of action research? The literature cites the importance of reflective practices to promote change. While this article is based on deductive desktop research, the actual conduct of action research necessitates investment of resources and time for inductive field work as well as produce actual change as the product and outcomes of the research. The findings discovered that there are several types of action research, each of which serves a different function. One type of action research is not better than another; rather, each type of action serves a different purpose. Authors are invited to consider utilizing action research at least in one of their research projects soon, with the aim of taking part as a change agent in the transformation of one aspect of society: be that of business, community, education, organization, or society at large.

Keywords: Action Research, Community-Based Action Research, Methodology, Participatory Action Research, Research

Background of the Problem

When researchers engage in addressing problematic issues as well as changing an aspect of the material world, they are engaged in action research. By means of social investigation and collaborative work, they are engaged in ameliorating social realities one way or the other. While action research had its genesis in the field of education, today, it is widely used also in community, health, business, and social science research. Action research bridges the gap between theory and practice.

Problem Statement

While action research is being used by some researchers, many do not know that different types of action research exist. They do not know how action research can be applied in their actions for change (Zuber-Skerritt, 2022). To employ action research, they need to know the strengths and weaknesses in using this research methodology.

Research Gaps

For those who are exposed to this methodology, many believe that there is only one type of action research and that it is monolithic. As there is a deficiency in the comprehensive analysis of action research, there is a dearth of understanding regarding the multiplicity of action research as well.

Purpose of this Article

The purpose of this article was to explain and explore the diverse types of action research, their uses, as well as their merits and demerits.

Research Questions

This article responded to the following queries:

1. What is action research?
2. What are the different types of action research?
3. In which fields are they utilized?
4. What are their strengths?
5. What are their weaknesses?

Specific Objectives of the Article

Based on the foregoing research questions, the objectives this paper were the following:

1. To explain what action research is
2. To identify the different types of action research
3. To determine in which areas they are employed
4. To discuss their strengths
5. To discuss their weaknesses

Significance of This Article

This article supports researchers to understand what action research is, in which areas they are employed, and to identify where they can apply the research methodology of action research in their investigative projects for change. These researchers are in such fields as business, educational settings, organizational development, and organizational change. It contributes to knowing the best fit model for utilization in their research.

Rationale of the Article

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 Understanding the different types of action research is crucial for success in bringing about positive transformation in business, classroom, community, and organization.

Coverage of the Article

The scope of this article is an overview of the different types of action research, a critical analysis, and the fields where they are applied. This paper provided a description, a typology of the different methodologies, case examples, strengths and weaknesses, as well as recommendations at the end. It is limited to a qualitative analysis. For its delimitation, the paper stressed clarity of the concepts as well as applications in the real world. It neither performed an empirical test nor a data-driven investigation. Furthermore, it is focused on action research as a methodology and a process, rather than examining in great depth case analysis.

LITERATURE REVIEW

This literature review provided the key term that gave direction to this article. It compared and contrasted action research with other mainstream types of research. They include collaboration, the genesis and evolution of this methodology, some variants, and reflective practice. This section ended with the gap that this article filled.

There are three major types of research: pure research, applied research, and action research. Firstly, pure research utilizes theory and searches for knowledge for the sake of knowledge. Examples of pure research include biology, chemistry, humanities, physics, sociology, and social sciences. Secondly, applied research aims for the technical application of skills based on the knowledge from pure research. Examples of applied research include aerospace, dentistry, engineering, medicine, nursing, and social work. Thirdly, action research, far from searching for knowledge for the sake of knowledge only, seeks to improve social context or practice, at school, in businesses, communities, or organizations. Action research can benefit the classroom, businesses, community, or the country. See Figure 1 below.

Pure Research	Production of New Knowledge
Applied Research	Technical Application of Skills
Action Research	Amelioration of Social Context or Practice

Figure 1: Major Types of Research
 Source: ©2024 Rey Ty

Action research is an iterative endeavor which requires the principal investigator to engage in collaboration with the people, school, organization or community under research. Action research was initiated formally as such in 1946 in the field of education (Lewin, 1946). For this reason, many action research articles are related to schools, education, teachers, administrators, and students (Mills, 2018). Later, however, action research has evolved into different fields. It started to be applied in community research to promote positive change, to the use of feminist perspectives, as well as to the application in organizational development and change. From its beginnings in education, action research is now used in business, community development, management, marketing, organizational development, organizational change, planning, political mobilization, public administration, social movements, social work, and other applied fields and disciplines.

Communities, organizations, and schools must engage in reflective practice to understand the current situation and how to meet the changing needs. Failing to do so could lead to being

10th International CEO Communication, Economics, Organization & Social Sciences Congress obsolete and not meeting the expectations of their stakeholders. Examples include Kodak, mainstream media, My Space, Nokia, physical shopping malls, and Yahoo (The Global Hues, 2024). Had they engaged in action research, their companies would have been more competitive, instead of lagging behind.

Some of the different variants of action research include the following: arts-based action research, basic action research, classroom action research, collaborative action research, critical participatory action research, digital community participatory action research, educational action research, community-based participatory action research, organizational action research, participatory action research, school action research, and youth community participatory action research.

This paper filled the knowledge gap of many researchers by to presenting systematically a comparative analysis of this methodology by way of a typology with a view to guide researchers for their proper utilization.

METHODOLOGY

Philosophy

In traditional research, the principal investigator is an objective observer from the outside who uses etic perspectives. However, in action research, the principal investigator is engaged in the process of working for positive change together with all the stakeholders and is therefore an insider using emic viewpoint. The conduct of action research by nature is materialist, as it delves into the existing situation or condition upon which positive changes are sought and will be brought to bear.

Research Design

This paper is a qualitative exploration of the different variants of action research. Action research itself could employ qualitative, quantitative, or mixed methods.

Research Approach

This paper itself is based upon existing literature and is therefore deductive. However, action research as such, which this article discussed is inductive, investigating real-world issues towards which actions for transformations are directed.

Research Strategy

Action research by itself is a form of research strategy in which the research engages with stakeholders with a view for transformation.

Data Collection Methods

Data collected for this article were based on existing literature on matters related to action research as a methodology as well as examples of the utilization of action research. For the actual action research, data are gathered through field work and involvement in the stakeholders' planning for changes.

Sources of Research Data

The sources employed here were from academic journals, books, and online sources. Diverse materials were utilized, which presented distinct viewpoints. They ranged from the seminal or classical work (Lewin, 1946) to cutting-edge materials on action research.

Comparative Data Analysis Methods

Relevant materials were gathered for the preparation of this article, after which the materials were subjected to comparative descriptive analysis through the emergent thematic coding. By

10th International CEO Communication, Economics, Organization & Social Sciences Congress doing so, a summary of the description of the data was provided. Different models of action research emerged in the process of coding.

Data Interpretation Methods

Upon review and reflection of the data that emerged from the reading materials, the codes and themes were organized into a typology of the different types of action research, based on the emerging trends and patterns, as the output of this paper. This typology was the product of the grounded theory process of developing a classification of the different types of action research.

Time Horizon

Action research tends to be cross-sectional, as the focus of the research is the current situation for which changes are sought, planned, and performed.

Reflexivity

In action research, the principal researchers are not an outsider but are co-producers of knowledge in terms of their positionality. In this way, they are involved in change the way the stakeholders are. The researcher will conduct member checking to ensure that the data are correct and that the interpretation is close to the meaning and intent of the stakeholders.

Research Ethics

Given that this article is merely desktop research, no human subjects were harmed.

FINDINGS

This article responded to five research objectives. These objectives relate to the meaning of action research, the different types of action research, the application of action research, strengths, and weaknesses.

Data Analysis

Research Objective 1

To Describe Action Research

Action research deals with the resolution of problems that exist in the material world. It involves a process that encompasses observation, planning, action, and reflection. Action research comprises participation and is iterative in procedure. It is both a systematic as well as an adaptive practical process of investigation, such as in the educational setting (Efron & Ravid, 2020) that necessitates participation which leads to solving real-world problems that makes a difference (Stringer & Ortiz Aragón, 2021). People, who will be affected by changes, have their voices heard. This type of research involves the resolution of real-world challenges and simultaneously engage in the contribution of the knowledge base (Lewin, 1946).

Research Objective 2

To Identify the Different Key Types of Action Research

There are several types of action research. Here we will discuss traditional action research, participatory action research, collaborative action research, educational action research, community-based action research, feminist action research, critical action research, and organizational action research.

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Traditional action research is based on the problem that the principal researcher identified. Its planning and implementation are top-down. This is the minimum level of action research. It relies solely on the knowledge and skills of the project leader. Traditional action research is applied in the resolution of issues involving the classroom as well as concerns of small organizations. In the traditional action research, one key researcher with absolute power and control performs the action research.

Unlike traditional action research which is vertically top-down in its execution, participatory action research (PAR) on its part is horizontal, as it involved peer to peer participation and networking. Together the researcher and the stakeholders are directly involved in the identification of the problem as well as the identification of potential solutions. An example is actions that involve community members in organizing their tree planting projects. Here, participation of stakeholders in research is key (Brydon-Miller, 1997). Participatory action research is more democratic than traditional action research, as stakeholders are involved in the process of change and are consulted.

Collaborative action research is based upon teams of same level professionals who work together to deal with common concerns. An illustration involves chemical engineers working together to produce nanoparticles of titanium dioxide and zinc oxide to produce high-quality natural sunscreen. For this type of research to succeed, stakeholders must be able to work harmoniously as a team (Denzin & Giardina, 2021).

Teaching staff engage in educational action research with a view to achieve improvements in the outcomes of instruction (Efron & Ravid, 2020; Glanz, 2025). For instance, teachers conduct action research to develop a curriculum that emphasizes inclusivity (Sagor, 2016). The primary objective here is to improve the practice of teaching (Glanz, 2025). Instructors engage in research with respect to their classes. This type of research improves the academic institution and empowers instructors (Mertler, 2020).

In community-based action research, the lead investigator works with the community to search for solutions customized to their needs in solving their local problems. An instance is the digging of a well in the village so that the villagers will always have access to water (Beltran-Figueroa et al., 2011; Stringer & Ortiz Aragón, 2021). Community members are empowered to deal with matters directly affecting their communities. The production of contextualized knowledge and change comes from the ground, rather than the use of foreign abstract generalized models. A specific type of community-based participatory action research involves the youth so that they themselves decide the courses of action that need to be undertaken that benefit them directly (Brion-Meisels & Albright, 2025).

As for feminist action research, disparity in gender which is the central focus is addressed, the purpose being to bring to fore the empowerment of the marginalized gender. An example is action research on the hiring and firing policy of a multinational corporation for top-level executives to find out whether gender matters in recruitments of top minds or the inclusion of gender voices in the curriculum in educational settings (Tisdell, 1995). Here, gendered views are crucial in implementing action research. Sex workers and trafficked persons, on their part, have their own unique challenges for which there exists a participatory action research is utilized for the purpose of developing and recommending policies for their protection (Mertler, 2020).

With respect to critical action research, the social investigation delves into disparities in the systemic level, calling for the advancement of social justice. An example is investigative work exposes religious, ethnic, colored, or cultural discrimination so that injustices will be addressed (Bierema, 2010; Dege, 2023; Fine & Torre, 2021; Kemmis et al., 2014). Power is unpacked and the marginalized and outcasts are empowered as the outcome of action research.

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Organizational action research, in turn, deals with the improvement of elements related to organizations, such as procedures and systems. The purpose is to increase learning of members of the organization to bring about positive organizational development and change. An illustration is the increase in the participation of team members in an organizational set up through practice of reflection (Coghlan & Brannick, 2009). See Figure 2 below for power dynamics in action research.

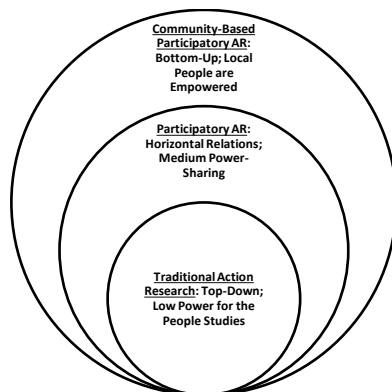


Figure 2: Power Dynamics in the Different Types of Action Research (AR)

Source: ©2024 Rey Ty

Research Objective 3

To Explain in Which Areas Action Research is Used

Action research is useful in many fields. Researchers use it in business, city planning, economy development, education, health, marketing, nursing, product development, social work, urban planning, and other related fields (Stringer & Ortiz Aragón, 2021). Here, some examples are discussed.

In business, human resource development, management, organizational development, and organizational change, action research is used to improve individual and organizational learning, development, and change (Bierema, 2010; Coghlan & Brannick, 2009; Gilley et al., 2008; Holton & Swanson, 2011; Merriam et al., 2007; Swanson & Holton, 1997). Change is difficult in organizational setting as people are used to traditions, rules of thumb, and normalized practices; this is the reason for which organizational action research helps in the smooth transition of organizations to move from the old organizational system to change to the new one (Andersen et al., 2024)

In education, the teaching staff improves practices in the classes (Stringer & Ortiz Aragón, 2021). This includes pedagogy, classroom, management of the classroom, time management, tweaking of testing instruments, and the like. Action research is also employed for the improvement of educational institutions (Glanz, 2025). This type of action research is also used to learn inequity among students based on their social class, caste, social status, or economic income. The purpose is to promote equity among the pupils as well as advance academic excellence across any social and economic differences among them (Sagor, 2016).

In community development, instead of relying on central, federal, or national government authorities or foreign funding agencies for improving the lives of communities, local needs are prioritized, using local wisdom. Action research for communities include such matters as water management, soil management, seed bank, sanitation, hygiene, healthcare, education, micro-loans, environmental protection, irrigation, and the like (Beltran-Figueroa et al., 2011; Gullion & Tilton, 2020; Renzo Rosales et al., 2024; Ty, 2009). Many local environmental actions,

10th International CEO Communication, Economics, Organization & Social Sciences Congress sustainable development projects, and food security measures are products of community-based participatory action research (Ty, 2016, 2021b, 2021a). An important issue today involves migrant workers and forced migration: for this concern, there is a unique action research that revolves around the needs of migrant labor (Hays, 2024).

Research Objective 4

To Discuss the Strengths of Action Research

There are several reasons for which action research is important. First, using action research rather than traditional research is useful and powerful in situations where change is sought to solve problems in the classroom, organization, community, or society at large. Action research is not merely research for the sake of gaining knowledge, though such endeavor as such is praiseworthy. Action research is intended primarily to solve problems with which stakeholders are confronted. Second, action research is not abstract; rather, it deals with problems and solving them as the research moves along.

Third, action research responds to the actual needs of stakeholders because of the problems with which they are faced. As challenges are contextual, solutions should likewise be contextual. Here comes in action research which is an on-the-ground process of dealing with problems.

Fourth, action research is flexible. It starts with identifying the problem at hand. Next, the researchers choose one of several ways of dealing with the problem. The lead researchers could decide to act as an expert and conduct top-down traditional action research. They could decide to be more democratic and engage in horizontal participatory action research with the stakeholders. In addition, they could choose to conduct bottom-up community-based action research that empowers the grassroots community members, especially those who are marginalized or are outcasts.

Fifth, in action research, the lead investigator cannot merely sit at a library and conduct research using materials available online as e-materials or offline as hardcopy documents. Rather, the principal investigator must interact one way or the other with the stakeholders who stand to benefit from the actions arising from the research. Hence, the voices of the people under scrutiny are not only surfaced but in fact play a critical role in the conduct of the research to ensure that the ensuing actions will match the expectations of the stakeholders and meet their needs. The engagement of participants in different forms is crucial in the conduct of action research. Sixth, action research relies on collaboration one way or the other: top-down, horizontal, or bottom-up.

Seventh, reflexivity is ensured in action research. Instead of being mere objective bystanders, the principal investigators are involved in both research and in change. In this way, the key researchers are engaged and have a stake in the development of positive transformation due to the research. The researcher is a co-producer of knowledge along with the people who stand to gain from the findings of the research.

Research Objective 4

To Discuss the Weaknesses of Action Research

While there are many benefits of action research, there are also some drawbacks as well. First, whereas both pure research and applied research have the power of generalizability of their findings, that is not the case with action research. As action research is based on the study of historically and socially based contexts, the findings of action research are unique to the issues specific to a given context.

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 Second, action research does not come by easy. Key investigators must spend a lot of resources in the conduct of the research. They need to spend time with the stakeholders prior to the conduct of the research to find out what their concerns are. Next, they must talk with the people to learn what their dreams, visions, and needs are so that they can map out a plan for positive change, after which they need to be with the stakeholders from the start of the conduct of the research until their actions bear fruit in the form of positive change. To perform all the above, finances must be allotted for food, drinks, transportation, and accommodation for the whole duration of the research.

Third, whereas the merit of action research is that the lead investigator is a co-producer of knowledge along with the stakeholders, such co-production of knowledge is also its demerit. Researchers are noteworthy for engaging in positive change for and with the stakeholders. However, in doing so, the researchers could potentially ignore missteps, errors, omissions, and problems in the conduct of research as they are too closely linked and attached with the expected outcome for positive change.

CONCLUSION

Summary

Action research arose from the need to deal with the need to solve problems and bring about positive change. There are several types of action research, some of which are traditional, participatory, collaborative, educational, community-based, feminist, critical, and organizational. Each type of action research has its own unique uses, merits, and demerits. The summary of this paper is presented in Figure 4 below.

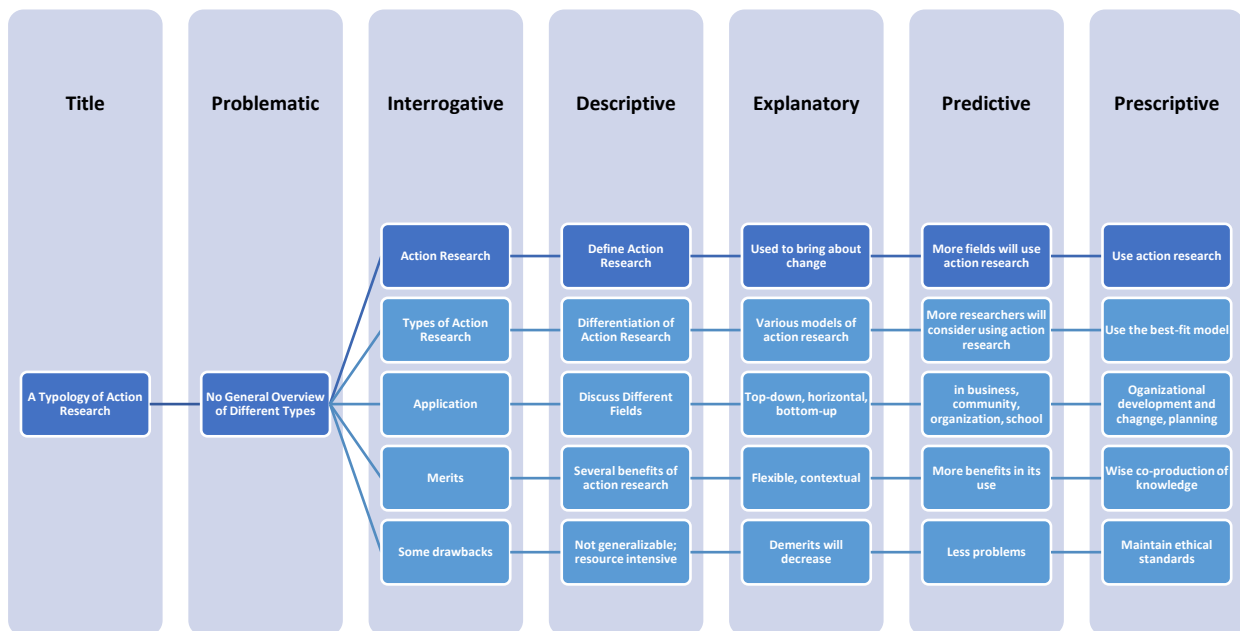


Figure 4: A Typology of Action Research for Scholar-Practitioners
 Source: ©2024 Rey Ty

So What?

Now What? Recommendations

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First, for the successful employment of action research, the principal investigators must first know and understand the context which needs actions for social change. Second, as there are many types of action research, principal investigators must understand and use the best-fit model. Third, collaboration is key for the meaningful and successful implementation of action research. Fourth, the key authors must recognize and acknowledge the role they play in the co-production of knowledge with the stakeholders. Fifth and lastly, there are potential areas of conflict as the researchers is deeply embedded with the stakeholders in business, classroom, community, organization, or society at large. Hence, engaging in action research is rife with potential conflict. Hence, key researchers must observe ethical practice when they work involves dealing with human subjects, such as in action research in general and counseling or providing psychotherapy to them (McLeod & McLeod, 2025).

Conclusion

Researchers could develop training of trainers in action research with materials as well as enroll in these courses. All researchers are encouraged to use action research. It can be used in business planning, community health, education, policy development, project planning, and elsewhere. Schools, communities, and organizations will stand to benefit from the fruits of action research. Everyone is transformed when engaged in action research, which promotes intellectual and social growth, as learning, action, and reflection are all integral in action research. Will you use action research in your next research project?

REFERENCES:

- Andersen, D. W., Sorensen, P. F., & Jamieson, D. W. (2024). *Using Action Research and Organization Development Strategies for Change in a Hierarchical Organization (Contemporary Trends in Organization Development and Change)*.
- Beltran-Figueroa, M., Folkman, D., Glowacki-Dudka, M., Syam, D. S., & Ty, R. (2011). Models of Common Ground for Social Action, Community Development, and Scholarly Research. *Proceedings of the Midwest Research-to-Practice Conference in Adult, Continuing, Community, and Extension Education*.
- Bierema, L. L. (2010). *Implementing a Critical Approach to Organization Development* (Original edition). Krieger Pub Co.
- Brion-Meisels, G., & Albright, T. (Eds.). (2025). *Critical thinking on youth participatory action research: Participation, power, and purpose*. Routledge.
- Brydon-Miller, M. (1997). Participatory action research. *Journal of Social Issues*, 53(4), 657–666.
- Coghlan, D., & Brannick, T. (2009). *Doing action research in your own organization* (3rd ed). SAGE.
- Dege, M. (2023). *Action Research and Critical Psychology: An Investigation of Subjectivity and Participation* (1st ed). Springer International Publishing AG.
- Denzin, N. K., & Giardina, M. D. (Eds.). (2021). *Collaborative futures in qualitative inquiry: Research in a pandemic*. Routledge.
- Efron, S. E., & Ravid, R. (2020). *Action research in education: A practical guide* (Second edition). The Guilford Press.
- Fine, M., & Torre, M. E. (2021). *Essentials of critical participatory action research*. American Psychological Association.
- Gilley, J. W., Dean, P., & Bierema, L. (2008). *Philosophy And Practice Of Organizational Learning, Performance And Change*. Basic Books.
- Glanz, J. (2025). *Action research: An educational leader's guide to school improvement* (Fourth edition). Rowman & Littlefield Publishers.
- Gullion, J. S., & Tilton, A. (2020). *Researching with: A decolonizing approach to community-based action research*. Brill.



- 10th International CEO Communication, Economics, Organization & Social Sciences Congress**
- Hays, C. M. (2024). *Eight Million Exiles: Missional Action Research and the Crisis of Forced Migration*. Wm. B. Eerdmans Publishing Co.
- Holton, E. F. I., & Swanson, R. A. (2011). *Foundations of Human Resource Development* (Large type / Large print edition). ReadHowYouWant.
- Kemmis, S., McTaggart, R., & Nixon, R. (2014). *The action research planner: Doing critical participatory action research*. Springer.
- Lewin, K. (1946). Action Research and Minority Problems. *Journal of Social Issues*, 2(4), 34–46. <https://doi.org/10.1111/j.1540-4560.1946.tb02295.x>
- McLeod, J., & McLeod, J. (2025). *Ethics in Participatory Research on Counselling and Psychotherapy: Justice, Solidarity and Care (Ethics In Action)*. Routledge.
- Merriam, S. B., Caffarella, R. S., & Baumgartner, L. (2007). *Learning in adulthood: A comprehensive guide* (3rd ed). Jossey-Bass.
- Mertler, C. A. (2020). *Action research: Improving schools and empowering educators* (Sixth Edition). SAGE.
- Mills, G. E. (2018). *Action research: A guide for the teacher researcher* (Sixth Edition). Pearson.
- Renzo Rosales, M., Johnson, L. P., & Rödlach, A. (Eds.). (2024). *Research as Accompaniment: Solidarity and Community Partnerships for Transformative Action* (1st ed.). Routledge.
- Sagor, R. D. (with Williams, C. D. V.). (2016). *The Action Research Guidebook: A Process for Pursuing Equity and Excellence in Education* (3rd ed). SAGE Publications.
- Stringer, E. T., & Ortiz Aragón, A. (2021). *Action research* (Fifth edition). SAGE.
- Swanson, R. A., & Holton, E. F. I. (1997). *Human Resource Development Research Handbook: Linking Research and Practice* (1st edition). Berrett-Koehler Publishers.
- The Global Hues. (2024, October 10). Downfall of Iconic Brands: Key Lessons to Learn. *World Meets Media*. <https://theglobalhues.com/the-downfall-of-iconic-brands-key-lessons-to-learn/>
- Tisdell, E. J. (1995). *Creating Inclusive Adult Learning Environments: Insights from Multicultural Education & Feminist Pedagogy*. Diane Pub Co.
- Ty, R. (2009). Where Have All the Indigenous Peoples Gone? A Participatory Action Research: Embracing the Moment to Act in a Time of Change. *Proceedings of the 29th Annual Midwest Research-to-Practice Conference In Adult, Continuing, Community and Extension Education*.
- Ty, R. (2016). *Eco-Justice: Towards Sustainable Development and Food Security in Asia. Fourth Asian Christian Life-Giving Agriculture Forum, 2016*. (Vol. 4). Christian Conference of Asia and Korean Christian Life-Giving Forum.
- Ty, R. (2021a). A participatory action research on the care for water and life on Earth: A case study of interreligious and intercultural engagements in the time of the pandemic in Thailand. *Caminhos de Diálogo*, 9(15), 156–176.
- Ty, R. (2021b). Interreligious and Intercultural Action Research for Environmental Care: Crises, Wisdom, and Action. *Proceedings of the International CEO Communication, Economics, Organization, & Social Sciences Congress*, 462–474.
- Zuber-Skerritt, O. (Ed.). (2022). *Action Research for Change and Development*. Routledge.



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Girişimcilik Eğitiminin Girişimcilik Eğilimi Üzerindeki Etkisi: Dezavantajlı Gruplar Üzerine Bir Araştırma

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ÖZET

Girişimcilik, bir fırsatı fark ederek ve bu fırsatı değerlendirmek için yenilikçi fikirler ve risk alma becerisiyle hareket ederek ekonomik değer yaratma sürecidir. Girişimciliğin gelişebilmesi için bireylerin kendi potansiyellerini fark edebilmelerinin yanı sıra girişimcilik özelliklerini ortaya çıkarabilmeleri gerekmektedir. Girişimcilik eğitiminin girişimcilik eğilimleri üzerinde olumlu etkisi olduğu bilinmektedir. Bu çalışmada TÜBİTAK 4004 Doğa ve Bilim Okulları Programı kapsamında desteklenen Samsun ilinde dezavantajlı bölgelerde yaşayan mesleki ve teknik lise öğrencilerine yönelik olarak uygulamalı girişimcilik eğitimi düzenlenmiştir. Bu eğitim ile dezavantajlı bölgelerde yaşayan bireylere başka bir alternatifin olduğu göstermek ve kendi potansiyellerini keşfetmelerini sağlamak amaçlanmıştır. 30 öğrenciye girişimcilik eğitimi verilerek eğitim öncesi ve sonrası girişimcilik eğitiminin girişimcilik eğitimi üzerine etkisinin ortaya çıkarılması amaçlanmıştır.

Anahtar Kelimeler: Dezavantajlı Gruplar, Girişimcilik Eğilimi, Girişimcilik Eğitimi, TÜBİTAK 4004.

The Effect of Entrepreneurship Education on Entrepreneurial Tendency: A Study on Disadvantaged Groups

ABSTRACT

Entrepreneurship is the process of creating economic value by recognizing an opportunity and acting with innovative ideas and the ability to take risks. For entrepreneurship to thrive, individuals must not only realize their own potential but also bring out entrepreneurial qualities. It is known that entrepreneurship education has a positive effect on entrepreneurial tendencies. In this study, a hands-on entrepreneurship training was organized for vocational and technical high school students living in disadvantaged areas in Samsun province, supported by the 4004 - Education in Nature and Science Schools Support Program. The aim of this training was to show individuals living in disadvantaged areas that there is an alternative and to help them discover their own potential. Entrepreneurship education was provided to 30 students, and it was aimed to reveal the effect of entrepreneurship education on entrepreneurial tendencies before and after the training.

Keywords: Disadvantaged Groups, Entrepreneurial Tendency, Entrepreneurship Education, TÜBİTAK 4004.

GİRİŞ

Girişimciliğin öğretilen bir olgu olması en önemli avantajı olmaktadır. Ülkeler girişimci birey sayısını arttırarak ekonomik kalkınmaya doğrudan destek olabilirler. Girişimci kişiler pazardaki fırsatları değerlendirerek kendi işlerini kurabilmeleri nedeniyle sadece kendilerine iş imkânı yaratmakla kalmayıp başkaları için de istihdam yaratabilmektedir. Ülkemizde birçok başarılı girişim örneği bulunmaktadır. Yemek sepeti, markafoni, çağdaş marketler zinciri, dimes bunlara örnek olabilir (Seçgin, 2020). Eğitim, girişimcilik potansiyelini ortaya çıkaran ve geliştiren önemli bir araçtır. Özellikle üniversitelerde girişimcilik kültürünün oluşturulması, girişimcilik derslerinin müfredata eklenmesi ve girişimci adaylarına özel programlar sunulması bu alandaki eğitimi desteklemektedir. Gelişmekte olan ülkelerde girişimcilik, istihdam yaratma, yerel ekonomiyi canlandırma ve toplumsal eşitliği artırma gibi işlevlere sahipken, gelişmiş ülkelerde teknoloji, biyoteknoloji ve yapay zekâ gibi sektörlerde yenilikçi çözümler sunarak küresel rekabette avantaj sağlamaktadır. Girişimcilik hem ekonomik kalkınma hem de toplumsal fayda sağlama açısından ülkelerin gelişmişlik düzeyine göre farklı katkılar sunmaktadır. Bu çalışmada Samsun ilinin dezavantajlı ilçelerindeki mesleki ve teknik lisede öğrenim gören öğrencilere TÜBİTAK 4004 Doğa ve Bilim Okulları Programı kapsamında uygulamalı girişimcilik eğitimi verilmiştir. Öğrencilere verilen uygulamalı girişimcilik eğitiminin girişimcilik eğilimleri üzerindeki etkisinin ortaya çıkarılması için Balaban ve Özdemir tarafından geliştirilen ölçek kullanılmıştır.

GİRİŞİMCİLİK EĞİTİMİNİN ÖNEMİ

Ülkelerde gelişme ve kalkınmanın temel yapıtaşlarından girişimciliğin odağında girişimci vardır. Girişimci bireyler ihtiyaç duyulan mal veya hizmetleri temin etmek amacıyla risk alabilen (Yıldız, Taşkiran ve Çiçek, 2011), fırsatları izleyebilen ve belirsizlik durumlarında yeni açılımlar yapabilmektedir (Naktiyok, 2004). Girişimciliğin tamamen doğuştan olmaması, eğitim faaliyetleri ile de pekiştirilebileceği düşüncesinden yola çıkılarak eğitim unsuru önemli bir faktör olarak karşımıza çıkmaktadır. Bireylerin girişimcilik yetenekleri ile aldıkları eğitim arasında da ilişki olduğu belirtilmektedir (Akyüz vd., 2009). Bu doğrultuda son yıllarda girişimcilik kültürünün oluşturulmasında özellikle üniversitelerde zorunlu veya seçmeli girişimcilik eğitimleri eğitim ve öğretim süreçlerine dahil edilmiştir. Üniversitelerin araştırma ve geliştirme misyonlarının yanı sıra toplumsal katkıya da yönelmeleri bunun bir yolunun da ekonomik kalkınma ile gerçekleştirilebileceği belirtilmektedir (Etzkowitz vd., 2000). Klofsten'e göre bir üniversitenin girişimciliği harekete geçirmeye yönelik üç temel faaliyette bulunması gerekir. İlki üniversitede tam bir girişimci kültürü oluşturmak ve sürdürmektir. İkincisi öğrencilere girişimciliğin ayrı bir ders olarak verilmesidir. Üçüncüsü de kendi işini kurmak isteyen bireyler için özel eğitim programları teklif etmektir (Klofsten, 2000). Girişimcilik eğitiminde temel amaç bir kişide girişimcilik potansiyeline yönelik olarak gizli kalmış birtakım özelliklerin ortaya çıkmasını ve farkında olmasını sağlamaktır (Henderson ve Robertson, 1999).

Ülkemizde girişimciliğe yönelik eğitimlerin üniversite düzeyinde öğretilmektedir. Avrupa ve Amerika'da ise ilk ve orta dereceli okullarda girişimcilik eğitiminin erişilebilirliğinin sağlandığı görülmektedir (Karadeniz, 2010). Heinonen (2006) ise girişimciliğin üniversite düzeyinde öğretilen olmasını desteklemekle birlikte ulaşılabilirliğin artırılması gerektiğini belirtmektedir. Lisansüstü düzeylerdeki girişimcilik eğitimlerinin içeriklerine bakıldığında küreselleşme, krizler, rekabet teorileri, iş ve ürün geliştirme stratejileri, nano teknoloji gibi konuların olduğu görülmektedir. Lisans düzeyinde ise daha spesifik ve programa uyarlanmış ders içeriklerinin olduğu görülmektedir (Yelkikalan, 2010).

Girişimcilik, gelişmekte olan ülkelerde istihdam yaratmak, yerel ekonomiyi canlandırmak ve dışa bağımlılığı azaltmak için önemli bir araç olabilmektedir. Özellikle tarım,

10th International CEO Communication, Economics, Organization & Social Sciences Congress imalat gibi geleneksel sektörlerde yenilikçi girişimler, verimliliği artırabilmektedir. Mikro girişimciler için sağlanan destekler (mikrofinans programları vb.) yoksulluğu azaltabileceği gibi, kadın girişimciliğinin desteklenmesiyle toplumsal eşitliğe katkı sağlanmaktadır (Gürol ve Bal, 2009; Tekin, 2004).

Gelişmiş ülkelerde ise girişimcilik teknoloji, biyoteknoloji ve yapay zekâ gibi yenilikçi sektörlerde ilerlemeyi hızlandırmaktadır. Global pazarlarda rekabet avantajı yaratarak ülkelerin ekonomik büyümesini sürdürmesine yardımcı olabilmektedir. Risk sermayesi ve kuluçka merkezleri sayesinde girişimciler, daha fazla Ar-Ge yapma ve yeni teknolojiler geliştirme fırsatı bulabilirler (Thomas & Mueller, 2000). Özetle gelişmekte ülkelerde girişimcilik faaliyetleri ekonomik eşitsizliklerin azalmasına ve yerel ekonominin güçlenmesine katkıda bulunurken, gelişmiş ülkelerde küresel sorunların çözümüne yönelik yenilikçi çözümlerin bulunmasına katkı sağlayabilmektedir (Kuvan, 2007; Çukacı, 2009; Thomas & Mueller, 2000).

YÖNTEM

Çalışma nicel araştırma yöntemleri ile gerçekleştirilmiştir. TÜBİTAK 4004 Doğa Eğitimi ve Bilim Okulları Programı kapsamında desteklenen “Mesleki ve Teknik Eğitimde Türkiye Yüzyılı Girişimcileri Projesi” ile Samsun ilinde dezavantajlı bölgelerde yaşayan mesleki ve teknik lise öğrencilerine yönelik olarak uygulamalı girişimcilik eğitimi düzenlenmiştir. Bu eğitim ile dezavantajlı bölgelerde yaşayan bireylere başka bir alternatifin olduğu göstermek ve kendi potansiyellerini keşfetmelerini sağlamak amaçlanmıştır. 30 öğrenciye girişimcilik eğitimi verilerek eğitim öncesi ve sonrası girişimcilik eğitiminin girişimcilik eğilimi üzerine etkisinin ortaya çıkarılması amaçlanmıştır. Eğitime ilişkin değerlendirmeler için Balaban ve Özdemir (2008)’in geliştirmiş olduğu 10 maddelik girişimcilik eğitimi ölçeğinden yararlanılmıştır. Bununla birlikte yapılandırılmış görüşme soruları ile eğitime sonrası girişimcilik eğilimlerine ilişkin değerlendirmeler alınmıştır.

BULGULAR

Öğrencilere girişimcilik eğitimi ile ilgili görüşlerini öğrenmek amacıyla anket uygulanmıştır. 10 sorudan oluşan anket ile eğitim sonrasında öğrencilerin girişimcilik eğitiminin katkısı öğrenilmeye çalışılmıştır. Tablo 1’de öğrencilerin girişimcilik eğitimi ile ilgili ifadelerine ilişkin frekans tablosu yer almaktadır.

Tablo 1: Girişimcilik eğitimi ile ilgili ifadelerin frekans tablosu

Eğitim sonrası	Katılmıyorum		Kararsızım		Katılıyorum	
	F	%	F	%	F	%
Girişimcilik eğitimi, girişimde bulunma konusunda beni olumsuz etkiledi.*	17	56,7	9	30,0	4	13
Girişimcilik eğitimi, girişimci olma yolundaki düşüncelerimi olumlu yönde etkiledi	1	3,3	11	36,7	18	60
Girişimcilik eğitimi, önceden fark etmediğim potansiyeli açığa çıkardı	2	6,7	16	53,3	12	40
Aldığım eğitim ile “Ben de girişimci olabilirim.” düşüncesi ağırlık kazanmaya başladı	3	10,0	8	26,7	19	63
Girişimcilik eğitimi, girişimciliği bir kariyer olarak düşünmeme sebep oldu.	6	20,0	10	33,3	14	47
Başarılı bir girişimci olmak için en önemli unsur eğitimidir.	3	10,0	3	10,0	24	80
Girişimcilik potansiyelinin geliştirilmesinde eğitim önemli bir unsurdur.	1	3,3	3	10,0	26	87
Eğitim sayesinde gençlerin girişimcilik potansiyeli geliştirilebilir.	0	0,0	5	16,7	25	83

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Potansiyelinin girişimcilğe uygun olmadığını girişimcilik eğitimi ile görmüş oldum	9	30,0	18	60,0	3	10
Eğitimin başarılı bir girişimci olunmasında etken bir unsur olduğunu düşünmüyorum	15	50,0	5	16,7	10	33

**Madde tersine kodlanmıştır.*

Girişimcilik eğilimi ile ilgili ifadelerle bakıldığında katılımcıların yarısından fazlası eğitimin girişimcilik potansiyelinin ortaya çıkarılmasında ve geliştirilmesinde olumlu katkısını olduğunu kabul etmektedir. Öğrencilerin %63'ü «bende girişimci olabilirim» düşüncesine daha olumlu bakabilmekteyken üç öğrenci girişimcilik potansiyellerinin olmadığını ve girişimci olamayacaklarına ilişkin inanç geliştirdiklerini belirtmektedir. Tablo 2’de ise cinsiyete göre ortalama değerler yer almaktadır. Çalışmada cinsiyete göre eğitime ilişkin görüşlerin farklılaştığı ortaya konulmuştur.

Tablo 2: Cinsiyete göre girişimcilik eğitimi ifadelerinin ortalama değerleri

Cinsiyet	Ortalama
Kadın	41,2
Erkek	30,7

Öğrencilere girişimciliği etkileyen faktörleri sıralamaları istenmiştir. Tablo 3’de etkinlik öncesi eğitim dördüncü sırada yer alırken, Tablo 4’te görüldüğü üzere etkinlik sonrası eğitim faktörü ilk sıraya yükselmiştir.

Tablo 3: Etkinlik öncesi girişimciliği etkileyen faktörlerin sıralanışı

Vizyon	1
Arkadaşlar	2
Para	3
Eğitim	4
Motivasyon	5
Deneyim	6
Aile şirketi	7

Tablo 4: Etkinlik sonrası girişimciliği etkileyen faktörlerin sıralanışı

Eğitim	1
Vizyon	2
Para	3
Arkadaşlar	4
Deneyim	5
Motivasyon	6
Aile şirketi	7

Etkinlik sonrasında öğrencilerin “mutlaka girişimci olacağım”, “sosyal yaşamı ve iş yaşamı dengeli bir şekilde yaşamak istiyorum”, “kendi işimi kurma yeteneğine sahip olduğumu düşünüyorum” gibi ifadelerde buldukları görülmüştür. Bununla birlikte “yüksek maaşlı bir iş fırsatını kabul ederim” ifadelerinde de buldukları görülmüştür.

SONUÇ VE TARTIŞMA

Girişimcilik, doğuştan gelen bir özellik değil, kültürel, sosyolojik, psikolojik, politik ve mali çevresel faktörler aracılığıyla bireylere kazandırılan bir yetenektir. Girişimci, ekonomik koşulları en verimli şekilde değerlendirerek, belirsizliğe katlanarak, üretimi yönlendirip yöneterek, yenilikçi yöntemler ve süreçler geliştirerek, yeni pazarlar araştırıp oluşturan

10th International CEO Communication, Economics, Organization & Social Sciences Congress kişilerdir. Bu bağlamda, günümüz dünyasında bir ülkenin kalkınma ve gelişiminde, hızla değişen koşullara uyum sağlama kapasitesine sahip girişimcilerin varlığı, önemli bir rol oynamaktadır. Girişimciliği etkileyen faktörler, bireyin iş kurma ve büyütme sürecindeki başarılarını şekillendirmektedir. Eğitim de girişimciliği etkileyen faktörler arasında yer almaktadır. Literatürde girişimcilik eğitiminin girişimcilik eğilimleri üzerine etkisi olmadığını gösteren çalışmalar bulunmaktadır (Şengür vd., 2022; Şengür vd., 2022). Bununla birlikte eğitim faktörü etkinlik sonrasında girişimciliği etkileyen faktörler açısından ilk sırada yer almıştır. Girişimcilik eğitimi, bireylerin yenilikçi düşünme, problem çözme ve liderlik gibi temel becerilerini geliştirmeye katkı sağlamaktadır. Bu eğitimler, katılımcıların iş dünyasında karşılaşılabilecekleri zorluklara yaratıcı ve pratik çözümler üretme yeteneğini artırırken, aynı zamanda özgüvenlerini de güçlendirir. Girişimcilik süreçlerinin temellerini öğrenmek, bireylerin risk almayı yönetme, kaynakları etkin kullanma ve fırsatları değerlendirme konularında bilinçlenmelerini sağlamaktadır. Ayrıca girişimcilik eğitimi, bireylerin sürdürülebilir ve yenilikçi iş modelleri tasarlayarak ekonomik kalkınmaya katkıda bulunmalarını teşvik eder. Bu sayede hem bireysel başarı hem de toplumsal fayda sağlanmaktadır. Cinsiyet açısından farklılığa bakıldığında Doğaner & Altunoğlu (2010) erkeklerin girişimcilik eğilimlerinin daha yüksek olduğunu belirtmektedir. Bununla birlikte Tanrıverdi vd., (2016) kadınların girişimcilik eğilimlerinin daha yüksek olduğunu belirtmektedir. Bu çalışmada da lise düzeyinde öğrenim gören kız öğrencilerin girişimcilik eğilimlerinin daha yüksek olduğu görülmüştür.

KAYNAKÇA

- Akyüz, K. C., Gedik, T., Aydın, A., Yıldırım, İ., & Akyüz, İ. (2009). Orman fakültesi son sınıf öğrencilerinin meslek tercihleri ve girişimcilik yetenekleri. *International Journal of Economic and Administrative Studies*, 2(1), 139-158.
- Balaban, Ö. ve Özdemir, Y. (2008). Girişimcilik eğitiminin girişimcilik eğilimi üzerindeki etkisi: Sakarya Üniversitesi İİBF örneği. *Girişimcilik ve Kalkınma Dergisi*, 3(2), 133-147.
- Çukacı, Y. C. (2009). *Girişimcilik ve küçük işletmeler* (Editörler: Mehmet Tikici ve Ali Aksoy). Ankara: Nobel Yayıncılık.
- Doğaner, M., & Altunoğlu, A. E. (2010). Adnan Menderes Üniversitesi Nazilli İktisadi ve İdari Bilimler Fakültesi İşletme Bölümü öğrencilerinin girişimcilik eğilimleri. *Organizasyon ve Yönetim Bilimleri Dergisi*, 2(2), 103-110.
- Etzkowitz, H., Webster, A., Gebhardt, C., & Terra, B. R. C. (2000). The future of the university and the university of the future: Evolution of ivory tower to entrepreneurial paradigm. *Research Policy*, 29(2), 313-330.
- Heinonen, J. (2006). Action-based activities in teaching corporate entrepreneurship at university level. *Journal of Asia Entrepreneurship and Sustainability*, 11(2), 1-26.
- Henderson, R., & Robertson, M. (1999). Who wants to be an entrepreneur? StudyMode.com. Retrieved July 2008, from <https://www.studymode.com>
- Karadeniz, Y. (2010). Türkiye’de girişimcilik eğitimi. Retrieved January 12, 2013, from http://vizyon21yy.com/documan/Egitim_Ogretim/Onemli_Gunler_Kuruluslar/Girisimcilik_Haftasi/Turkiyede_Girisimcilik_Egitimi.pdf
- Klofsten, M. (2000). Training entrepreneurship at universities: A Swedish case. *Journal of European Industrial Training*, 24(6), 337-344.
- Kuvan, H. (2007). Türk girişimcilerinin yaşam ve çalışma değerleri: Malatyalı girişimciler üzerine bir araştırma (Yayımlanmamış doktora tezi). Süleyman Demirel Üniversitesi, Sosyal Bilimler Enstitüsü
- Naktiyok, A. (2004). *İç girişimcilik*. İstanbul: Beta Yayınları.
- Seçgin, Y. (2020). Girişimcilik eğitiminin girişimcilik eğilimi üzerine etkisi: Üniversite öğrencileri üzerine bir araştırma. *Business & Management Studies: An International Journal*, 8(1), 803-827.
- Şengür, F., Lapçın, H.T. ve Hamutoğlu, N. B. Determination of Entrepreneurship Tendencies of Students after TÜBİTAK 4004 “Aviation Girls Step into Entrepreneurship” Project, 552.
- Şengür, F., Lapçın, H. T., & Hamutoğlu, N. B. (2022, Aralık). Genç havacıların girişimcilik hakkındaki görüşleri: TÜBİTAK 4004 “Havacı Kızlar Girişimciliğe Adım Atıyor” Projesi. EGE 7th Uluslararası Sosyal Bilimler Kongresi, İzmir, Türkiye.
- Tanrıverdi, H., Bayram, G. N., & Alkan, M. (2016). Girişimcilik eğitiminin girişimcilik eğilimi üzerine etkisinin incelenmesi. *Girişimcilik ve Kalkınma Dergisi*, 11, 1-29.



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Tekin, M. (2004). Giriřimcilik ve küçük iřletme yöneticilięi. Ankara: Detay Yayıncılık.

Thomas, A. S., & Mueller, S. L. (2000). A case for comparative entrepreneurship: Assessing the relevance of culture. *Journal of International Business Studies*, 31, 287-301.

Yelkikalan, N., Akatay, A., Yıldırım, H. M., Karadeniz, Y., Köse, C., Koncagül, Ö., & Özer, E. (2010). Dünya ve Türkiye üniversitelerinde girişimcilik eğitimi: Karşılaştırmalı bir analiz. *KMÜ Sosyal ve Ekonomik Araştırmalar Dergisi*, 12(19), 51-59.

Yıldız, S., Taşkıran, E., & Çiçek, M. (2011). Üniversite öğrencilerinin bireysel değerleri ile girişimcilik eğilimleri arasındaki ilişki: Kafkas Üniversitesi'nde bir araştırma. 10. İşletmecilik Kongresi (ss. 48-54). İzmir.

Yonca Gürol, & Yasemin Bal. (2009). Türkiye'de girişimciliğin evrimi ve gelişimi için girişimcilik eğitiminin önemi. Yıldız Technical University, Department of Economics. Revised October 2009.



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Örgüte Uyum Konusunda Önemli Bir Kavram: Örgütsel Sosyalleşme

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ÖZET

Örgütsel sosyalleşme kavramı, örgütsel süreçlerle ilgili birçok değişkenle doğrudan ya da dolaylı bir şekilde ilintilidir. Bu çalışmanın amacı, bireyin yaşadığı önemli örgütsel süreçler arasında yer alan örgütsel sosyalleşme ile ilgili bir teorik çerçeve oluşturarak kavramın daha iyi anlaşılmasını sağlamaktır.

Örgütsel sosyalleşme çalışanın, örgütün normlarını, değerlerini kültürünü öğrendiği, örgütün bir parçası haline geldiği süreçtir. Bireyin içinde bulunduğu ortamla uyumuna yönelik bir kavram olan örgütsel sosyalleşme, bireyin sadece gündelik yaşamı açısından değil aynı zamanda örgütsel yaşamıyla ilgili süreçler açısından da son derece önemlidir.

Birey içinde bulunduğu sosyal çevreye uyum sağlayarak yaşamını sürdürmektedir. Bireyin yaşadığı topluma uyum sağlaması, gerçekleştirdiği sosyalleşme faaliyetleri ile doğrudan bağlantılıdır. Birey öncelikle ailede, sonrasında dahil olduğu eğitim yaşamı aşamaları içerisinde sosyalleşme faaliyetlerine katılmaktadır. Ailede başlayan, çevre tarafından desteklenen ve eğitim kurumlarıyla pekiştirilen sosyalleşme faaliyetleri, bireyin hayatını sürdürme amacıyla dahil olacağı iş yaşamı boyunca da varlığını ve gelişimini sürdürmeye devam etmektedir.

İş yaşamı faaliyetlerinin başarılı şekilde sürdürülmesi ve tamamlanması konusunda örgütsel sosyalleşme değişkeninin rolü dikkat çekicidir. Bu kavramın hem çalışanlar hem de yöneticiler tarafından daha iyi anlaşılmasının, sosyalleşme sürecinde oluşabilecek problemlerin önlenmesi ya da azaltılması konusunda etkili olacağı düşünülmektedir.

Literatürde örgütsel sosyalleşme değişkeni ile ilgili yapılmış farklı çalışmalar bulunmasına rağmen, bu değişkeni tek başına ele alan çalışmaların sayısının az olması bu çalışmanın özgün yönünü oluşturmaktadır. Çalışmanın örgütsel sosyalleşme konusunda araştırma yapmayı düşünenler için teorik bir alt yapı oluşturma noktasında katkı sağlaması beklenmektedir.

Keywords: Örgüt, uyum, sosyalleşme, örgütsel sosyalleşme.

ABSTRACT

A Crucial Concept for Organizational Adaptation: Organizational Socialization

The concept of organizational socialization is directly or indirectly related to many variables related to organizational processes. The purpose of this study is to provide a better understanding of the concept by creating a theoretical framework about organizational socialization, which is among the important organizational processes experienced by the individual.

Organizational socialization is the process in which the employee learns the norms, values and culture of the organization and becomes a part of the organization. Organizational socialization, which is a concept for the adaptation of the individual to the environment in which he/she lives, is extremely important not only for the individual's daily life but also for the processes related to his/her organizational life.

Individuals survive by adapting to the social environment in which they live. The individual's adaptation to the society in which he/she lives is directly related to the socialization activities he/she performs. The individual participates in socialization activities first in the family and then in the stages of educational life. Socialization activities that start in the family, supported by the environment and reinforced by educational institutions continue to exist and develop throughout the working life in which the individual will be involved in order to survive.



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The role of organizational socialization variable in the successful continuation and completion of work life activities is remarkable. It is thought that a better understanding of this concept by both employees and managers will be effective in preventing or reducing the problems that may occur in the socialization process.

Although there are different studies on the organizational socialization variable in the literature, the fact that there are few studies that deal with this variable alone constitutes the unique aspect of this study. The study is expected to contribute to the creation of a theoretical infrastructure for those who intend to conduct research on organizational socialization.

Keywords: Organization, Adaptation, Socialization, Organizational Socialization.

Bu çalışmada örgütsel sosyalleşmeye yönelik gerçekleştirilen faaliyetlerin örgütler için ifade etmekte olduğu anlam ve önemin açıklanması amaçlanmıştır. Çalışma sonucunda bireyin işiyle ve üyesi olduğu örgüt ile ilişkisini önemli düzeyde etkileyen örgütsel sosyalleşme faaliyetlerinin daha iyi anlaşılması sağlanacaktır.

Araştırma kapsamında ortaya çıkan araştırma soruları şu şekilde sıralanabilmektedir;

- Çalışanlar ve yöneticiler için örgütsel sosyalleşme değişkeninin önemi nedir?
- Örgütsel sosyalleşme değişkeni hangi örgütsel değişkenler üzerinde etki oluşturarak çalışanın iş yaşamını etkilemektedir?
- Örgütsel sosyalleşmeye yönelik olarak gerçekleştirilen faaliyetler sonucu örgütlerde ortaya çıkan durumlar nelerdir?

Çalışanın motive olması, örgüt başarısı için yüksek düzeyde önemli yapıya sahip olmasına rağmen, çalışanlar işe başladığı zamanlarda ya da iş kapsamında uzun süreler harcadıklarında olumlu çıktılarının nasıl oluşacağına dair gerçekleştirilen çalışmalar sınırlıdır. Örgüt ortamında gerçekleşen olumlu sosyalleşme faaliyetleri olumlu örgütsel çıktılar için önemlidir (Chong et al., 2024, s. 1). Küreselleşme ve dolayısıyla her alanda meydana gelen gelişimler örgütleri değişimlerle karşı karşıya getirmektedir. Örgüt başarısı için örgütsel sosyalleşme kavramının anlamı ve önemi anlaşılmalıdır (Kuyar, 2023, s. 143).

Örgütsel sosyalleşme kavramı, dinamikleri ve dengesi sebebiyle, küresel zorluklar ve gelişmeler içinde araştırılması ve akademik ilgi görmesi gereken konulardandır (Chue et al., 2024, s. 303). Bu çalışma örgütlerde örgütsel sosyalleşmenin anlaşılmasına, uygulanmasına ve kavramın geleceğine yönelik çıkarımlar sunmaktadır. Çalışmanın örgütsel davranış alanında bir araştırma açığının kapatılmasına katkı sağlaması amaçlanmıştır.

TEORİK ÇERÇEVE

Sosyalleşme süreci, bireyi sosyal varlık haline getiren bir süreçtir. Yapılan araştırmalarda bireyin neyin kabul edilebilir neyin kabul edilemez davranış olduğunu anlamasıyla ilgili olduğu ifade edilmektedir. İçinde iletişimi, etkileşimi barındırmaktadır. Toplum içinde yetişkine dönüşme sürecidir. Zaman içinde örgütsel rol ve davranışlarla benzerlik gösterdiği, bireyler ve örgütler için önemli fırsatlar oluşturduğu anlaşılmış ve bu kavrama ilgi artmıştır. Böylece insan hayatında önemli yere sahip olan sosyalleşme olgusu örgütler içinde de incelenmeye başlanmıştır (Mammadova, 2022, s. 172). Bireyin hem günlük yaşamda hem de iş yaşamında refaha ulaşması pek çok örgütsel faktörle bağlantılıdır (Pamuk ve Marşap, 2023, s. 87). Örgütsel sosyalleşme değişkeni tüm örgütsel faktörler içinde önemli bir yere sahiptir.

Bir çalışanın örgütüyle bütünleşmesi ve örgütün bir üyesi haline gelmesi 'örgütsel sosyalleşme' kavramına denk gelen karmaşık bir yolculuktur (Chue et al., 2024, s. 303). Örgütsel sosyalleşme çalışanın örgüte bir üye olarak katılması için gereken tutum, davranış ve bilgi edinme sürecidir (Toprakçı ve Avcı, 2021, s. 417). Örgütsel sosyalleşme, bireyin örgütü için etkili bir çalışan olabilmek için yaşamakta olduğu bir geçiş dönemini anlatmaktadır. İlgili geçiş döneminde yaşanan öğrenme ve deneyimleri kapsayan bir süreçtir (Coşkun, 2020, s. 311). Sosyalleşme örgütlerde öğrenmeyi, yaratıcılığı ve sorunları çözmeye yönelik iş birliği yapmayı geliştirmektedir (Sial et al., 2023, s. 1).

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Örgütsel sosyalleşme örgütün yeni çalışanları örgüt kültürüne kazandırdığı süreç olarak da ifade edilebilmektedir. Başka bir ifade ile; örgüt kültürel değerlerinin üst düzey çalışanlar ve liderlerden, yeni çalışanlara aktarılmasını, yeni çalışanlara örgütsel rol ve görevleri başarılı şekilde yerine getirmeleri için gerekli bilgi ve becerilerin sağlanmasını içermektedir. Örgütsel sosyalleşme dışarıdan birinin alınıp, örgütün temel inanç ve değerlerini ona öğretmekle ve o kişiyi içerden biri haline getirmekle ilgilidir (Mammadova, 2022, s. 173). Bireyin örgüt norm, değer ve davranış kalıplarının öğrenilmesi ve içselleştirilmesi süreci olan örgütsel sosyalleşme bir anda gerçekleşip biten bir süreç değil, tüm yaşam boyunca devam etmekte olan bir süreçtir. Hayat boyu öğrenmeyle paralellik göstermektedir (Aydın ve Tulunay Ateş, 2022, s. 923). Kavrama farklı bir bakış açısıyla yaklaşıldığından sosyalleşme sürecinin insan hayatı boyunca devam ettiği, yaşanan her değişimle birlikte (iş değişimi, mevcut işte yeni iş tanımları vb.) sürecin tekrarlandığı görülmektedir (Aydın ve Tulunay Ateş, 2022, s. 922).

Sosyalleşme bireyin bağlı bulunduğu toplulukta etkileşimlerle kendini tamamlaması şeklinde de ifade edilebilmektedir (Karabey ve Duman Öztürk, 2022, s. 355). Örgüt yapısı ve toplumsal yapı arasındaki benzerlikten hareket edilerek, örgütsel sosyalleşmenin, toplumsal sosyalleşmeye benzer bir öğrenme süreci olduğu ifade edilebilmektedir. Örgütsel sosyalleşme süreci işgörenin örgüt içinde gereken bilgi ve becerileri öğrenmesi, anlamlandırması ve sürdürmesinin beklendiği bir süreçtir (Saylık ve Hazar , 2021, s. 1138).

Örgütsel sosyalleşmede çalışanın karşılıklı etkileşim içinde olduğu kişilerle karşılıklı olarak gerçekleştirdiği öğrenme davranışı önemli sonuçları beraberinde getirebilmektedir (Durmuş, 2022, s. 277). Bir öğrenme süreci olan sosyalleşme, bireyin öğrendikleri sayesinde sosyal düzenin korunmasına katkı sağlamaktadır. Geçirilen etkin sosyalleşme süreci, kişi ve seçtiği iş arasındaki uyum, iş ve iş ortamına kolay uyum sağlama, işte üretken ve doyum sahibi olma, işte mutlu olma, sağlıklı bir kariyer edinme açısından öneme sahiptir (Memduhoğlu, 2008, s. 137).

Yeni bir işe başlayan veya bağlı bulunduğu örgütte yeri, statüsü değişen çalışanın hiçbir yardım almadan veya birdenbire mesleğe, örgüte uyum sağlamasını beklemek doğru değildir. Bireyin alıştırılması, uyumlu veya yeterli hale getirilmesi süreci olan örgütsel sosyalleşmenin sağlanması için hem çalışanın hem de mevcut üyelerin yapması gereken çeşitli faaliyetler bulunmaktadır (Çağlar, 2022, s. 2320). Bu süreçte çalışana, çalışma arkadaşları tarafından örgüt ve yükselme imkanlarına yönelik gelecekle ilişkili durumlar hakkında bilgilendirme yapılması, çalışanın örgüte uyumunu kolaylaştırmaktadır. İlgili süreçte örgütünü anlayıp kabul gören bireyin yönetici ve örgütüne daha kolay güven duyması ve örgüte uyum sağlaması kolaylaşabilmektedir (Cengiz, 2024, s. 2192).

Günümüz örgütleri çalışanların sosyalleşmesi için çeşitli yol ve yöntemler denemektedirler (Mammadova, 2022, s. 175). Çalışanın örgütünde geçirdiği ilk yıllar meslek yaşamındaki önemli ve zor yıllardır. Bu süreçte bireyin uyumunu başarılı bir şekilde tamamlamak için örgüt tarafından temel ve hazırlayıcı eğitim gibi çeşitli isimler altında bazı sosyalleşme eğitimleri uygulanabilmektedir (Memduhoğlu, 2008, s. 145). Örgütler kendi faaliyetleri çerçevesinde kurallar geliştirip ve çalışanlarının bu kurallar kapsamında hareket etmesine yönelik düzenlemeler yapabilmektedir. Yapılan düzenlemeler, çalışanın örgütünü tanımasını, amaç ve hedeflerle paralel şekilde işlerini öğrenmelerini ve bunu iş yaşamına yansıtmasını kapsayabilmektedir (Yıldız ve İlban, 2022, s. 545). Birey tüm bu süreçler boyunca değer ve normları öğrenerek örgüte uyum sağlamaya çalışmaktadır (Aydın ve Tulunay Ateş, 2022, s. 922). Örgüte yeni dahil olan veya mevcut çalışanların çeşitli durumlar karşısında kendilerini

10th International CEO Communication, Economics, Organization & Social Sciences Congress yabancı biri gibi hissetmemeleri, potansiyellerini kullanabilmeleri ve psiko-sosyal açıdan ihtiyaçlarını karşılayabilmeleri için sosyalleşme sürecine gereksinim duyulmaktadır (Taşlıyan, Güler ve Gurbanlı, 2022, s. 1042). Dolayısıyla örgütsel sosyalleşme sürecinde temel amaç, örgüt çalışanlarının bağlı buldukları örgüte uyumu olarak karşımıza çıkmaktadır (Ayar, 2023, s. 415; Özyılmaz Misican, 2021, s. 115).

Bireyin bağlı bulunduğu örgüt amaçları ile kişisel isteklerini gerçekleştirebilmek için güdülenmesinde öncelikle örgüt ile uyum sağlaması, kendisini örgütün önemli bir parçası olarak hissetmesi, örgüt değer ve normlarını içselleştirip, örgütü ile bağ kurması gerekmektedir. Bu durumların sağlanması etkin örgütsel sosyalleşme ile mümkündür (Baransel Cinar ve Tanrıöğen, 2022, s. 542). Uyum sağlamış bir çalışanın, bağlı bulunduğu örgütte tatmin duyacağı, daha uzun süre kalmaya istekli olacağı ve örgütüyle özdeşleşebileceği ifade edilmektedir (Pamuk ve Marşap, 2023, s. 87). Örgütsel bağlama sağlanan uyum neticesinde gerçekleşen sosyalleşme durumunda çalışanlar, örgütte bulunan önemli kişiler tarafından onay almak için kendilerinden beklenenlere yönelik davranışlar sergileyebilmektedirler (Yıldırım, 2024, s. 12). Birey çevresinde olup bitenleri gözlemleyerek yeni ortama uyum sağlamak amacıyla öğrenme eylemini gerçekleştirebilmekte ve davranışlarını buna yönelik olarak şekillendirebilmektedir. (Durmuş, 2022, s. 276). Örgütsel anlamda sosyalleşme tutum, değer ve davranışların değişimiyle mümkün olmaktadır. Çalışanlar kendi tutum ve davranışlardan vazgeçerek örgütün onayladığı davranışlara yönelmektedirler (Mammadova, 2022, s. 175).

Sosyalleşme süreci sadece yönetsel olarak değil bireysel olarak da ele alınması gereken ve psikolojik süreçler içeren bir dönüşümdür (Taşlıyan, Güler ve Gurbanlı, 2022, s. 337). İşe alım ve iş başında eğitim için gerçekleştirilen yatırımların daha çok fayda sağlaması için motive etme özelliği olan sosyalleşme faaliyetlerinin göz önünde bulundurulması gerekmektedir (Chong et al. 2024, s. 3). Örgütün daha fazla aidiyet kazanması için yaptıkları uygulamalar da çalışan tutum ve davranışlarında etki oluşturmaktadır. Örgütsel sosyalleşmeye yönelik gerçekleştirilen faaliyetlerde bunlardan (Özyılmaz Misican, 2021, s. 117). Literatürde örgütsel sosyalleşme sürecinin ortaya çıkardığı veya etkilemekte olduğu birçok örgütsel sonuçtan bahsedilmektedir.

Çalışmanın bu kısmında konuyla ilgili birkaç çalışmanın sonuçlarından bahsedilecektir;

Cengiz (2024)' e göre örgütsel sosyalleşme süreci çalışanların örgüte yönelik olarak pozitif imaj hissetmelerine, kariyer beklentileri ile ilgili net bilgilere sahip olarak örgüte uyum sağlamlarına, çalışma arkadaşlarının desteklerini hissetmelerine öncülük etmektedir. Sosyalleşme sürecinin başarısı, örgüt içinde ortaya çıkabilecek pozitif davranışları artırabilmektedir. Aynı zamanda sosyalleşme süreçleri sonucunda kişi örgüt uyumunun sağlandığı, yöneticiyle güven ilişkisinin oluştuğu ve dolayısıyla erdemli davranış sergilemenin arttığı ifade edilmektedir.

Tümkaya ve Badeli Azman (2023)'e göre, örgüt amaçlarına ulaşılmasında ve bireylerin kendini örgüte ait ve üretken hissetmeleri noktasında örgütsel sosyalleşmenin önemi vurgulanmaktadır.

Özyılmaz Misican (2021)'e göre örgütsel sosyalleşmenin kişilerarası güveni güçlendirmesinin beklendiği ifade edilmektedir. Ayrıca örgütün sağlamakta olduğu kazanımlardan memnun olan çalışanların örgütte kalma eğilimleri arttığı ifade edilmiştir.

Bektaş ve Berber Çelik (2023)'e göre örgütsel sosyalleşme düzeylerinin örgüt kültürüne uyum ve örgütsel sürdürülebilirlik bakımından tüm örgütler için önemli olduğu ifade edilmektedir.

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Bunun yanı sıra örgüte aidiyeti düşük çalışanların fazla sayıda olduğu örgütlerde başarının düşeceği ve bu örgütlerin varlıklarını devam ettirme konusunda çeşitli sorunların ortaya çıkacağı sonuçlarına ulaşılmıştır.

Chue et al.(2024)'e göre sosyalleşme faaliyetlerinin iş yerine katılanlara; çalışma içeriği, kültürü ve bağlamına yönelik bilgi edinmeleri ve örgütü tanımaları için fırsatlar oluşturduğu ifade edilmiştir.

Doğusan vd. (2024)e göre akademisyenler üzerine gerçekleştirilen bir çalışmada kuruma daha kolay uyum sağlamaları bakımından örgütler tarafından danışmanlık/oryantasyon gibi hizmetlerin verilebileceğinden bahsedilmiştir. Teşvik ve maddi desteklerle, haksızlıklara karşı alınacak önlemlerle kurum içi iş doyumlarının yükseltilerek sosyalleşmelerine katkı sağlanabileceği ifade edilmiştir.

Gölmez ve Atmaca (2023)'e göre idealizm ve sosyalleşme düzeylerinin örgütsel uyumu artırdığı ifade edilmektedir.

Demir (2021)'e göre sosyalleşmenin ihmal edilmesi sonucunda, çalışanların örgütlerde başarılı kültürlenme süreçlerinin olumsuz etkilendiği ifade edilmiştir.

Yıldız vd., (2021)'e göre başarılı bir sosyalleşme süreci geçirmenin iş verimini önemli ölçüde etkilediği ifade edilmektedir.

Torlak vd. (2024)'e göre çalışanlar örgüt hedeflerini ve ilkelerini benimsediğinde bilinç, öğrenme, bağlılık, adanmışlık ve özgünlüğün etkisinin arttığı ifade edilmektedir.

(Dagsland et al. 2024)'e göre sosyalleşmeye yönelik üç aşamalı bir süreklilik ortaya koyulmuştur. Bunlar; telkin/farkındalık, tutumsal/davranışsal/duygusal tepkiler ve yön bulma/hayatta kalma şeklinde sıralanmaktadır.

Şişman (2024)'e göre örgütsel sosyalleşmeye verilen önem ve önceliğin iş tatmini ve işe olan bağlılık üzerinde etki oluşturabileceği ifade edilmiştir.

Yukarıda ele alınan çalışmaların sonuçları incelendiğinde örgütsel sosyalleşme sürecinin etkin yürütüldüğü örgütlerde, örgütsel olumlu çıktıların daha kolay elde edilebileceği ifade edilebilmektedir. Örgütsel sosyalleşme kavramının etkin şekilde değerlendirilmesi örgüt faaliyetlerinin sürekliliği için önemlidir.

Örgütün sürekliliğini sağlayabilmek için gerekli olan insan sermayesinin önemi göz ardı edilmemelidir. Örgütü ile bütünleşemeyen çalışanların örgüt sürekliliğine katkı sağlamaları beklenemez (Demir, 2021, s. 156). Sürdürülebilir yapının sağlanması ve rekabette kazanmak için her bir örgüt üyesinin; potansiyelini geliştirme, insan kaynakları geliştirme stratejilerine katkı sağlama, işe alım süreçleri ve sonrasında öğrenmeye devam etme vb. konularda teşvik edileceği ortamların sağlanması gerekmektedir (Ezer, 2023, s. 1). Olumsuz etkilerin önlenmesi, olumlu etkilerin ortaya çıkmasına katkı sağlanması noktasında örgütsel sosyalleşmeye ilişkin faaliyetlerin etkin kullanımı gündeme gelmektedir (Demir, 2021, s. 157). Örgüt sürekliliğinin sağlanması konusundan örgüt yöneticisi ve eski üyelerle söz konusu yeni üyeler arasında pozitif etkileşim oluşması önemlidir. Aksi takdirde örgüt içinde ekonomik, psikolojik ve fiziksel birçok sorun ortaya çıkabilmektedir.

SONUÇ

Örgütsel sosyalleşme çalışanların yeni bilgiler edinmeleri, işin yapılması için gereken becerilerin öğrenilmesi ve örgüte uyum sağlanması için önemli bir süreçtir (Mammadova, 2022, s. 175). Ortaya çıkarması ihtimali olan birçok örgütsel durum nedeniyle bu kavram üzerinde örgüt yöneticilerinin dikkatle durması gerekmektedir.

İşgücü piyasasında artan işsizlik rakamları ve rekabet beraberinde işten ayrılanlar yerine yeni bireylerin istihdamının kolaylığını getirmektedir. Fakat her yeni işe alım bir maliyetin yanı sıra zaman kaybı da yaşatabilmektedir. Bahsedilen rekabet ortamında mevcut ve iyi performans gösteren çalışanlarla örgüt faaliyetlerinin başarılı şekilde sürdürülmesi için örgütsel sosyalleşmenin etkin yönetimi önemlidir. Örgüte yeni başlayan veya bir değişiklikte karşı karşıya gelen çalışanın bağı güçlendirmesi ve aidiyet hissetmesi için yapılan desteklemeler onların motivasyonunu da artırabilmektedir. Etkin örgütsel sosyalleşme faaliyetleri sayesinde çalışanlar kendilerini bağlı buldukları örgütün bir parçası olarak görüp, daha üretken tavırlar sergileyerek daha başarılı örgütsel sonuçların ortaya çıkmasına katkı sağlayabilmektedirler (Özyılmaz Misican, 2021, s. 128).

Örgütsel sosyalleşme ile ilgili bahsedilen özellikler dikkate alındığında, kavramın sürekli iyileşmeye katkı sağlayan, gelişimi destekleyen, öğreten ve öğrenmeye yönlendiren çok yönlü bir süreç olduğunu söylemek mümkündür. Tüm bunların yanı sıra örgütsel sosyalleşme kavramının bireyin kişilik özellikleriyle yakından ilişkili olduğunu göz ardı etmemek gerekmektedir. Örgüte katıldıktan sonra sosyal bir ortamla karşılaşan bireyin geçireceği sosyalleşme süreci üzerinde kişilik özelliklerinin de önemli düzeyde etkisi bulunmaktadır (Çilingir ve Erkılıç, 2022, s. 3276).

Örgütsel sosyalleşme kapsamında gerçekleştirilen faaliyetler üst yönetim tarafından titizlikle takip edilirse, çalışanların kendisini daha rahat ifade ederek daha özgür çalıştıkları, örgüt değer ve normlarını daha iyi anladıkları iş ortamları sağlanabilmektedir (Yıldız ve İlban, 2022, s. 560). Örgütler çalışanlarına daha fazla özgürlük, yetki ve sorumluluk vermeli, kaygıları hakkında fikirlerini almalı, onların başarılarını tanımalı, onları yeni görevlere dahil etmeli ve geri bildirimler sağlamalıdır (Torlak vd.,2024, s. 241).

Örgütsel sosyalleşme sadece örgütler için değil çalışanlar içinde yüksek düzeyde öneme sahiptir. Bu süreçte çalışan örgüt tarafından kendine sağlanan bilgileri iyi algılamalı ve değerlendirmelidir. Böylelikle örgütün beklentilerini daha iyi anlarken ve kendi beklentilerine de cevaplar alabilecektir. İşe yönelik gelişen pozitif duygularla sağlanması gereken uyum süreci kolaylaşabilmektedir (Cengiz, 2024, s. 2209). Etkin şekilde yönetilen örgütsel sosyalleşme faaliyetleri çalışan faaliyetlerinin daha fonksiyonel hale getirilmesine katkı sağlamaktadır (Durmuş, 2022, s. 277).

Çalışanların örgüt içinde öğrenmeleri ve dolaylı şekilde sosyalleşmelerine yönelik olarak hem bireyselleştirilmiş hem kurumsallaştırılmış sosyalleşme stratejilerinin nasıl geliştirilebileceği hakkında araştırmalar yürütülebilir (Chue et al.,2024, s. 313). Bu çalışma ile örgütsel davranış alanı için bir araştırma açığının kapatılmasına katkı sağlanmıştır. Bu çalışmada örgütsel sosyalleşmeye yönelik kavramsal detaylı bilgilere yer verilmiştir. Gelecekte gerçekleştirilmesi planlanan çalışmalarda örgütsel sosyalleşme değişkeni pek çok farklı örgütsel değişkenle bir

10th International CEO Communication, Economics, Organization & Social Sciences Congress araya getirilip kullanılabilir. Ortaya koyulan değerlendirmeler, gelecekte yapılması planlanan araştırmalara alt yapı oluşturabilecek yapıdadır.

Bu çalışma çeşitli sektörlerde, farklı örgüt yapıları içinde ilgili kavramın incelenmesi kavramın etkilerinin anlaşılması noktasında literatüre katkı sağlayabilir. Örgütsel sosyalleşme değişkeni, örgütsel adalet, örgütsel bağlılık veya örgütsel sinizm gibi çeşitli örgütsel değişkenlerle bir araya getirilerek ilgi çekici çalışmalar ortaya çıkarılabilir.

KAYNAKÇA

- Ayar, M. (2023). Örgütsel toplumsallaşma (sosyalleşme, sosyalizasyon). M. Avcı, & E. Kara (Ed.), *Birey, örgüt ve toplum* (1 b., s. 415-432). Konya: Eğitim Yayınevi.
- Aydın, F., ve Tulunay Ateş, Ö. (2022). Öğretmenlerin örgütsel sosyalleşmesine ilişkin 2016-2020 yılları arasında Türkiye'de yapılan akademik çalışmaların incelenmesi. *Uluslararası Sosyal Bilimler Akademi Dergisi*, 4(10), 920-945.
- Baransel Cinar, D. ve Tanrıoğen, A. (2022). Üniversitelerin örgüt yapısı ile akademisyenlerin örgütsel sosyalleşmeleri arasındaki ilişki. *Türk Eğitim Bilimleri Dergisi*, 20(2), 541-567.
- Bektaş, T. ve Berber Çelik, Ç. (2023). Örgütsel vatandaşlık davranışının kişilik özellikleri ve örgütsel sosyalleşme açısından incelenmesi. *Sakarya Üniversitesi İşletme Enstitüsü Dergisi*, 5(2), 119-125.
- Cengiz, H. (2024). Örgütsel sosyalleşmenin örgütsel erdemliliğe etkisinde kişi-örgüt uyumu ve yöneticiye güvenin rolü. *Yönetim Bilimleri Dergisi*, 22(54), 2190-2218.
- Chong, J., Gagn'e, M., Dunlop, P. & Wee, S. (2024). Facilitating newcomer motivation through internalization: A self-determination theory perspective on newcomer socialization. *Human Resource Management Review*, 34(2024), 101041.
- Chue, S., Säljö, R., Pang, P. & Lee, Y.-J. (2024). Organizational socialization strategies of interns transitioning to telecommuting work in uncertain times. *Journal of Workplace Learning*, 36(5), 301-318.
- Coşkun, B. (2020). Örgütsel sosyalleşme perspektif ve modelleri. *International Social Sciences Studies Journal*, 6(55), 311-326.
- Çağlar, A. (2022). Yeni göreve başlayan okul müdürlerinin örgütsel ve mesleki sosyalleşmeleri. *Milli Eğitim*, 51(235), 2319-2348.
- Çilingir, F. ve Erkiç, E. (2022). Sosyal zekânın örgütsel sosyalleşme ve hizmet verme yatkınlığı üzerindeki etkisinin incelenmesi: konaklama işletmeleri işgörenleri üzerine bir araştırma. *İşletme Araştırmaları Dergisi*, 14(4), 3270-3292.
- Dagsland, Å., Robinson, R. & Brenner, M. (2024). Stemming (chef's) occupational attrition: Navigating and surviving the socialisation process. *International Journal of Hospitality Management*, 122(2024), 103847.
- Demir, S. (2021). Örgütsel sosyalleşme ile örgütsel sessizlik arasındaki ilişki üzerine bir çalışma. *Elektronik Eğitim Bilimleri Dergisi*, 10(19), 156-166.
- Doğusan, S., Yaşar Sönmez, B. ve Yalçın, C. (2024). Yükseköğretimde "hayallerim ve meslek hayatım": Spor bilimleri fakültesi akademik personelinin örgütsel sosyalleşmeye ilişkin görüşleri. *Yükseköğretim ve Bilim Dergisi*, 14(1), 108-117.
- Durmuş, İ. (2022). Çalışanların örgütsel sosyalleşmesinde yönetici işlevselliği ve algılanan örgütsel destek ilişkisi: sosyal öğrenme kuramı perspektifi. *Manas Sosyal Araştırmalar Dergisi*, 11(1), 275-292.
- Ezer, M. (2023). *Kişi-örgüt uyumu*, (1 b.). Ankara: İksad Yayınevi.
- Gölmez, A. ve Atmaca, T. (2023). Öğretmenlerin mesleki idealizm, örgütsel sosyalleşme ve örgütsel uyum düzeyleri arasındaki ilişki. *Türkiye Sosyal Araştırmalar Dergisi*, 27(3), 681-696.
- Karabey, C. ve Duman Öztürk, F. (2022). Örgütsel sosyalleşme, bilgi paylaşma davranışı ve bilgi paylaşmaya yönelik duygular arasındaki ilişkiler. *Uluslararası Ekonomi, İşletme ve Politika Dergisi*, 6(2), 352-370.
- Kuyar, Z. (2023). Stratejik insan kaynakları yönetiminde sosyoloji disiplininin önemi. *Organizasyon ve Yönetim Bilimleri Dergisi*, 15(2), 132-144.
- Mammadova, M. (2022). Örgütsel sosyalleşme ile ilgili teoriler üzerine bir literatür taraması. *Tuarn-Sam Uluslararası Bilimsel Hakemli Dergisi*, 14(56), 172-175.
- Memduhoğlu, H. (2008). Örgütsel sosyalleşme ve Türk eğitim sisteminde örgütsel sosyalleşme süreci. *Yüzyüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi*, 5(2), 137-153.
- Özyılmaz Misican, D. (2021). İşe gömülmüşlük algısının örgütsel sosyalleşmenin sinizm üzerine etkisinde aracı rolü. *"İŞ, GÜÇ" Endüstri İlişkileri ve İnsan Kaynakları Dergisi*, 23(1), 111-132.

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- Pamuk, M. ve Marşap, A. (2023). İş-yaşam dengesi, kişi-örgüt uyumu ve kişi-iş uyumunun örgütsel özdeşleşme üzerindeki etkileri. *Manisa Celal Bayar Üniversitesi Sosyal Bilimler Dergisi*, 21(3), 73-99.
- Saylık, A. ve Hazar, S. (2021). X ve Y kuşağı okul müdürlerinin iletişim becerilerinin aday öğretmenlerin örgütsel sosyalleşmelerine etkisi. *Elektronik Sosyal Bilimler Dergisi*, 20(79), 1137-1161.
- Sial, M., Paul, Z., Rafiq, Z. & Abid, G. (2023). Does mobile technology shape employee socialization and enable tacit knowledge sharing in public sector organizations. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(2023), 100089.
- Şişman, S. (2024). Örgütlerde toksik liderlik ve bununla baş etme stratejileri üzerine bir değerlendirme. *Uluslararası Liderlik Çalışmaları Dergisi: Kuram ve Uygulama*, 7(1), 39-50.
- Taşlıyan, M., Güler, B. ve Gurbanlı, E. (2022). Örgütsel sosyalleşmenin örgütsel sessizlik üzerine etkisi: tekstil sektöründe bir alan araştırması. *Kahramanmaraş Sütçü İmam Üniversitesi Sosyal Bilimler Dergisi*, 19(2), 1041-1056.
- Toprakçı, M. ve Avcı, Y. (2021). Öğretmenlerin kültürel sermaye yeterlikleri ile örgütsel sosyalleşme düzeyleri arasındaki ilişkinin incelenmesi. *Iğdır Üniversitesi Sosyal Bilimler Dergisi*, 10(28), 416-433.
- Torlak, N., Budur, T. & Khan, N. (2024). Links connecting organizational socialization, affective commitment and innovative work behavior. *The Learning Organization*, 31(2), 227-249.
- Tümekaya, S. ve Badeli Azman, Ö. (2023). Eğitimcilerin örgütsel sosyalleşme düzeylerinin karşılaştırılması: ABD/Türkiye örneği. *Gaziantep Üniversitesi Eğitim Bilimleri Dergisi*, 7(1), 45-69.
- Yıldırım, A. (2024). Kamu görevlileri etik kurul kararları üzerinden kamu yönetiminde etik kültürünü okumak. *İnönü Üniversitesi Uluslararası Sosyal Bilimler Dergisi*, 13(1), 1-20.
- Yıldız Yalçın, A., Boydak Özcan, M. ve Özdemir, T. (2021). Ücretli öğretmenlerin örgütsel sosyalleşmesine yönelik bir çalışma. *Uluslararası Sosyal Alan Araştırmaları Dergisi*, 10(1), 122-136.
- Yıldız, N. ve İlban, O. (2022). Örgütsel sosyalleşmenin örgütsel sessizlik ve işten ayrılma niyeti üzerine etkisi: konaklama işletmeleri örneği. *Seyahat ve Otel İşletmeciliği Dergisi*, 19(3), 542-564.



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Post-Bürokrasi Kavramına Dair Eleştirel Bir Değerlendirme

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ÖZET

Kamu yönetimi disiplini özünde modernitenin veya modern yönetim anlayışının ortaya çıkmasıyla eş zamanlıdır. Post-modernizmin etkileriyle kamu yönetimi ve politikası alanında görülen müzakereci, iletişimsel ve daha doğrusu tartışmacı dönüş modern kamu yönetimi disiplini açısından varoluşsal önemdedir. Aydınlanmacı bir modernite anlayışı ve epistemolojisi yoluyla kamu yönetimi disiplinine atfedilen evrensellik iddiaları bu post-modern dönüşle bürokrasi kavramı merkezinde sorgulanmaya başlanmıştır. Kamu yönetimi disiplinde postmodernizmin izleri sürdüğümüzde karşımıza post-bürokrasi kavramı çıkmaktadır. Post-bürokratik söylemlerin kamu yönetiminin ve bürokrasinin rolünü hangi noktada veya ne derece önemsizleştirildiği sorgulanmalıdır. Bu çalışma bürokrasi sonrası ve bürokrasisiz bir kamu yönetiminin bir çözüm olamayacağını ancak bürokrasileri destekleyici çözümler bulmak gerektiğini vurgularken kamu yönetiminde söylemin pratiğin yerini almasının mümkün olmadığını savunmaktadır. Son olarak post-modernizmin bürokratik yapıları değişen koşullara ve beklentilere göre güncellenebilir kılacak bir sorgulama biçimi olarak düşünülmesinin radikal ve soyut değişim programlarından daha yararlı olacağı fikri savunularak dengeli bir tutum önerilmektedir.

Anahtar Kelimeler: Post-modernizm, Post-modern Kamu Yönetimi, Post-bürokrasi

A Critical Evaluation of the Concept of Post-Bureaucracy

ABSTRACT

The discipline of public administration is essentially contemporaneous with the emergence of modernity or modern management. The deliberative, communicative, or rather argumentative turn in the field of public administration and policy with the effects of post-modernism is of existential importance for the modern public administration discipline. The claims of universality attributed to the discipline of public administration through an Enlightenment understanding and epistemology of modernity have begun to be questioned at the center of the concept of bureaucracy with this post-modern turn. When we trace the traces of postmodernism in the discipline of public administration, we come across the concept of post-bureaucracy. It should be questioned at what point or to what extent post-bureaucratic discourses trivialize the role of public administration and bureaucracy. This study emphasizes that a post-bureaucracy and bureaucracy-free public administration cannot be a solution, but it is necessary to find solutions that support bureaucracies, and argues that it is not possible for discourse to replace practice in public administration. Finally, a balanced approach is suggested by arguing that post-modernism as a form of questioning that would make bureaucratic structures updateable according to changing conditions and expectations would be more useful than radical and abstract change programs.

Keywords: Post-modernism, Post-modern Public Administration, Post-bureaucracy.

Genel olarak postmodernizm kavramı mimari, edebiyat, güzel sanatlar, sosyoloji, iletişim, teknoloji, politika, sinema gibi birçok alanda etkisini göstermiştir. Modernite ve postmodernite arasındaki ilişki kesintisiz olduğundan Habermas ve Giddens gibi düşünürler modernitenin tamamlanmamış bir süreç olduğuna vurgu yaparlar. Bu çalışmada öncelikle postmodernizmin kuramsal boyutu tartışılacak ardından kamu yönetimi ile ilişkisi açığa çıkarılacak ve postmodern kamu yönetiminin hangi temellere dayandığı ele alınarak, postmodern kamu yönetimine yönelik olarak eleştiriler üzerinde durulacaktır. Bu eleştiri tepkisel ve savunmacı bir bakış açısıyla değil, kamu yönetimi disiplini kendi tarihsel ve sosyal bağlamı içerisinde ele alan bir eleştirel durum değerlendirmesi niteliğinde ortaya konacaktır.

Çalışmanın seyri bakımından postmodernitenin inşa sürecini anlamak için modernitenin kısa bir açıklamasının yapılması uygun görülmektedir. Modern ifadesi çağa uygun olan, çağdaş anlamlarına gelmektedir. Modern terimi Latince’de *Modernus* biçiminde Hıristiyanlık dönemini, Roma ve Pagan geçmişlerinden ayırmak amacıyla 5. yüzyılda kullanılmıştır (Habermas, 1996:39). Modern terimi içinde yaşanan zamansal uzamda devam eden bir değişim olsa da tarihsel uzamda eskiden yeniye geçişin bir ifadesidir. Belli bir tarihsel dönemi ifade etmek için kullanılan Aydınlanma kavramına içkin bir şekilde kullanılması modernizmi bir aydınlanma projesi olarak görmeyi kolaylaştırmaktadır. Böylece ideolojik bir içerim kazanan modernizm bilim ve rasyonalitenin sağladığı doğrusal ve sürekli bir ilerleme sayesinde ideal toplumsal düzenlemelere ulaşılabileceği inancını barındırmaktadır (Şaylan, 2009: 144-146). Modernizm böylece şeylerin eski düzenine karşı bir tepki olarak gelişen olguculuk (pozitivizm), akılcılık (insan aklının özerkliği) ve bilimsel bilginin evrenselliği üzerine kurulu olan yeni bir dünya vizyonunun paylaşılmasıdır (Yıldırım, 2010:704). Post-modernizm bir bütün olarak bu vizyonun sorgulanmaya başlandığı ve halen devam eden bir süreci ifade eder.

Post-modernizmin modernizmi sorgulaması moderniteyi yıkıp yeni bir çağı başlatan devrim-kurucu bir düşünce değildir. Aslında post-modernizm tümdengelimli ve tümevarımlı kabulleri sorgulama, modernizmin insan merkezli iyimserliğinin yerine daha çoğulcu ve olumsal bir ilerleme fikrini savunan bir başka dünya vizyonu olarak okunabilir. Aydınlanma geleneği çerçevesinde modernite ile beraber biçimlenen kamu yönetimi disiplini post-modern dönemde merkeziyetçi, hiyerarşik, değişime ayak uyduramayan ve katı bürokratik bir anlayış olarak eleştirilmeye başlanmıştır. Modernizmin belli bir süre sonra dönemin sosyal, kültürel ve ekonomik ihtiyaçlarına cevap verememesi postmodernist düşünceye zemin hazırlayarak bir sorgulama alanı doğmuştur. Postmodern kamu yönetiminin yaptığı bu sorgulama sonucunda modern kamu yönetiminin temel değerleri yerini hesap verebilirlik, yerinden yönetim, katılımcılık, açıklık ve esneklik (elastikite) gibi değerlere bırakmıştır. Postmodernite; tüketimcilik, bilginin metalaşması, küreselleşme ve otoritenin parçalanması gibi faktörlerle yaşam biçimimizi etkileyen özelliklere sahip 20. yüzyılın sonu ve 21. yüzyılın başındaki geç kapitalizmle de ilintilidir (King, 2005:519).

1. POSTMODERNİZM: KAVRAM, TARİHSELLİK ve ÖZELLİKLER

Postmodernizm terimi ilk olarak Arnold Toynbee tarafından 1939’da yayınlanan “A Study of History” başlıklı eserinde kullanılmıştır. Kavram Jean-François Lyotard’ın “Postmodern Durum” adlı kitabıyla beraber evrensel olarak tartışılan bir konu haline gelmiştir. Postmodern kavramının kültür kuramı alanında modernizme karşı bir eleştiri ve/ya modernizmden sonra gelen anlamında kullanılması 1960 ve 1970’li yıllarda gerçekleşmiş olup (Best ve Kellner, 2016:27) ve günlük yaşama girişi ile esas yaygınlığı 1980’li yıllarda başlamıştır (Erinç, 1994). Postmodernizm anlayışının kimisine göre modernizme bir tepki olarak doğduğu, kimisine göre ise sanat ve estetik alanlarında yeni bir anlayışı ortaya koyduğu ifade edilmektedir (Babaoğlu

10th International CEO Communication, Economics, Organization & Social Sciences Congress ve Çobanoğlu, 2018:179). Postmodernizm giderek yeni ve farklı olan her şeyi ve her durumu ifade eden veya herkese kendinden bir şey bulabilme olanağı sunan (Aslan ve Yılmaz, 2001:98) bir boş gösterene dönüşme tehlikesi içindedir. Postmodernizm, Batı düşüncesinde “postmodern dönüş” şeklinde ifade edilmiş olup içerisinde pek çok yaklaşımı barındırmaktadır. Fakat bu farklı yaklaşımların ortak noktasını “meta anlatıların ölümü” oluşturmaktadır. Yani meta-anlatıların tüm insanları kapsayan evrensel gerçekliklere (insan doğası gibi) yönelik tekabüliyeti, postmodern düşüncede yerini belirsiz bir doğa anlayışı, esnek, değişken ve çoğul bağlamlara bırakmıştır. Böylece postmodern düşüncede insanlık için evrensel anlam taşıyan meta-anlatıların meşruiyetinin yitirilmesi söz konusudur (Hugman, 2003:1025). Postmodernizm esasında evrensel doğrulara, büyük anlatılara ve mutlak gerçekliğe karşı şüpheli bir tutum sergileyip daha çok sosyal inşacı (Berger ve Luckmann, 2008) ve post-yapısal veya yapı-sökümcü (deconstruction) (Derrida, 1978) bilgi kuramlarından esinlenmektedir.

Bilgi ve sosyal gerçekliğin (nesnel veya teknik hakikatler olmaktan çok) sosyal etkileşimler ve söylemler aracılığıyla inşa edilen (özel veya kültürel) dolayısıyla tekil değil çoğulcu bir üretim olduğu iddiasının daha özgürlükçü, toplumsal olarak duyarlı, marjinalleştirilmiş grupların sesini duyan ve demokratik değerlere dönük bir kamu yönetimi anlayışını beraberinde getireceği fikri yadsınamaz. Post-yapısalcılar da bilginin bir iktidar aracı veya güç olduğu fikrinin ötesinde bilginin iktidar ilişkilerinden bağımsız olamayacağını, yani ne bilgi alanı olmaksızın herhangi bir iktidar ilişkisi ne de iktidar ilişkilerini göz önünde bulundurmayan ve oluşturmayan bir bilgi alanından söz edilemeyeceğini (Foucault, 1992:33) savunurlar. Modernist teoriler nesnellığe atıfta bulunurken postmodernist teoriler dili ön plana çıkararak toplumun dil aracılığıyla inşa edildiğini ve toplumu ancak dil aracılığıyla anlaşılabilen bir anlam ağı olarak görmüşlerdir. Bu bağlamda toplum yazılı bir metin gibi okunmalıdır ve farklı okumalara bağlı olarak ise anlam değişebilmektedir. Böylece nihai yargılara alan açmayan postmodern anlayış toplumun herhangi bir okumasını da geçici bulmakta ve nihai olmadığını göstermektedir (Hugman, 2003:1025-1026). Hugman’ın, nihai yargıların yapılamayacağına ilişkin bir iddianın kendisinin de bir nihai yargı olduğunu ve bu durumun bir paradoksa işaret ettiğini ifade etmesi de dikkate değerdir (2003:1033).

Dile ve kültüre dönüş süreci ister istemez verimlilikten veya çıktılardan çok sürece yani söyleme odaklanmayı gerektiren daha durumsal, profesyonel olmayan katkılara açık ve daha “samimi” bir kamu yönetimi ve politikası anlayışını desteklemektedir. “Gelin bütünlüğe karşı savaş başlatalım, gelin sunulamayana tanıklık edelim, farklılıkları etkin kılp, adım onurunu kurtaralım” Lyotard’ın (1997:159) ifadesi bu açıdan numuneliktir. Bu yapıbozumcu mücadele belli ölçüde bilimsel kurum ve kuramları bir metin olarak görür; nasıl metinlerin ve kavramların incelenmesiyle onların tutarsızlıklarını ve belirsizliklerini ortaya koyuyorsak bütün baskıcı, hiyerarşik ve hakikat tekeline sahip sosyal yapıları daha kırılğan hale getirip çoğulcu ve demokratik bir hale getirebiliriz. Bu yaklaşım tümünden olumsuzlayıcı veya devrimci bir yaklaşım değildir zira kavramlar ve kurumlar yapıbozuma uğrattılırken mevcut anlamları veya işlevleri tamamen yok edilmez sadece alternatifleri üretilir veya baskın (başat) anlamlar veya yapılar sökülerek yeniden inşa edilir. Ancak nihayetinde Lyotard’ın ifadesiyle post-modern durumda yani günümüzde büyük anlatılar güvenilirliklerini yitirmekte ve yerine yerel-küçük anlatıları tercih etmek gerekmektedir (Lyotard, 1997:130).

2. POSTMODERNİZM ELEŞTİRİSİ

Postmodern düşünceye eleştirel yaklaşanlar eleştirilerini; postmodernliğin geçici bir heves olduğunu, yeni bir söylem ve kültürel sermaye arayışı içerisinde olan entelektüellerin bir icadı olduğunu veya özgürleştirici modern teorileri ve değerleri değersizleştirmeye çalışan muhafazakâr bir ideoloji olduğu yönünde şekillendirmişlerdir (Kellner ve Best, 2016:16).

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Postmodernizm kavram olarak farklı anlamlara sahip olmasının yanı sıra başından beri birçok önemli düşünür tarafından eleştirilmiştir. Bu itiraz ve eleştiriler ideolojik, fenomen ya da durumsal olarak postmodernizmin varlığı ile ilgilidir. Gellner, Giddens, Touraine ve Habermas gibi düşünürler modernliğin engellenmesinin yalnızca modern değerlerin değil aynı zamanda temel dayanaklarının da engellenmesi anlamına geleceğini ve epistemik bir kaosa sebep olacağını belirtmektedirler (Aslan ve Yılmaz, 2001:104). Bu düşünürler ayrıca postmodernizmin modernizmden bir kopuş olmadığını, bir değişim sürecinden geçse de modernliğin bir süreklilik olduğunu iddia ederler.

Habermas postmodernistlerin karşı-aydınlanmayla ittifak kurduklarını ileri sürerek faşizmle tedirgin ölçüde akrabalık kurduğunu belirtmektedir (Kellner ve Best, 2016:324-325). Habermas için modernliğe muhalefet etmek aslında Batı demokrasilerinin başarılarını yok saymak anlamına gelmektedir. Habermas modernliğin eksik yönlerinin terk edilmesini değil yeniden değerlendirilmesini önermektedir; araçsal aklın hayatın tüm alanlarına nüfuz etmesi yıkıcı iken, kültürel farklılaşma ve eleştirel akıl ilerici bir durumdur (Kellner ve Best, 2016:334).

Heller ve Feher'e (1993:7) göre postmodernizm belli bir tarihsel bir dönem ya da iyi tanımlanmış politik düşünce değildir (Heller ve Feher, 1993:7). Gellner ise postmodern düşüncenin hemen hemen her konuya müsamaha gösterdiğinden bahsetmektedir. Bütün inançların eşit olduğu fikri saçmalaktır ve tüm insanların düşüncelerinin doğru olduğu bir anlayış mantıksızdır. Gellner'e göre postmodernizm "feci derecede cilalı, anlaşılması mümkün olmayan bir yazın üretti" (1993: 61). Dolayısıyla postmodernizmin bu muğlaklığının nedeni belki de mevcut kültürün postmodernitenin eşliğinde duran bir modernite kültürü (Adams ve White, 1995:14) olmasından kaynaklanmaktadır.

3. POSTMODERNİZM VE KAMU YÖNETİMİ: POSTMODERN KAMU YÖNETİMİ

Postmodernizm 1970'li yıllardan itibaren kendisini sosyal bilimler alanında yoğun şekilde hissettirdiği ölçüde kamu yönetimi disiplini de etkilediği görülmektedir. 1980 ve 1990 yıllarına gelindiğinde kamu yönetimi anlayışı yeni kamu işletmeciliği olarak şekillenmiştir. Postmodernizmin kamu yönetimi disiplini üzerindeki etkisi 1970 yıllardan 1980'li yılların başlangıcına kadar Dwight Waldo'nun fikirleri çerçevesinde oluşturulan yeni kamu yönetimi olarak ortaya çıkmıştır. Postmodern kamu yönetimi, modern kamu yönetiminde sabitlenen ve şekleleştirilen kavram ve anlayışlara karşı çıkmaktadır (Şener, 2007:41). Postmodern kamu yönetimi anlayışına göre modern kamu yönetimi geleneksel olarak büyük, bürokratik ve merkezi yapısıyla değişime kapalı ve gizil nitelikler taşıyan bir anlayışı resmeder. Postmodern kamu yönetimi anlayışı ise yerinden yönetimci, katılımı esas alan, demokratik, piyasa odaklı ve daha esnek bir karakterdedir (Doğan, 2014:74). Bürokrasi kavramını da yapıbozuma uğratan postmodernizm, bürokrasiyi de bir büyük anlatı olarak görür ve yerine geçici örgütlenmeleri yeğler. Modern kamu yönetiminin "bürokrasi kuramı", postmodern kamu yönetiminde yerini "geçici örgütlenme (ad hoc) kuramlarına" bırakmıştır (Ergun, 1997:13). Böylece postmodern kamu yönetimi "demokratik, insan haklarına saygılı, temel işlevlerini yerine getirirken meşru hareket eden, aşırı merkezîyetçilikten uzaklaşmış, mümkün olduğunca yerleşmiş, bazı işlerini özel sektöre bırakmış, büyük ölçüde özelleşmiş, sivilleşmiş, halkın istek ve beklentileri doğrultusunda politika belirler" (Genç, 2010:152) şeklinde ifade edilmiştir. Taylorist yönetim ilkeleri, Fordist üretim tarzı ve Weberyen bürokrasi tanımı modern yönetim sistemlerin yapı taşlarıdır. Postmodern düşünce ile beraber bu büyük anlatılar yerini göreceliliklere, çoklu gerçekliklere ve anti kuramsalcı yaklaşımlara bırakmıştır (Özcan ve Ağca, 2010:3). Modern kamu yönetiminde bürokrasinin işlevi giderek yönetme işini anlaşılabilir ölçüde detaylandırmak ve tüm kamusal alana yaymak dolayısıyla sivil toplumu değil devleti desteklemek olarak anlaşılmaya başlanmıştır. Aynı zamanda kurallı bir sistemin

10th International CEO Communication, Economics, Organization & Social Sciences Congress kuralsız bir sistemden daha iyi olduğuna dair bir inancın olduğu da ifade edilmelidir (Tomo, 2019:483).

4. POST-BÜROKRASİ

Bir devletin yönetim şeklinin bağlı olduğu toplumun kültürü, siyasal alışkanlıkları, tarihi ve seçilmiş elitlerin isteklerine bağlı olarak toplumdan topluma değişiklik göstermesi beklenirken endüstri devriminin küresel etkileri genel bir anlayışın her yerde geçerli olacağına dair beklentileri beslemiştir. 1800'lü yılların sonlarından itibaren yönetimin başta siyaset ve hukuk gibi disiplinlerden ayrı olarak incelenmesi gerektiğine dair düşünceler yönetimin sınırları, ilkeleri ve kapsamının belirlenmesine yönelik çabaları içermiş ve bu klasik yönetim anlayışı olarak karşımıza çıkmıştır. Klasik yönetim anlayışının esas kaynakları Woodrow Wilson, Frederick Taylor, Max Weber ve Luther Gulick eserlerinde görülmektedir (Lynn, 2001: 145).

Ussallığa, verimliliğe, katı hiyerarşik yapılanmaya, denetim olgusuna ve siyaset ile yönetim ayrımına oldukça önem verilmiş böylece bürokrasi kendi bağımsız politikalarını oluşturmak ve yasallaştırmak için bilimsel olguları ve gerçekleri kullanmıştır. Dolayısıyla kamu yönetimi “modernist ve kapitalist bir toplumun güç ilişkilerini ve çıkarlarını” yansıtmaktadır (De Zwart, 2002: 486). Katı, hiyerarşik ve yoğun bürokratik yapılanmanın 1980'li yılların toplumsal ve ekonomik değişimlerin ivme kazandırdığı krizlerle başa çıkamadığı düşünülmüş ve sonucunda devlet örgütlenmelerinin daha esnek ve minimalist örgütlenmelerle daha etkin ve verimli çalışacağı inancı doğmuştur (Özer, 2005:4). Yeni kamu yönetimi anlayışının post bürokratik örgütleri üretim ve yönetim sistemlerini değişen şartlara uygun şekilde reforme etmeyi amaçlamışlardır. Bu geleneksel bürokrasinin ontolojik bir sorun haline geldiği anlamına da gelebilir. Post-bürokrasi, hiyerarşik ve büyük örgütlerin daha yatay hale ve küçük örgütler haline getirilmesini kurallara değil beklentilere uymayı, örgüt içinde ve örgütler arasındaki ağları güçlendirmek adına sınırların esnekleştirilmesinden daha fazlasıdır. Aslında post-bürokrasi kavramı bürokratik örgütlerin ontolojik bir gerçeklikten ziyade gündelik deneyimlerle inşa edilen sosyal bir epistemolojiye indirgemeyi amaçlar. Böylece vatandaşların devletin eylem ve hizmetlerini sorgulamasını ve geliştirici öneriler sunmasını mümkün kılacak şekilde paydaşlara dönüşmesi istenmiştir. Gelişen bu yeni yönetim anlayışı içerisinde yeni kurumsal iktisat ve işletmecilik kavramlarını barındırmaktadır. Bu da işletmeci bir anlayış; devletin kamu hizmetini sunarken özel bir şirketmişçesine halkın (müşterilerin) yüksek memnuniyetini esas alan fakat giderlerini minimum düzeyde tutan bir yapı ve işleyişe sahip olmasını gerektirmektedir (Şat, 2009:98-99). Yeni kurumsal iktisat anlayışına göre bürokrasiler daha şeffaf ve hesap verilebilir olmalı aynı zamanda kamu hizmetlerinin maliyetini minimum seviyede tutmalıdır. Şeffaf, maliyetsiz ve hesap veren bir yapının soyut ve ontolojik bir gerçeklikten ziyade bir söylem olduğu aşikârdır. Bu bağlamda, kamu yönetiminde performans ölçümüne önem verilmeli, kamu hizmetlerinin sunumunda piyasa ve piyasa benzeri rekabetçi mekanizmalar kullanılmalı, kamu-özel iş ortaklıkları kurulmalı, dış (özel piyasadaki) kaynaklardan faydalanma yoluyla devlet girdi ve süreç odaklılıktan, çıktı ve sonuç odaklılığa yönlendirilmelidir (Eryılmaz, 2015:56-57). Böyle bir tanımlama içinde bürokrasinin girdiler-süreçler-çıkıtlar şeklinde tarifi mümkün bir sistem dahi olamayacağı anlaşılmaktadır.

Yeni yönetim anlayışının yerelleşme, sosyal eşitliği sağlama, performans kontrolü, esneklik sağlama, özelleştirme, rekabeti geliştirmek gibi söylemleri bir post-bürokrasiden ziyade bürokratiksizleştirme yani kamu yönetimini oluşturan bütün insan kaynağını ve geleneğini ortadan kaldırma girişimi olarak okunabilir. Post-bürokrasi, klasik anlamdaki bürokrasinin mevcuttaki eksiklerini geliştirmek adına girdiği yapısal değişimler ile devleti bir özel şirket edasıyla yönetilmeye çağırılmaktadır. Dolayısıyla memur düzeyinde bürokrat müşteriye hizmet sunan personele ve amir durumundaki bürokrat ise personelinden sorumlu yöneticiye

10th International CEO Communication, Economics, Organization & Social Sciences Congress dönüşmektedir. Böylece post-bürokrasi klasik bürokrasinin yapı, kural ve işlevlerinin dönüşüme uğradığı bir aşamanın çok ötesine geçerek akışkan, gayri resmi ve organik sentezlere-terkiplere dönüştürür. Post-bürokratik örgütler söylemi en ılımlı noktada yatay örgütlenme (kurum içi hiyerarşik sınırın yıkılması) ve iş süreçlerinde takım çalışmasının olanaklı kılınması anlamına gelirken bu örgütlenme yapısı performansa ve stratejik planlamaların belirleyiciliği üzerine kuruludur. Uygulamada ise bu hizmet üretenlerin kaygısı altında hizmetlerin hızlı bir şekilde ucuza mal edilmesine ancak yerel hizmetlerin sürekliliğini ve güvenliğini azaltacak şekilde alt-yapının kalitesizliğine yol açabilir. Bu bağlamda kamusal hizmetler gerçekleştirilirken vatandaşa verimlilik sağlayacağı düşüncesi ile müşteri odaklı bir yaklaşımın benimsenmesinin risk taşıdığını düşünmekteyiz. Müşteri odaklı bir yaklaşımın hizmetin kalitesini belirlediğine yönelik anlayışın aksine belli bir noktadan sonra kâr maksimizasyonunun hedef haline geldiği, zamanla amaçların yer değiştirdiği ve nihayetinde niteliksiz bir hizmetin gerçekleştiği bir senaryonun oldukça mümkün olduğu görülmektedir. Öyle ki Türkiye gündemini derinden sarsan yeni doğan çetesi vakası¹ bu bağlamda düşünebilir. Devlet mekanizmasının müşteri odaklı yaklaşıma sahip olduğu bir düzende devlete bağlı veya bağımlı kuruluşların da aynı zihniyeti sürdürmesi kaçınılmaz olmaktadır. Dolayısıyla yakın zamanda gerçekleşen bu vaka geniş bir açıdan bakıldığında bürokratik işleyişlerin salt teknik kararlardan ibaret olmadığı, bu sürecin zihinsel bir kapsamı da bulunduğunun belki de önemli örneklerinden birini teşkil etmektedir. Bürokrasiye atfedilen modern veya postmodern anlayış biçimlerinin yansımaları yalnızca devlet mekanizmasında değil, devlete bağlı kurum ve kuruluşların (özellikle sağlık, eğitim ve güvenlik gibi alanlarda) işleyişine de yansıyan zihinsel bir durumun ifadesidir.

Post-bürokrasinin meydana getirdiği bu örgütsel değişim demokratik anlamda devlet kurumlarının hizmet ve işlemlerinde vatandaş tarafından sorgulanmasına zemin hazırlayarak devlet karşısında güçlü bireyler anlayışına hizmet ettiği düşünülebilir. Oysa uygulamada vatandaşın hesap verecek veya verilen hizmetin kalitesini artıracak kadar otoriteye veya yetkiye sahip kişiler kalmamaktadır. Diğer bir ifadeyle vatandaşın şikâyeti dinlenmekte olsa da üretilen çözüm bu şikâyeti giderse de kalıcı olarak şikâyetlere yol açmayan bir yapıyı mümkün kılmamaktadır. En son İzmir ilinde gerçekleşen ve iki kişinin elektrik çarpması² sonucu ölmesine yol açan ihmaller zincirinden bürokrasiyi değil bürokratiksizleştirmeyi veya bir makamsızlaştırmayı sorumlu tutmak gerekir. Bürokrasinin kaldırılmasıyla devlet aygıtının küçülmesini veya vatandaşın devlet karşısındaki güç ve gölgesinin büyümesini beklemek ve bunu demokrasinin bir uzantısı şeklinde yorumlamak kolay görünmemektedir. Bu bir tür sorumluları teşhis edememe problemine dönüşmektedir.

Kamu yönetiminde postmodern inşacılık çeşitlilik ve çok seslilik, esneklik, disiplinlerarası yaklaşım, sürekli olarak yeniden düşünme biçimleri şeklinde yansımaktadır. Postmodernizm farklı seslerin varlığının önemine atıfta bulunarak heterojenliğin kabulünü esas almaktadır. Postmodernizmin bu yönü kamu yönetimi disiplini açısından disiplinin daha kapsayıcı ve daha katılımcı yaklaşımları benimsemesini teşvik eder. Dolayısıyla farklı toplulukların ve bireylerin düşünceleri etrafında şekillenen politikaların bu çeşitlilik temelinde biçimlenmesi önem taşımaktadır. Fakat diğer taraftan postmodernizmin olası anlamlar arasındaki farklılık fikri aşırı görecelilik ve öznellik noktasına vardığında nihayetinde neyin doğru sayılabileceği konusunda herhangi bir yargıya varmak imkânsız hale gelmektedir. Bu nedenle olası değerler arasında bir seçim yapılamadığı için bir nihilizme (her şey gider) veya solipsizme (sadece benim dünya görüşüm bilinebilir-tekbencilik) kurban gider (Hugman, 2003:1026). Diğer bir deyişle postmodernizmin bu aşırı göreceliliği bir kafa karışıklığı yaratarak okuyanı tam

¹ Haber için bkz; <https://www.aa.com.tr/tr/gundem/yenidogan-cetesi-sorusturmasinin-18-aylik-kronolojisi/3370486>

² Haber için bkz; <https://www.aa.com.tr/tr/gundem/izmirde-saganaktan-kacmaya-calisan-2-kisi-elektrik-akimina-kapilarak-oldu/3273915>

10th International CEO Communication, Economics, Organization & Social Sciences Congress anlamıyla temelsiz ve bir nihilizm atmosferinde serbestçe yüzer halde bırakır (Adams ve White, 1995:10). Böyle bir pozisyonun kamu yönetimi gibi topluma müdahalede bulunan bir disiplin için sonuçları ağır olabilir. Bu durumda özellikle evrensel bir “insan” öznesinin inkârına kadar giderek; ister liberal ister radikal biçimde olsun modernist dünya görüşünün merkezini oluşturan “özgürleşme” kavramına yönelik bir meydan okumayı beraberinde getirmektedir. Gerçekten de bazı postmodernistlere göre modernist “özgürleşme” fikri insan olmanın ne olduğuna dair evrensel bir anlayış ileri sürdüğü için totalitarizme yol açmaktadır. Bu tartışma kamu yönetimi gibi topluma müdahale eden alanlar için bir meydan okuma yaratmaktadır. Postmodernizm farklılık kavramını ciddiye alan ve dolayısıyla herhangi bir bakış açısına ayrıcalık tanımayan bir analiz gibi görünüyorsa da aynı zamanda kamu yönetimi gibi (topluma müdahale eden-meselesi toplum olan) alanların altından etik halıyı çekiyor gibi görünmektedir (Hugman, 2003:1026).

Postmodern kamu yönetiminde bürokrasinin etkinliğinin azaltılmasıyla ve vatandaşlık bilincinin ve katılımının artmasıyla ortaya çıkan tabloda gönüllülük esaslı, kâr amacı gütmeyen sivil toplum örgütlerinin önemi de artmış dolayısıyla tüm bu nitelikler postmodern anlayışın katılımcı yaklaşımı benimsemesiyle ilgili çıktılar olarak karşımıza çıkmaktadır (Doğan, 2017:31). Tüm bunlar kamu yönetiminin çok katmanlı ve karmaşık bir hal almasıyla ilgilidir. Bürokrasinin baskınlığına karşı çıkabilmek adına kullanılan bu yapı-bozumlar yersiz-yurtsuzlaştırma, bilgi ve düşüncenin dağınıklık ve düzensizliğine işaret etmekte ve modern haliyle temsilin inkârı manasına gelmektedir.

SONUÇ

Kamu yönetimi disiplini bakımından gerçekleştirilen bu incelemede amaçlananın bir postmodernizm veya modernizm savunusundan/reddiyesinden öte kamu yönetiminin iyileştirilmesine yönelik bir sorgulama olduğudur. Bu sorgulama yapılırken modernist düşüncenin kamu yönetimine yönelik negatif etkilerinin olduğu kabul edilmiştir. Bu etkileri birkaç noktada toplayabiliriz. Örneğin; çalışan memurların iş yapış şekillerini norma ve yazılı yasalara göre yapması memurun verdiği hizmetin verimliliği noktasını önemsememesine sebep olabilir. Gerçekleştirilen işlem veya hizmetin kurallara bağlı şekilde yapılması işlemde sağlanan verimin düşünülmemesine kapı aralayabilir. Böylece amaçlar yer değiştirerek hizmetin niteliği yerine kurallara uymanın hedef haline geldiği bir durum oluşmaktadır. Kurallara bağlı çalışma anlayışı çalışanların iş görme potansiyellerinde sınırlı davranmasına neden olabilir. Bir çalışan yazılı kurallara bağlı olarak görevinin gerekliliklerini minimum seviyede yerine getirerek; hem norma aykırı hareket etmemiş olur hem de iş potansiyelini azaltmış olur. Böyle bir durumda sağlanan hizmetin verimsizliği tartışılabilir. Bu gibi etkilerden kaynaklı bürokrasinin verimsizliğine yönelik yanıt arayışları postmodernizme götüren yolların önünü açabilir. Fakat postmodernizmde kendi içinde tutarsız görünen ve çözüme ulaştırmayan noktaları bulunmaktadır. Bu noktada postmodernizmin etkilerinden bahsetmek gerekmektedir.

Postmodernizm modern felsefe ile bir hesaplaşma içindedir ve heterojenlik, çokseslilik, parçalanmışlığı savunurken diğer taraftan da bunların beraberinde getirmesi muhtemel yanlış anlama ve çıkarsamaları da olumlayan bir tehlike barındırabilir. Postmodernizm egemen olunamayacak olanı yaratma çabasında olduğu için kamu yönetiminin pratik uygulamalarında yetersiz kalabilir. Postmodern kamu yönetiminin eleştirileri postmodernizmin getirdiği belirsizlikler, görecelilik ve pratikte var olan uygulamalarına yöneliktir. Bu anlamda postmodern kamu yönetiminin belirli standart ve kuralları reddettiği, yerine sürekli yeniden inşa edilen kavramlar silsilesini yerleştirdiği için kamu yönetimi alanında kaosa sebep olabileceği düşünülmektedir. Böylece geleneksel yönetim anlayışına ait düzen ve öngörülebilirliğin zayıflayacağı düşünülmektedir. Postmodernizmin her yoruma açık yapısı

10th International CEO Communication, Economics, Organization & Social Sciences Congress göreceliği savunmasından kaynaklıdır. Fakat bu durum kamu yönetimi disiplininde nesnel kararlar alabilmeyi güçleştirebilir ve kurallara bağlı (normatif) bir temel oluşturmayı zorlaştırabilir. Çünkü kamu yönetimi disiplininin ilgi ve sorumluluk alanı ciddi meseleler olduğu için disiplininin kendisi de bu minvalde değerlendirilmelidir. Postmodern teorilerin kamu yönetimi uygulamalarında soyut ve teorik düzeyde kalacağı ve böylece günlük yönetim uygulamalarında yetersiz kalacağı düşünülmektedir. Kamu hesap verilebilirliği ve şeffaflığının postmodern yaklaşımların göreceli bakış açısına sahip olması ve normların reddiyesinden ötürü etkin yürütülemeyebilir. Aynı zamanda verimlilik ve etkinlik sorunları baş gösterebilir. Çünkü geleneksel yönetim anlayışının planlama, organizasyon, kontrol gibi uygulamalarının yerini dolduracak ve verimliliği artı yönde etkileyecek işleyişler bulunamayabilir. Kaldı ki toplumlar genellikle kapsamlı ve radikal değişimlere direnç göstermektedir. Postmodern kamu yönetimi de köklü değişimler getireceğinden ve alışılmışı değiştireceğinden ötürü vatandaşların direnci ile karşılaşılabilir. Buna ek olarak postmodernizmin anti-otoriter ve anti-hiyerarşik yapısı mevcutta bulunan idari ve politik yapılarla çatışabilir, bu çatışmalar yönetimin karar alma süreçlerinde istikrarsızlığa sebebiyet verebilir. Diğer taraftan postmodernizm özü itibariyle bir modernite eleştirisi üzerinden temellendiğinden dolayı aslında yine Batı tarihinin argümanlarıyla bir karşı çıkış yapmaktadır. Dolayısıyla onun bu durumu Batı yönetim tarihinin yeni bir evresine tekabül etmiş sayılmaz mıdır? Modern unsurlara karşı çıkan postmodernizm dayanaklarını ve sorgulamalarını yine aynı felsefi düşünce ve coğrafya üzerinden ifade ettiği için Batı dışı toplumları dışarıda bırakmış ve böylelikle de kendi evrenselini diğer toplumlara dayatmış olmaktadır. Bu bağlamda moderniteye karşı gerçekleştirdiği eleştirel soruşturmanın bir benzeri de postmodern felsefeye gösterilebilir. Kaldı ki tavsiye edilenin her ülkenin kendi toplumsal ve kültürel zeminine yönelik kendi kamu yönetimi modelini oluşturmasıdır. Tartışılanın, kamu yönetimi modelinin nasıl olması ve hangi nüvelerden beslenmesi gerektiği olması dolayısıyla her ülkenin tarihsel, kültürel ve politik farklılıkları nedeniyle kendine özgü özellikler sunması oldukça olağan bir durumdur.

Postmodern felsefenin soyut esaslara bağlı yapısının temel norm haline getirilmesi halinde kamu yönetiminin ciddi işleyen mekanizmasında yetersiz kalabileceği düşünülmektedir. Bunu yerine tavsiye edilen postmodern savların tıpkı bir nihilizm gibi geçiş aşamasında kullanılan yöntemler olarak değerlendirilmesi hem fikir vermesi hem de klasik yönetim anlayışının eksik yönlerinin fark edilmesi bakımından kullanılabilirliği düşünülmektedir. Fakat topyekûn bir postmodern kamu yönetimi inşasının pratikte yetersiz kalabileceği düşünülmektedir. Bürokrasiyi yok etmenin bir çözüm olmadığını, bürokrasinin değişen koşullara göre uyarlayarak alternatif destekleyici çözümler aranabileceği düşünülmektedir. Yine sivil toplum kuruluşlarının varlığı ve etkinliği demokratik bir toplum için önemlidir fakat STK'ların bürokrasinin yerini alması veya bürokrasiye alternatif gösterilmesi uç bir düşüncedir. Elbette değişen şartlara göre kurumlar ve işleyiş güncellenmelidir fakat bu güncelleme postmodernizmin öngördüğü gibi radikal ve soyut bağlamalarda olmamalıdır.

Postmodern tavsiyeler mevcut sorunların çözümüne giden yolda sorgulama eşiği işlevi görebilir fakat tümünden bir postmodern yönetim anlayışının imkânlı olmadığı düşünülmektedir. Aynı zamanda bürokrasi ile postmodernist düşünce arasında bir denge sağlanması da muhtemeldir. Örneğin; bürokrasiye özgü belli kurallar korunurken, kamu hizmeti sağlamada dijital araçlardan (post-bürokratik bir tutum) faydalanılması esneklik sağlamaktadır. Türkiye'de E-Devlet uygulamaları bu minvalde değerlendirilebilir. Bir ikametgâh değişikliğinin hem düzenli prosedürlere bağlı yapılması hem de e-devlet üzerinden işleme alınabilmesi bu denge anlayışına örnek gösterilebilir. Benzer şekilde kamu politikaları oluşturulurken vatandaşların katılımının esas alınmasıyla dijital mecralar üzerinden görüş bildirmeleri mümkün kılınabilirken, nihai kararın yasal çerçeveye uygunluğu korunmalıdır. Örnekleri çoğaltılabilecek bu gibi pratiklerin

10th International CEO Communication, Economics, Organization & Social Sciences Congress post-bürokrasi ile bürokrasinin dengelenmesiyle işlevsel hale geleceği düşünülmektedir. Post-bürokrasinin kamu yönetimi disiplinine yenilikçilik, vatandaş odaklılık ve esneklik kazandırdığı düşünülse de uygulamada kontrol eksikliği, makamsızlaştırma (yetkisizleştirmeden kaynaklı) ve belirsizlik gibi riskler taşımaktadır. Bu nedenle tavsiye edilen; post-bürokrasinin avantajlarından faydalanılırken dezavantajlarından kaçınmak için belli bürokratik kural ve mekanizmaların korunması ve dolayısıyla dengenin sağlanması gerekmektedir.

KAYNAKÇA

- Adams, G. B. ve White, J. D. (1995). Reason and Postmodernity: The Historical and Social Context of Public Administration Research and Theory. *Administrative Theory & Praxis*. 17(1):1-18.
- Aslan, S. ve Yılmaz, A. (2001). Modernizme Bir Başkaldırı Projesi Olarak Postmodernizm. *C.Ü İktisadi ve İdari Bilimler Dergisi*. 2(2): 93-108.
- Best, S. ve Kellner, D. (2016). *Postmodern Teori: Eleştirel Soruşturmalar*. (Çev. Mehmet Küçük), 3. Basım, İstanbul: Ayrıntı Yayınları.
- Babaoğlu, C. ve Çobanoğlu, S. (2018). Kamu Yönetiminde Postmodern Savlar. *Sayıştay Dergisi*. (108):175-189.
- Berger, P. ve Luckmann, T. (2008). *Gerçekliğin Sosyal İnşası: Bir Bilgi Sosyolojisi İncelemesi*. (Çev. V. S. Öğütle), 1. Baskı İstanbul: Paradigma Yayınları.
- Derrida, J. (1978). *Writing and Difference*. University of Chicago Press
- Doğan, K. C. (2014). Postmodern Kamu Yönetimi Anlayışı Çerçevesinde Bir Denetim Paradigması: Ombudsman. *Sayıştay Dergisi*. (94): 78-79.
- Doğan, K. C. (2017). Postmodern Kamu Yönetiminin Kuramsal Temelleri Çerçevesinde Yönetişim Yaklaşımı: Literatür Taraması. *Ömer Halisdemir Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*. 10(1): 27-45.
- De Zwart, F. (2002). Administrative Practice and Rational Inquiry in Postmodern Public Administration Theory. *Administration & Society*. 34(5): 482-498.
- Ergun, T. (1997). Postmodernizm ve Kamu Yönetimi. *Amme İdaresi Dergisi*. 30(4): 3-15.
- Eryılmaz, B. (2015). *Kamu Yönetimi*. 8. Baskı. Kocaeli: Umuttepe Yayınları.
- Erinç, S. M. (1994). *Postmodernizmin Tanımı*. 8 Haziran günü Anadolu Üniversitesi Eğitim Fakültesi'nde verilen konferans metni.
- Foucault, M. (1992). *Hapishanenin Doğuşu*. (Çev. M.A. Kılıçbay), Ankara: İmge Kitabevi.
- Gellner, E. (1993). *Mülakat*. (Konuşan: Şahin Alpay), Türkiye Günlüğü, Cedit Yayınları, Sayı 24, Ankara.
- Genç F. N. (2010). Yen Kamu Hizmet Yaklaşımı. *Türk İdare Dergisi*. (466):145-159.
- Heller, A. ve Feher, F. (1993). *Postmodern Politik Durum*, (Çev. Şükrü Argın, Osman Akınhay). Ankara:Öteki Yayınevi.
- Habermas, J. (1996). Modernity: An Unfinished Project. iç. (Eds. Maurizio Passerin d'Entreves ve Seyla Benhabib), *Critical Essays on the Philosophical Discourse of Modernity*, Polity Press. Cambridge.
- Hugman, R. (2003). Professional Values and Ethics in Social Work: Reconsidering Postmodernism?. *The British Journal of Social Work*, 33(8): 1025-1041.
- King, C. S. (2005). "Postmodern Public Administration": In the Shadow of Postmodernism. *Administrative Theory & Praxis*. 27(3): 517-532.
- Lyotard, J. F. (1997). *Postmodern Durum*. (Çev. Ahmet Çiğdem). Ankara: Vadi Yayınları
- Lynn, L. E. (2001). The Myth of the Bureaucratic Paradigm: What Traditional Public Administration Really Stood For. *Public Administration Review*, 61(2): 144-160.
- Özcan, K. ve Ağca, V. (2010). Yeni Kamu Yönetimi Anlayışında Postmodernizmin İzleri. *Amme İdaresi Dergisi*. 43(3): 1-32.
- Özer, M. A. (2005). Günümüzün Yükselen Değeri: Yeni Kamu Yönetimi. *Sayıştay Dergisi*. (59):3-46.
- Şaylan, G. (2009). *Postmodernizm*. Ankara: İmge Yayınevi.
- Şener, H. E. (2007). Kamu Yönetiminde Postmodernizm. iç. *Kamu Yönetimi: Yöntem ve Sorunlar*. Prof. Dr. Sinasi Aksoy ve Doç. Dr. Yılmaz Ustuner (der.), Ankara: Nobel Yayınları, ss. 31-47.
- Şat, N. (2009). Yeni Kamu Yönetimi Anlayışı: Weber Bürokrasisinin Sonu Mu?. *Hitit Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*. 2(1): 93-108.
- Tomo, A. (2019). Bureaucracy, Post-Bureaucracy, or Anarchy? Evidence from the Italian Public Administration. *International Journal of Public Administration*, 42(6): 482-496.



10th International CEO Communication, Economics, Organization & Social Sciences Congress

Yıldırım, M. (2010). Modernizm, Postmodernizm ve Kamu Yönetimi. *Uluslararası İnsan Bilimleri Dergisi*. 7(1): 703-719.

İNTERNET KAYNAKLARI

Anadolu Ajansı, (2024), <https://www.aa.com.tr/tr/gundem/izmirde-saganaktan-kacmaya-calisan-2-kisi-elektrik-akimina-kapilarak-oldu/3273915> Erişim Tarihi: 19.11.2024

Anadolu Ajansı, (2024), <https://www.aa.com.tr/tr/gundem/yenidogan-cetesi-sorusturmasinin-18-aylik-kronolojisi/3370486> Erişim Tarihi: 20.11.2024



10th International CEO Communication, Economics, Organization & Social Sciences Congress
UNESCO Yaratıcı Gastronomi Şehirlerine Yönelik Bir İnceleme

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ÖZET

UNESCO Yaratıcı Şehirler Ağı, kültürel ve yaratıcılıkla bağlantılı şehirlerin uluslararası düzeyde tanınması ve desteklenmesi amacıyla oluşturulmuş bir platformdur. 2004 yılında başlatılan bu girişim, şehirlerin sürdürülebilir kalkınma hedeflerine ulaşmalarına yardımcı olmayı amaçlamakta, kültürel çeşitliliğin teşvik edilmesini desteklemekte ve yaratıcı endüstrilerin ekonomik ve sosyal dönüşümdeki rolünü vurgulamaktadır. Yaratıcı şehirler, çeşitli alanlarda uzmanlaşarak yerel kültürlerin ve sanatsal ifadelerin gelişimine katkıda bulunmakta, böylece hem ekonomik hem de sosyal dönüşüm süreçlerine önemli bir ivme kazandırmaktadır. Yaratıcı şehirler, yalnızca sanatsal ve kültürel faaliyetleri ile değil, aynı zamanda bu faaliyetlerin toplum ve ekonomi üzerindeki etkileri ile de ön plana çıkmaktadır. Bu bağlamda, yaratıcı şehirlerin sosyal kapsayıcılığı artırma, toplumsal dayanışmayı güçlendirme ve ekonomik kalkınmayı teşvik etme potansiyeli üzerinde durulmaktadır. Şehirler, yaratıcılığı ve kültürel mirası geliştirme stratejileri ile yerel halkın yaşam kalitesini artırmayı hedeflemekte ve böylece küresel ölçekte daha sürdürülebilir bir gelişim modeline katkıda bulunmaktadır. Çalışmada nitel araştırma yöntemi kullanılmıştır. Araştırma kapsamında UNESCO Yaratıcı Şehirler Ağı'nın işleyişi, sağladığı fırsatlar ve karşılaştığı zorluklar ele alınacaktır. Ayrıca, bu ağın yaratıcı şehirler üzerindeki etkileri ve yerel yönetimlerin kültürel stratejilerdeki rolü incelenecektir. Böylece, yaratıcı şehirlerin ulusal ve uluslararası düzeydeki etkileşimleri ve sürdürülebilir kalkınma süreçlerine katkıları hakkında derinlemesine bir anlayış sağlanması amaçlanmaktadır. Dünya genelinde 2024 yılı itibarıyla 35 ülkeden 56 şehir "Yaratıcı Gastronomi Şehri" unvanı almıştır. Listeye en çok katkı sağlayan ülkeler sırasıyla Çin, Brezilya, Türkiye ve İtalya olduğu gözlemlenmiştir.

Anahtar Kelimeler: Unesco, Yaratıcı Şehir, Turizm, Küresel Ağ

A Review of UNESCO Creative Gastronomy Cities

ABSTRACT

The UNESCO Creative Cities Network is a platform for the international recognition and support of cities linked to culture and creativity. Launched in 2004, the initiative aims to help cities achieve their sustainable development goals, supports the promotion of cultural diversity and emphasizes the role of creative industries in economic and social transformation. Creative cities contribute to the development of local cultures and artistic expressions by specializing in a variety of fields, thus providing an important impetus to both economic and social transformation processes. Creative cities are characterized not only by their artistic and cultural activities, but also by their impact on society and the economy. In this context, the potential of creative cities to increase social inclusion, strengthen social solidarity and promote economic development is emphasized. Cities aim to improve the quality of life of local people through strategies to enhance creativity and cultural heritage, thus contributing to a more sustainable development model on a global scale. Qualitative research method was used in the study. Within the scope of the research, the functioning of the UNESCO Creative Cities Network, the opportunities it provides and the challenges it faces will be discussed. In addition, the effects of this network on creative cities and the role of local governments in cultural strategies will be examined. Thus, it is aimed to provide an in-depth understanding of the interactions of creative cities at national and international level and their contribution to sustainable development processes. As of 2024, 56 cities from 35 countries around the world have received the title of "Creative City of Gastronomy". The countries that contributed the most to the list are China, Brazil, Turkey and Italy, respectively.

Key Words: Unesco, Creative City, Tourism, Global Network

1. GİRİŞ

UNESCO, kültürel mirası koruma ve sürdürülebilir kalkınma adına önemli bir misyon üstlenmektedir. Belirledikleri misyon çerçevesinde, 2010 yılında Yaratıcı Şehirler Ağı (Creative Cities of Gastronomy) programını başlatarak, gastronomi alanında yaratıcı çözümler geliştiren şehirleri onurlandırmaya başlamıştır. Program aracılığıyla, yalnızca yemek kültürü değil, aynı zamanda gastronominin ekonomi, turizm ve kültürel etkileşim üzerindeki rolü de vurgulanmaktadır. Yaratıcı gastronomi şehirleri, geleneksel mutfakların korunmasının yanı sıra yenilikçi gastronomik uygulamalarla yerel ekonomilerin canlanmasına katkıda bulunmaktadır (UNESCO Türkiye Millî Komisyonu, 2024). UNESCO Yaratıcı Gastronomi Şehirleri; bu alanlarda eğitim ve araştırma yaparak, yerel halkı bilinçlendirmeyi ve dünya çapında gastronomi ile ilgili deneyimlerin paylaşılmasına olanak tanımaktadır. Gastronominin toplumların kimliğini oluşturan önemli bir unsur olduğu kabul edilirken; yaratıcı endüstrilerini gastronomi ile birleştiren şehirler, yemek ve mutfak kültürlerinin sadece bir yeme içme meselesi olmadığını, aynı zamanda kültürel bağları güçlendiren, sosyal ve ekonomik bir araç olduğunu da göstermektedir (Alyakut & Küçükkömürler, 2018, s. 4). Yaratıcı şehirlerin gastronomi dünyasındaki etkisi; sürdürülebilirlik, yenilikçilik ve yerel kaynakların en verimli şekilde kullanılması gibi unsurları ön plana çıkarmaktadır. Şehirler, mutfaklarını dünya çapında tanıtarak gastronomi turizmini desteklerken, aynı zamanda çevresel ve ekonomik sürdürülebilirlik için de çözümler üretmektedirler (Akkuş & Yordam, 2020, s. 916). UNESCO, bu şehirlerin birbirleriyle etkileşime girerek deneyimlerini paylaşmalarını teşvik eder ve gastronomi yoluyla toplumlar arası anlayışın gelişmesine olanak tanır. Her bir Yaratıcı Gastronomi Şehri, yerel mutfağını ve gastronomik mirasını farklı bir biçimde yansıtarak dikkat çekmektedir. Yaratıcı şehirlerde, yemek sadece bir beslenme aracı değil, aynı zamanda toplumsal bir ifade biçimi, kültürel mirası yaşatma ve geleceğe taşıma yolu olarak görülmektedir (Parson & Pearson, 2017, s. 346). Yerel tariflerin ve geleneklerin korunmasının yanı sıra, gastronomi, modern ve yenilikçi yaklaşımlar ile buluşarak farklı kültürlerden beslenen zengin bir mozaik oluşturmaktadır. Sonuç olarak, UNESCO Yaratıcı Gastronomi Şehirleri, sadece gastronominin kendisine değil, aynı zamanda bu alanda yaratıcı düşünce ve sürdürülebilir çözümler geliştiren şehirlerin geleceğe dönük birer örnek oluşturmasına olanak sağlamaktadır. Şehirlerin oluşturduğu ağ, global gastronomi dünyasında hem ekonomik hem de kültürel bağların güçlenmesine katkıda bulunurken, mutfak kültürlerinin geleceğe taşınmasına da büyük bir ivme kazandırmaktadır (Akkuş & Yordam, 2020).

2. TEORİK ÇERÇEVE

2.1. UNESCO Yaratıcı Şehirler Ağı

UNESCO Yaratıcı Şehirler Ağı, 2004 yılında başlatılan bir girişimdir ve şehirlerin kültürel çeşitliliği, sürdürülebilir kalkınma ve toplumsal gelişim için yaratıcı potansiyellerini keşfetmelerine olanak tanımaktadır. Yaratıcı Şehirler Ağı; çeşitli yaratıcı alanlarda (sanat, tasarım, müzik, edebiyat, sinema, el sanatları, dijital sanatlar ve gastronomi) liderlik yapan şehirleri bir araya getirerek, şehirler arası kültürel değişim ve işbirliğini teşvik etmektedir (Smith & Warfield, 2008, s. 288). UNESCO'nun bu ağı oluşturma amacının, şehirlerin yalnızca kültürel miraslarını korumakla kalmayıp aynı zamanda yaratıcı endüstriler üzerinden ekonomik ve toplumsal faydalar sağlamalarını desteklemek olduğu söylenebilir. Yaratıcı şehirlerin önemli özelliklerinden biri, kültürel çeşitliliğin ve yerel mirasın korunmasıyla birlikte, bu değerlerin yerel halk için ekonomik ve sosyal kalkınma araçlarına dönüştürülmesidir (Göker, 2011, s. 45). Yaratıcı şehirler, genellikle sanatsal ve kültürel etkinlikleri ile tanınmakta; ancak bu şehirler aynı zamanda inovasyon, sürdürülebilirlik ve toplumsal eşitlik gibi kavramlarla da ilişkili olarak gelişmektedirler (Gülduran & Arıkan Saltık, 2020). UNESCO, yaratıcı şehirlerin yalnızca yerel sanatçılar ve zanaatkarlar için fırsatlar yaratmakla kalmayıp, aynı zamanda

10th International CEO Communication, Economics, Organization & Social Sciences Congress yaratıcı endüstrilerin küresel ölçekte tanıtılmasını ve ekonomik büyümeyi desteklemesini beklemektedir. UNESCO Yaratıcı Şehirler Ağı'na dâhil olan şehirler, yaratıcı endüstrilerdeki çeşitliliği yansıtmaktadır. Oluşturulan ağda gastronomi, müzik, sinema ve edebiyat gibi alanlar, şehirlerin kültürel kimliklerini tanıtmada önemli bir rol oynamaktadır (Yalçınkaya, 2018, s. 41). Ağa dahil olan şehirler, genellikle sanatsal değerleri ve kültürel geçmişi modern ve yenilikçi yollarla birleştirerek, hem kendi toplumları hem de dünya için ilham verici projeler ortaya koymayı amaçlamaktadır.

Özellikle gastronomi alanındaki şehirler, yerel mutfak kültürlerinin korunması ve küresel düzeyde tanıtılması konularında önemli çalışmalar yürütmektedir. Ağdaki şehirlerin her biri, yaratıcı sektörlerde sağladıkları katkılarla toplumsal ve ekonomik yapıları güçlendirmektedir. Yaratıcı şehirler; kültürel etkinlikler ve festivaller düzenleyerek, sanatçıları, zanaatkarları ve girişimcileri bir araya getirmektedir (Goldberg-Miller & Heimlich, 2017, s. 122). Ayrıca, yaratıcı ekonominin büyümesi için altyapı geliştirme, eğitim ve yenilikçi projelere yatırım yapma gibi adımlar atmaktadırlar. Bunun yanı sıra, yaratıcı şehirler sürdürülebilir kalkınma ilkeleri doğrultusunda, çevresel sorumluluk ve toplumsal adalet gibi değerleri de göz önünde bulundurmaktadır.

UNESCO Yaratıcı Şehirler Ağı, ek olarak şehirlerin birbirleriyle işbirliği yaparak deneyimlerini ve bilgilerini paylaşmalarına olanak tanımaktadır. Yaratıcı Şehirler Ağı'nda yer alan şehirler, bir araya gelerek kültürel miraslarını, yaratıcı projelerini ve sürdürülebilir kalkınma stratejilerini daha geniş bir perspektifte değerlendirme fırsatı bulabilmektedir (UCCN, 2024). Böylece, sadece bir şehir değil, tüm dünya kültürleri birbirlerinden beslenebilir ve global anlamda yaratıcı endüstrilerin gelişimine katkıda bulunabilirler. Yapılan çalışmalar doğrultusunda UNESCO Yaratıcı Şehirler Ağı, küresel çapta yaratıcı sektörlerin önemini artıran bir şekilde tanınmasını ve desteklenmesini sağlamaktadır. UNESCO Yaratıcı Şehirler Ağı, şehirlerin kültürel miraslarını hem koruma hem de geliştirme konusunda önemli bir platform sunmaktadır. Aynı zamanda yaratıcı şehirlerin, yerel kimliklerini, sanatsal ve kültürel değerlerini global bir sahnede tanıtarak, sürdürülebilir kalkınma, kültürel anlayış ve toplumsal işbirliği gibi konularda dünya genelinde önemli etkilere sahip olduğu görülmektedir (Tiyapiphat, 2017, s. 150).

2.2. UNESCO Yaratıcı Şehirler Ağının Gastronomik Yönü

UNESCO Yaratıcı Şehirler Ağı, yalnızca kültürel çeşitliliği korumakla kalmayıp, aynı zamanda yaratıcı endüstrileri sürdürülebilir kalkınma araçlarına dönüştürmeyi amaçlayan bir platformdur. Bu ağın gastronomi yönü, şehirlerin mutfak kültürlerini hem koruma hem de dünya çapında tanıtmaya çabalarına odaklanmaktadır (Akın & Bostancı, 2017, s. 111). Gastronomi, yalnızca yemek pişirmekle ilgili bir faaliyet olmanın ötesine geçer; aynı zamanda yerel kimlikleri, toplumsal gelenekleri ve kültürel mirası yaşatma ve paylaşma yoludur. UNESCO Yaratıcı Şehirler Ağı'nda gastronomi, bu bağlamda, yerel mutfakların sürdürülebilir kalkınmaya katkıda bulunmasını sağlayan bir güç olarak öne çıkmaktadır (Yel, 2024, s. 2049). Gastronomi alanındaki UNESCO Yaratıcı Şehirler, mutfaklarını sadece turistlere tanıtmakla kalmayıp, aynı zamanda yerel halkın yaşam kalitesini iyileştirecek, ekonomik fırsatlar yaratacak projeler geliştirmektedir (Hatunoğlu, 2021). Ayrıca bu şehirler, yerel üreticilerin desteklenmesi, geleneksel yemek tariflerinin yaşatılması ve yenilikçi gastronomik projelerin teşvik edilmesi gibi unsurları bir araya getirmektedir (Kakiuchi, 2016, s. 103). Gastronomi ile ilgili eğitim programları, atölye çalışmaları ve festivaller düzenlenerek halkın bilinçlendirilmesi sağlanabilmektedir. Bu tür etkinlikler, hem yerel halkın gastronomi kültürüne olan bağlılıklarını pekiştirmekte hem de dışarıdan gelen turistlere derinlemesine bir deneyim sunmaktadır (Şahin & Ünlüönen, 2021, s. 1205).

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UNESCO Yaratıcı Şehirler Ağı'na dahil olan gastronomi şehirleri, sürdürülebilirlik ilkesini benimseyerek, doğaya zarar vermeden gastronomi endüstrisini büyütmeyi hedeflemektedir. Yerel tarım yöntemlerinin korunması, organik üretim, atık yönetimi ve çevre dostu uygulamalar gibi pratiklerin, gastronomi turizminin çevresel etkilerini azaltmak için benimsendiği görülmektedir. Örneğin, bazı şehirler yerel çiftçilerle işbirliği yaparak organik ürünlerin tüketimini teşvik etmekte ve geleneksel, doğal yöntemlerle yetiştirilen ürünlerin kullanılmasını desteklemektedir (Özgürel & GÜdü Demirbulat, 2024, s. 49). Kullanılan bu tür uygulamalar, sadece çevresel sorumluluğu değil, aynı zamanda yerel ekonomiyi de güçlendirmektedir (Yalçınkaya, 2018).

Bir başka önemli yön, gastronomi alanındaki şehirlerin birbirleriyle etkileşim içinde olarak deneyimlerini paylaşmasıdır. UNESCO Yaratıcı Şehirler Ağı, gastronomi şehirleri arasında bilgi alışverişi ve işbirliği sağlamaktadır. Paylaşım yapılan ağ sayesinde, gastronomi turizminin gelişmesi, yemek kültürlerinin korunması ve yenilikçi mutfak uygulamalarının yayılması kolaylaşmaktadır (Özkan, 2023, s. 1011). Gastronomi, aynı zamanda bir şehir için sosyal uyum ve toplumsal bağları güçlendiren bir araç olarak görülmektedir. Yerel halkın yemek kültürüne olan ilgisi, gastronomi üzerinden kurulan ilişkiler sayesinde daha derinleşir ve bu da toplumsal dayanışmayı artırabilir.

Gastronomi, UNESCO Yaratıcı Şehirler Ağı'nda sadece yemek pişirme sanatı olarak değil, aynı zamanda kültürel mirası aktaran ve toplumsal refahı artıran bir güç olarak görülmektedir. Yaratıcı şehirlerde gastronomi, sosyo-ekonomik kalkınma sürecinde önemli bir rol oynamaktadır. Yerel mutfak kültürleri, sadece yerel pazarlarda ve restoranlarda değil, aynı zamanda dünyadaki diğer şehirlerde de tanıtılmaktadır (Dağdelen & Pamukçu, 2019, s. 342). Böylece, gastronomi bir şehir için hem bir kültürel kimlik unsuru hem de ekonomik bir kalkınma aracına dönüşebilmektedir. Dolayısıyla UNESCO Yaratıcı Şehirler Ağı, gastronomiyi yalnızca bir yemek kültürü olarak görmekle kalmayıp, aynı zamanda bir şehrin sürdürülebilir kalkınma stratejisinin merkezine yerleştirilebilir. Ağa dahil olan şehirler, gastronominin sosyal, kültürel ve ekonomik faydalarını birleştirerek, küresel gastronomi dünyasında daha adil, sürdürülebilir ve kapsayıcı bir yapı oluşturmaktadır (Namyślak, 2014, s. 2413). UNESCO'nun bu ağdaki şehirleri desteklemesi, hem yerel halkın yaşam kalitesini artıran hem de dünya çapında kültürel anlayış ve işbirliği sağlayan önemli bir adım oluşturmaktadır.

2.3. UNESCO Yaratıcı Şehirler Ağına Girmiş Uluslararası Örnekler

UNESCO Yaratıcı Şehirler Ağı, dünya çapında pek çok farklı şehirde yaratıcı endüstrilerin gelişimine olanak sağlamaktadır. Örneğin, Fransa'nın Lyon şehri, gastronomi alanında UNESCO Yaratıcı Şehri olarak tanınmış olup, zengin mutfak geleneği ve yenilikçi gastronomik etkinlikleriyle dikkat çekmektedir. Çin'in Chengdu şehri ise, geleneksel Sichuan mutfağını modern dokunuşlarla birleştirerek gastronomi turizminde önemli bir merkez haline gelmiştir. Bunun yanı sıra, Kanada'nın Montreal şehri, dijital sanatlar ve oyun tasarımı gibi alanlarda yaratıcı endüstrilere yaptığı yatırımlarla tanınırken, Meksika'nın Oaxaca şehri, yerel mutfağını ve sürdürülebilir tarım uygulamalarını ön plana çıkararak gastronomi alanında UNESCO'nun takdirini kazandığı görülmektedir. Ayrıca Almanya'nın Berlin şehri, tasarım ve sanat alanındaki yenilikçi projeleriyle UNESCO Yaratıcı Şehri olarak kültürel etkileşimi artırmakta ve sanatı modern yaşamla birleştirerek global düzeyde etki yaratmaktadır. Diğer yandan, Japonya'nın Kyoto şehri, geleneksel Japon mutfağını ve el sanatlarını yaşatarak gastronomi ve kültür alanında büyük bir başarı elde etmiştir. Arjantin'in Buenos Aires şehri ise sinema ve edebiyat alanındaki katkılarıyla öne çıkmakta ve Latin Amerika'nın kültürel mirasını dünya çapında tanıtmaktadır. Hindistan'ın Chennai şehri, müzik ve sahne sanatları alanındaki yaratıcı çalışmalarıyla dikkat çekerken, İspanya'nın Barcelona şehri de tasarım ve mimarlık alanındaki

10th International CEO Communication, Economics, Organization & Social Sciences Congress yenilikçi projeleri ile global ölçekte etkisini göstermektedir. Birleşik Krallık'ın Edinburgh şehri ise edebiyat ve sanat etkinlikleri ile UNESCO Yaratıcı Şehirler Ağı'na önemli katkılar sağlamaktadır. Bu şehirler; UNESCO'nun kültürel çeşitliliği teşvik eden misyonunu yaşatarak, yerel halklarının yaratıcı potansiyellerini keşfetmelerine ve küresel kültürel alışverişi zenginleştirmelerine olanak tanımaktadır (UCCN, 2024).

2.4. UNESCO Yaratıcı Şehirler Ağına Girmiş Türkiye'den Örnekler

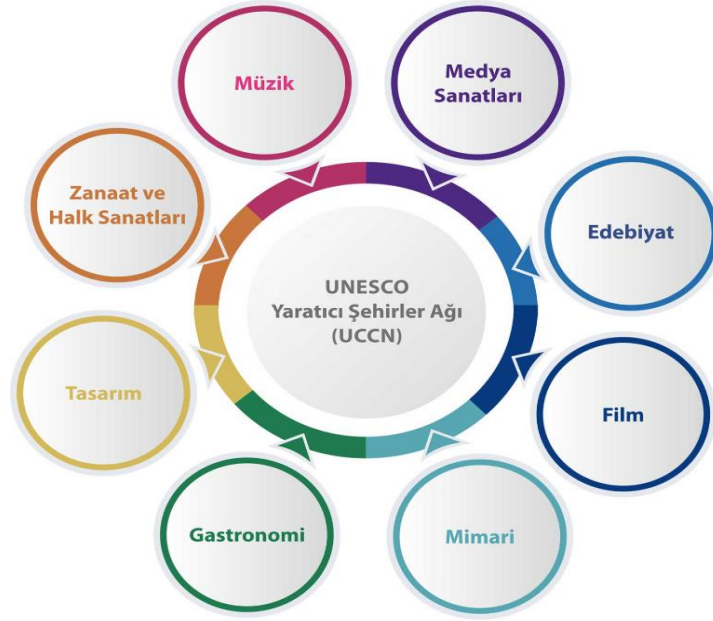
Türkiye, UNESCO Yaratıcı Şehirler Ağı'na gastronomi alanında dahil olan şehirlerle, zengin mutfak kültürünü global ölçekte tanıtmaya fırsatı bulmaktadır. Bunlardan ilki, Gaziantep şehridir. 2015 yılında UNESCO Yaratıcı Şehirler Ağı'na gastronomi temasında katılan Gaziantep, Türk mutfağının önemli bir merkezi olarak dikkat çekmektedir. Şehir, zengin ve çeşitli yemek kültürüyle bilinmekte, özellikle baklava ve kebab gibi geleneksel lezzetleriyle ünlü olduğu görülmektedir. Gaziantep, geleneksel yemek tariflerini koruyarak yerel üreticileri destekleyen ve gastronomik mirasını dünyaya tanıtan projeler geliştirmektedir. Ayrıca, gastronomi turizmini artırarak şehrin ekonomik kalkınmasına katkı sağlamaktadır.

Bunun yanı sıra, Afyonkarahisar ve Hatay gibi şehirler de Türkiye'nin gastronomi alanındaki UNESCO Yaratıcı Şehirler Ağı'na dahil edilmiştir. Afyonkarahisar, 2019 yılında gastronomi temasında ağda yerini almış ve özellikle "Afyon kaymağı" ve "etli ekme" gibi yerel lezzetleri ile dikkat çekmektedir. Afyon'un mutfağı, zengin tarihi ve geleneksel tatlarıyla hem yerel halk hem de turistler için önemli bir cazibe merkezi olmuştur. Diğer bir örnek ise Hatay'dır; 2017 yılında gastronomi temasında UNESCO Yaratıcı Şehirler Ağı'na katılan Hatay, çeşitli yemek ve tarifleriyle tanınmaktadır. Türkiye'nin farklı bölgelerindeki bu şehirler, hem yerel gastronomik mirası yaşatmaya hem de dünya çapında tanıtarak, sürdürülebilir gastronomi turizmini desteklemektedir. Gaziantep, Hatay ve Afyonkarahisar gastronomik yönleriyle UNESCO'nun bu ağında yer alarak, Türkiye'nin mutfak kültürünü küresel düzeyde tanıtmaya ve destekleme noktasında önemli bir rol üstlenmektedir (UNESCO Türkiye Milli Komisyonu, 2024).

3. YÖNTEM

Çalışmada nitel araştırma yöntemlerinden belgesel tarama tekniği kullanılmıştır. Belgesel tarama; kitap, resmi evrak, ses kayıtları, video görüntülü kayıtlar ve edebi eserler gibi yazılı ve görsel kayıtlı belgelerin belirli bir sistemle incelenmesi tekniğidir. Bazı araştırmacı kaynaklarına göre "belgesel gözlem" ya da "doküman metodu" şeklinde de ifade edilebilmektedir (Karasar, 2016).

Yaratıcı Şehirler Ağı, şehirlerin kendi potansiyel ve enerjilerini yönlendirecekleri yaratıcı endüstrilerdeki tercihlerine dayanarak sekiz ana tema etrafında yapılandırılmıştır. UNESCO'nun belirlediği "Yaratıcı Şehirler Ağı" temaları; edebiyat, sinema, müzik, el sanatları ve halk sanatları, tasarım, gastronomi, medya sanatları ve mimarlık'tır. Aşağıda Şekil 1'de UNESCO Yaratıcı Şehirler Ağı tema sunulmuştur.



Şekil 1. UNESCO Yaratıcı Şehirler Ağı Temaları
Kaynak: UNESCO Türkiye Milli Komisyonu, 2024

4. BULGULAR VE TARTIŞMA

4.1. UNESCO Yaratıcı Şehirler Ağı Uluslararası Listesi

UNESCO Yaratıcı Şehirler Ağı'nda bulunan şehirler, seçtikleri yıla göre ve yaratıcı endüstrisi temalarına göre aşağıda Tablo 1'de verilmiştir. Ağa ilk katılan Edinburgh 2004 yılında edebiyat ana teması ile seçilmiştir. Toplam 350 şehir, 8 temada dağılım göstermektedir. Gastronomi teması altında seçilmiş olan toplam 56 şehir bulunmaktadır.

Tablo 1. UNESCO Yaratıcı Şehirler Ağı Listesi

Sıra	Şehir	Tema	Yıl	Sıra	Şehir	Tema	Yıl
1	Edinburgh	Edebiyat	2004	176	Barcelos	Zanaat ve Halk Sanatları	2017
2	Asvan	Zanaat ve Halk Sanatları	2005	177	Seattle	Edebiyat	2017
3	Santa Fe	Zanaat ve Halk Sanatları	2005	178	Dubai	Tasarım	2017
4	Buenos Aires	Tasarım	2005	179	Cochabamba	Gastronomi	2017
5	Berlin	Tasarım	2005	180	Daegu	Müzik	2017
6	Popayán	Gastronomi	2005	181	Baku	Tasarım	2019
7	Montreal	Tasarım	2006	182	Ayacucho	Zanaat ve Halk Sanatları	2019
8	Bologna	Müzik	2006	183	Asahikawa	Tasarım	2019
9	Seville	Müzik	2006	184	Arequipa	Gastronomi	2019
10	Glasgow	Müzik	2008	185	Areguá	Zanaat ve Halk Sanatları	2019
11	Lowa City	Edebiyat	2008	186	Angoulême	Edebiyat	2019
12	Kobe	Tasarım	2008	187	Ambon	Müzik	2019
13	Lyon	Edebiyat	2008	188	Afyonkarahisar	Gastronomi	2019
14	Melbourne	Edebiyat	2008	189	Hyderabad	Gastronomi	2019
15	Shenzhen	Tasarım	2008	190	Jinju	Zanaat ve Halk Sanatları	2019
16	Nagoya	Tasarım	2008	191	Kargopol	Zanaat ve Halk Sanatları	2019

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17	Kanazawa	Zanaat ve Halk Sanatları	2009	192	Karlsruhe	Medya Sanatları	2019
18	Ghent	Müzik	2009	193	Kazan	Müzik	2019
19	Bradford	Film	2009	194	Kuhmo	Edebiyat	2019
20	Icheon	Zanaat ve Halk Sanatları	2010	195	Sarajevo	Film	2019
21	Östersund	Gastronomi	2010	196	Lahore	Edebiyat	2019
22	Saint-Étienne	Tasarım	2010	197	Querétaro	Tasarım	2019
23	Chengdu	Gastronomi	2010	198	Leeuwarden	Edebiyat	2019
24	Sydney	Film	2010	199	Leiria	Müzik	2019
25	Seoul	Tasarım	2010	200	Mérida	Gastronomi	2019
26	Shanghai	Tasarım	2010	201	Muharrağ	Tasarım	2019
27	Dublin	Edebiyat	2010	202	Mumbai	Film	2019
28	Graz	Tasarım	2011	203	Nanjing	Edebiyat	2019
29	Reykjavík	Edebiyat	2011	204	Odessa	Edebiyat	2019
30	Hangzhou	Zanaat ve Halk Sanatları	2012	205	Portoviejo	Gastronomi	2019
31	Jeonju	Gastronomi	2012	206	Valladolid	Film	2019
32	Norwich	Edebiyat	2012	207	Yangzhou	Gastronomi	2019
33	Beijing	Tasarım	2012	208	Viljandi	Zanaat ve Halk Sanatları	2019
34	Bogota	Müzik	2012	209	Viborg	Medya Sanatları	2019
35	Sapporo	Medya Sanatları	2013	210	Veszprém	Müzik	2019
36	Krakow	Edebiyat	2013	211	Santo Domingo	Müzik	2019
37	Paducah	Zanaat ve Halk Sanatları	2013	212	Caldas da Rainha	Zanaat ve Halk Sanatları	2019
38	Enghien-les-Bains	Medya Sanatları	2013	213	Biella	Zanaat ve Halk Sanatları	2019
39	Fabriano	Zanaat ve Halk Sanatları	2013	214	Wrocław	Edebiyat	2019
40	Zahlé	Gastronomi	2013	215	Wonju	Edebiyat	2019
41	Brazzaville	Müzik	2013	216	Sanandaj	Müzik	2019
42	Hamamatsu	Müzik	2014	217	Bergamo	Gastronomi	2019
43	Gwangju	Medya Sanatları	2014	218	Wellington	Film	2019
44	Hannover	Müzik	2014	219	San José	Tasarım	2019
45	Heidelberg	Edebiyat	2014	220	Bendigo	Gastronomi	2019
46	Granada	Edebiyat	2014	221	Belo Horizonte	Gastronomi	2019
47	Jingdezhen	Zanaat ve Halk Sanatları	2014	222	Ramallah	Müzik	2019
48	Torino	Tasarım	2014	223	Beirut	Edebiyat	2019
49	Linz	Medya Sanatları	2014	224	Potsdam	Edebiyat	2019
50	York	Medya Sanatları	2014	225	Bangkok	Tasarım	2019
51	Suzhou	Zanaat ve Halk Sanatları	2014	226	Bandar Abbas	Zanaat ve Halk Sanatları	2019
52	Pekalongan	Zanaat ve Halk Sanatları	2014	227	Port of Spain	Müzik	2019
53	Helsinki	Tasarım	2014	228	Ballarat	Zanaat ve Halk Sanatları	2019
54	Mannheim	Müzik	2014	229	Valparaíso	Müzik	2019

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55	Tsuruoka	Gastronomi	2014	230	Valledupar	Müzik	2019
56	Tel Aviv-Yafo	Medya Sanatları	2014	231	Havana	Müzik	2019
57	Shunde	Gastronomi	2014	232	Trinidad	Zanaat ve Halk Sanatları	2019
58	Dakar	Medya Sanatları	2014	233	Hanoi	Tasarım	2019
59	Florianopolis	Gastronomi	2014	234	Sukhothai	Zanaat ve Halk Sanatları	2019
60	Galway	Film	2014	235	Fortaleza	Tasarım	2019
61	Curitiba	Tasarım	2014	236	Exeter	Edebiyat	2019
62	Dunedin	Edebiyat	2014	237	Slemanı	Edebiyat	2019
63	Nassau	Zanaat ve Halk Sanatları	2014	238	Sharjah	Zanaat ve Halk Sanatları	2019
64	Dundee	Tasarım	2014	239	Metz	Müzik	2019
65	Jacmel	Zanaat ve Halk Sanatları	2014	240	Essaouira	Müzik	2019
66	Busan	Film	2014	241	Lliria	Müzik	2019
67	Sofia	Film	2014	242	Cebu City	Tasarım	2019
68	Prague	Edebiyat	2014	243	Kırşehir	Müzik	2019
69	Bilbao	Tasarım	2014	244	Santiago de Cali	Medya Sanatları	2020
70	Tambasasayama	Zanaat ve Halk Sanatları	2015	245	Vranje	Müzik	2020
71	Kaunas	Tasarım	2015	246	Overstrand Hermanus	Gastronomi	2020
72	Baghdad	Edebiyat	2015	247	Abu Dhabi	Müzik	2021
73	Austin	Medya Sanatları	2015	248	Hamar	Medya Sanatları	2021
74	Gaziantep	Gastronomi	2015	249	Huai'an	Gastronomi	2021
75	Al-Ahsa	Zanaat ve Halk Sanatları	2015	250	Ibague	Müzik	2021
76	Adelaide	Müzik	2015	251	Jakarta	Edebiyat	2021
77	Idanha-a-Nova	Müzik	2015	252	Gdynia	Film	2021
78	İsfahan	Zanaat ve Halk Sanatları	2015	253	Gimhae	Zanaat ve Halk Sanatları	2021
79	Kingston	Müzik	2015	254	Santiago de Cuba	Müzik	2021
80	Katowice	Müzik	2015	255	Santa Maria da Feira	Gastronomi	2021
81	Tongyeong	Müzik	2015	256	Kuching	Gastronomi	2021
82	Santos	Film	2015	257	Recife	Müzik	2021
83	Kinshasa	Müzik	2015	258	Launceston	Gastronomi	2021
84	Rome	Film	2015	259	London	Müzik	2021
85	Rasht	Gastronomi	2015	260	Manises	Zanaat ve Halk Sanatları	2021
86	Ljubljana	Edebiyat	2015	261	Modena	Medya Sanatları	2021
87	Liverpool	Müzik	2015	262	Nakuru	Zanaat ve Halk Sanatları	2021
88	Lviv	Edebiyat	2015	263	Namur	Medya Sanatları	2021
89	Lubumbashi	Zanaat ve Halk Sanatları	2015	264	Port Louis	Müzik	2021
90	Puebla	Tasarım	2015	265	Phetchaburi	Gastronomi	2021
91	Tucson	Gastronomi	2015	266	Perth	Zanaat ve Halk Sanatları	2021

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92	Parma	Gastronomi	2015	267	Pasto	Zanaat ve Halk Sanatları	2021
93	Ulyanovsk	Edebiyat	2015	268	Usuki	Gastronomi	2021
94	Phuket	Gastronomi	2015	269	Xalapa	Müzik	2021
95	Ensenada	Gastronomi	2015	270	Whanganui	Tasarım	2021
96	Detroit	Tasarım	2015	271	Weifang	Zanaat ve Halk Sanatları	2021
97	Óbidos	Edebiyat	2015	272	Vilnius	Edebiyat	2021
98	Durán	Zanaat ve Halk Sanatları	2015	273	Gothenburg	Edebiyat	2021
99	Varanasi	Müzik	2015	274	Srinagar	Zanaat ve Halk Sanatları	2021
100	Nottingham	Edebiyat	2015	275	Doha	Tasarım	2021
101	Dénia	Gastronomi	2015	276	Thessaloniki	Gastronomi	2021
102	Montevideo	Edebiyat	2015	277	Covilhã	Tasarım	2021
103	Burgos	Gastronomi	2015	278	Come	Zanaat ve Halk Sanatları	2021
104	Medellín	Müzik	2015	279	Tbilisi	Medya Sanatları	2021
105	Budapest	Tasarım	2015	280	Tallinn	Müzik	2021
106	Bitola	Film	2015	281	Cluj-Napoca	Film	2021
107	Tartu	Edebiyat	2015	282	Lankaran	Gastronomi	2021
108	Bergen	Gastronomi	2015	283	Cannes	Film	2021
109	Belém	Gastronomi	2015	284	Campina Grande	Medya Sanatları	2021
110	Singapore	Tasarım	2015	285	Kharkiv	Müzik	2021
111	Barcelona	Edebiyat	2015	286	Saint Petersburg	Gastronomi	2021
112	Bandung	Tasarım	2015	287	Bursa	Zanaat ve Halk Sanatları	2021
113	San Cristóbal de las Casas	Zanaat ve Halk Sanatları	2015	288	Rouen	Gastronomi	2021
114	Bamiyan	Zanaat ve Halk Sanatları	2015	289	Kermanshah	Gastronomi	2021
115	Salvador	Müzik	2015	290	Buraidah	Gastronomi	2021
116	Jaipur	Zanaat ve Halk Sanatları	2015	291	Bohicon	Gastronomi	2021
117	Almaty	Müzik	2017	292	Bida	Zanaat ve Halk Sanatları	2021
118	Baguio City	Zanaat ve Halk Sanatları	2017	293	Huancayo	Müzik	2021
119	Auckland	Müzik	2017	294	Belfast	Müzik	2021
120	Gabrovo	Zanaat ve Halk Sanatları	2017	295	Batumi	Müzik	2021
121	Amarante	Müzik	2017	296	Ashgabat	Tasarım	2023
122	Alba	Gastronomi	2017	297	Asaba	Film	2023
123	Guadalajara	Medya Sanatları	2017	298	Valencia	Tasarım	2023
124	Hatay	Gastronomi	2017	299	Gwalior	Müzik	2023
125	İstanbul	Tasarım	2017	300	Herakleion	Gastronomi	2023
126	João Pessoa	Zanaat ve Halk Sanatları	2017	301	Hoi An	Zanaat ve Halk Sanatları	2023
127	Kansas City	Müzik	2017	302	Hobart	Edebiyat	2023
128	Geelong	Tasarım	2017	303	Iași	Edebiyat	2023
129	Toronto	Medya Sanatları	2017	304	Iloilo	Gastronomi	2023

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130	Košice	Medya Sanatları	2017	305	Granada	Tasarım	2023
131	Kolding	Tasarım	2017	306	Ipoh	Müzik	2023
132	Kortrijk	Tasarım	2017	307	Kathmandu	Film	2023
133	Kütahya	Zanaat ve Halk Sanatları	2017	308	Toulouse	Müzik	2023
134	San Antonio	Gastronomi	2017	309	Kozhikode	Edebiyat	2023
135	Lillehemmer	Edebiyat	2017	310	Kutaisi	Edebiyat	2023
136	Limoges	Zanaat ve Halk Sanatları	2017	311	Şanlıurfa	Müzik	2023
137	Macao	Gastronomi	2017	312	Rio de Janeiro	Edebiyat	2023
138	Madaba	Zanaat ve Halk Sanatları	2017	313	Mexicali	Müzik	2023
139	Manchester	Edebiyat	2017	314	Montecristi	Zanaat ve Halk Sanatları	2023
140	Mexico City	Tasarım	2017	315	Montreux	Müzik	2023
141	Milan	Edebiyat	2017	316	Nkongsamba	Gastronomi	2023
142	Norrköping	Müzik	2017	317	Okayama City	Edebiyat	2023
143	Pesaro	Müzik	2017	318	Novi Sad	Medya Sanatları	2023
144	Łódź	Film	2017	319	Oulu	Medya Sanatları	2023
145	Panama City	Gastronomi	2017	320	Tukums	Edebiyat	2023
146	Brasilia	Tasarım	2017	321	Ulaanbaatar	Zanaat ve Halk Sanatları	2023
147	Québec City	Edebiyat	2017	322	Umngeni Howick	Zanaat ve Halk Sanatları	2023
148	Chordeleg	Zanaat ve Halk Sanatları	2017	323	Varaždin	Müzik	2023
149	Chiang Mai	Zanaat ve Halk Sanatları	2017	324	Vicente Lopez	Film	2023
150	Qingdao	Film	2017	325	Penedo	Film	2023
151	Chennai	Müzik	2017	326	Ouarzazate	Film	2023
152	Yamagata	Film	2017	327	Veliky Novgorod	Müzik	2023
153	Praia	Müzik	2017	328	Bydgoszcz	Müzik	2023
154	Changsha	Medya Sanatları	2017	329	Banja Luka	Müzik	2023
155	Wuhan	Tasarım	2017	330	Battambang	Gastronomi	2023
156	Frutillar	Müzik	2017	331	Buffalo City	Edebiyat	2023
157	Carrara	Zanaat ve Halk Sanatları	2017	332	Gangneung	Gastronomi	2023
158	Utrecht	Edebiyat	2017	333	Fribourg	Gastronomi	2023
159	Porto-Novo	Zanaat ve Halk Sanatları	2017	334	Casablanca	Medya Sanatları	2023
160	Cape Town	Tasarım	2017	335	Da Lat	Müzik	2023
161	Tunis	Zanaat ve Halk Sanatları	2017	336	Surakarta	Zanaat ve Halk Sanatları	2023
162	Cairo	Zanaat ve Halk Sanatları	2017	337	Taif	Edebiyat	2023
163	Paraty	Gastronomi	2017	338	Suphanburi	Müzik	2023
164	Buenaventura	Gastronomi	2017	339	Bissau	Müzik	2023
165	Durban	Edebiyat	2017	340	Bremen	Edebiyat	2023
166	Bucheon	Edebiyat	2017	341	Bolzano	Müzik	2023
167	Tétouan	Zanaat ve Halk Sanatları	2017	342	Caracas	Müzik	2023

168	Brno	Müzik	2017	343	Bukhara	Zanaat ve Halk Sanatları	2023
169	Terrassa	Film	2017	344	Castelo Branco	Zanaat ve Halk Sanatları	2023
170	Ouagadougou	Zanaat ve Halk Sanatları	2017	345	Chiang Rai	Tasarım	2023
171	Bristol	Film	2017	346	Caen	Medya Sanatları	2023
172	Braga	Medya Sanatları	2017	347	Chaozhou	Gastronomi	2023
173	Sokodé	Zanaat ve Halk Sanatları	2017	348	Cetinje	Tasarım	2023
174	Sheki	Zanaat ve Halk Sanatları	2017	349	Chongqing	Tasarım	2023
175	Morelia	Müzik	2017	350	Concepción	Müzik	2023

Tablo 1'e göre UNESCO Yaratıcı Şehirleri'nin dağılımı incelendiğinde; müzik teması %21 (n=75), zanaat ve halk sanatları teması %18 (n=66), gastronomi teması %16 (n=56), edebiyat teması %15 (n=54), tasarım teması %14 (n=49), film teması %7 (n=25) ve medya sanatları teması %7 (25) oranlara sahiptir. Şehirlerin ağı dahil olduğu tarihler incelendiğinde, 2004 yılında 1 şehir, 2005 yılında 5 şehir, 2006 yılında 3 şehir, 2008 yılında 7 şehir, 2009 yılında 3 şehir, 2010 yılında 8 şehir, 2011 yılında 2 şehir, 2012 yılında 5 şehir, 2013 yılında 7 şehir, 2014 yılında 28 şehir, 2015 yılında 47 şehir, 2017 yılında 64 şehir, 2019 yılında 63 şehir, 2020 yılında 3 şehir, 2021 yılında 49 şehir ve 2023 yılında 55 şehir listeye dahil edilmiştir. Listeye seçilen şehirlerin en yüksek sayıya ulaştığı yıl 2017 yılıdır ve toplam 64 şehir seçilmiştir. UNESCO Yaratıcı Şehirler Ağı listesine gastronomi temasında seçilen 56 şehrin 13'ü 2021 yılında, 10'u 2015 yılında, 9'u 2019 yılında, 8'i 2017 yılında, 7'si 2023 yılında, 3'ü 2014 yılında, 2'si 2010 yılında seçilmiştir. 2005, 2012, 2013 ve 2020 yıllarında ise 1'er şehir UNESCO yaratıcı şehirler ağı listesine dahil olmuştur. Yaratıcı şehirler ağına Türkiye'den seçilen şehirler; 2015 yılında Gaziantep (gastronomi); 2017 yılında Hatay (gastronomi), İstanbul (tasarım) ve Kütahya (zanaat ve halk sanatları); 2019 yılında Afyonkarahisar (gastronomi), Kırşehir (müzik); 2021 yılında Bursa (zanaat ve halk sanatları) ve 2023 yılında Şanlıurfa'dır (müzik). UNESCO Yaratıcı Şehirler Ağı'na gastronomi teması ile seçilen şehirlerin, ağı dahil olmalarının sonucunda, ne gibi kazanımlar elde ettikleri/edebileceklerine ilişkin araştırma bulguları tema ve alt temaları ile Tablo 2'de sunulmuştur.

Tablo 2. Yaratıcı Şehirler Ağı'nın Yaratıcı Gastronomi Şehirleri Üzerindeki Etkilerine İlişkin Bulguların Tematik Gruplandırması

Ekonomik Etkileri	Sürdürülebilir kalkınma hedeflerine ulaşmaya destek
	Yerel ekonomiyi canlandırma
	Ekonomik büyüme ve gelişmeye destek
	İstihdama katkı
	Yeni iş fırsatları oluşturma
	Yerel üreticilerin desteklenmesi
	Yerel yatırımları artırma
	Değer zinciri yaratma
	Yerel, bölgesel kalkınmaya araç olma
	Yerel, bölgesel gelirleri artırmaya destek
	Turizm ve gastronomi altyapısını güçlendirme
	Yerel kaynakların verimli kullanımı
	Çarpan etkisi yaratarak diğer sektörlerinin gelişimine katkı
	Devlet ve yerel yönetimlerin gelirlerini arttırma
Araştırma-Geliştirme Etkileri	Eğitim ve araştırma fırsatları yaratma
	İlham verici projelerin desteklenmesi
	Yenilikçilik ve yaratıcılığı destekleme
	Atölye çalışmalarını niceliksel ve niteliksel olarak artırma

	Festivalleri uluslararası boyuta taşıma ve çeşitlendirme
	Ağa dahil şehirlerin deneyim ve bilgi paylaşımı
	Şehirler arası işbirliği
Toplumsal Etkileri	Toplumsal kimliği güçlendirme
	Toplumsal dayanışma
	Toplumsal adalet
	Toplumsal bilinç oluşturma
	Toplumsal işbirliği
	Topluluk duygusunu güçlendirme
	Sosyal uyum
	Yerelin yaşam kalitesi artırma
Pazarlamaya Etkileri	Markalaşma sürecine katkı
	Yerel değerlerin ve şehrin tanıtımı
Koruma Etkileri	Doğal çevreyi koruma (Atık yönetimi, çevre dostu uygulamalar vb.)
	Ekonomik çevreyi koruma
	Sosyal çevreyi koruma
	Kültürel çevreyi/mirası koruma
	Yerel/geleneksel üretimi ve ürünleri koruma
Turizm Endüstrisine Etkileri	Ziyaretçi ve turist deneyimlerini zenginleştirme
	Gastronomi aracılığıyla unutulmaz deneyim fırsatları sunma
	Yiyecek içecek işletmelerinde kaliteyi yükseltme
	Turizm altyapısına katkı
	Turistik ürün çeşitlendirmesi sağlama
*Yazarlar tarafından UNESCO Creative Cities Network (UCCN) web sayfasından alınan bilgilerden derlenmiştir.	

Tablo 2'ye göre UNESCO Yaratıcı Şehirler Ağı'nın, yaratıcı gastronomi şehirleri üzerindeki etkileri 6 tema ve bu temaları oluşturan 41 faktörden oluşmaktadır. Özellikle ekonomik büyüme ve gelişme hedeflerinin ötesinde kalkınma ve sürdürülebilirlik eksenli yaratıcı endüstrilerin harekete geçirilmesinin, şehirlerde turizm gelişimine, markalaşmaya ve özellikle de yenilik-yaratıcılık yeteneklerinin keşfine ve toplumsal refaha katkı sağladığı söylenebilir.

SONUÇ VE ÖNERİLER

UNESCO Yaratıcı Şehirler Ağı, kültürel ve yaratıcı sektörlerin şehirlerin ekonomik, sosyal ve kültürel kalkınmasında önemli bir rol oynadığını göstermektedir. Yaratıcı Şehirler ağı, şehirlerin birbirlerinden öğrenmelerini ve işbirlikleri yapmalarını teşvik ederken, küresel düzeyde kültürel çeşitliliği desteklemektedir. Yaratıcı şehirler, sanat, tasarım, müzik, edebiyat gibi alanlarda ortak projeler geliştirerek, kültürel mirası koruma ve yenilikçi çözümler üretme konusunda önemli adımlar atmaktadır. UNESCO Yaratıcı Şehirler Ağı'na seçilmiş 350 yaratıcı şehir bulunmaktadır. Listedeki şehirlerin 56'sı (%16) gastronomi teması ile ağa dahil olmuştur. Gastronomi temasında, yıl itibarıyla 2021 yılında 13 şehir listeye dahil edilmiştir ve bu tema altında en fazla şehrin seçildiği yıl olmuştur. UNESCO'nun bu tür bir ağ kurması, şehirlerin sürdürülebilir kalkınma hedeflerine ulaşmalarını sağlamak için güçlü bir platform sunmaktadır. Yaratıcı şehirler, sadece kültürel üretimle değil, aynı zamanda ekonomik büyümeye katkı sağlayan sektörlerle de ilişkilidir. UNESCO Yaratıcı Şehirler Ağı, yerel ekonomilerin çeşitlendirilmesine ve yaratıcı sektörlerin daha görünür hale gelmesine yardımcı olmaktadır. UNESCO Yaratıcı Şehirler Ağı, şehirlerin yaratıcı ekonomilerini geliştirerek, yerel sanatçılara, girişimcilere ve kültürel projelere daha fazla fırsat sunmaktadır. Şehirlerin başarısı, altyapı yatırımlarının, eğitim politikalarının ve yerel yönetimlerin stratejik planlarının uyumlu bir şekilde entegre edilmesine bağlıdır. UNESCO Yaratıcı Şehirler Ağı, şehirler arasındaki kültürel işbirliklerini de güçlendirmektedir. Ağa dahil olan şehirler, kültürel değişim ve deneyim paylaşımı sayesinde, kendilerini daha geniş bir küresel kültürel bağlamda konumlandırabilmektedirler. Yapılan işbirlikleri, yaratıcı sektörlerin uluslararası düzeyde daha fazla tanınmasını ve bu sektörlerle yönelik küresel bir ağın inşa edilmesini mümkün kılmaktadır.

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Şehirler; kendi benzersiz kültürel özelliklerini tanıtarak, küresel pazarlarda rekabet edebilme yeteneklerini artırmaktadır. Son olarak, UNESCO Yaratıcı Şehirler Ağı'nın uzun vadeli etkileri, yaratıcı endüstrilerle birlikte sosyal, kültürel ve çevresel sürdürülebilirliğin sağlanmasında görülmektedir. Yaratıcı Şehirler Ağı; şehirlerin sadece ekonomik açıdan değil, aynı zamanda toplumsal ve çevresel açıdan da gelişmelerine katkı sağlamaktadır. Şehirler yaratıcı endüstriler aracılığıyla daha kapsayıcı, eşitlikçi ve çevreye duyarlı politikalar geliştirebilir. UNESCO'nun desteğiyle, bu şehirlerin yaratıcı potansiyelleri daha geniş bir küresel çerçevede şekillendirilebilir ve geleceğe yönelik sürdürülebilir kalkınma hedeflerine ulaşılması hızlandırılabilir. Araştırmadan elde edilen bulgular doğrultusunda aşağıda yer alan öneriler geliştirilmiştir:

- Yaratıcı Ekonomiye Yatırım Yapılmalı: Şehirler, yaratıcı endüstrilere daha fazla finansal destek ve altyapı yatırımları sağlamalı, bu alanlarda yeni girişimler için uygun ortamlar yaratmalıdır.
- Yerel Halkın Katılımı Teşvik Edilmeli: Yaratıcı şehirler, toplulukların aktif katılımını sağlayarak, yerel sanatçılar ve yaratıcı profesyonellerin sesini duyurmalı ve onları projelere dahil etmelidir.
- Eğitim Programları Geliştirilmeli: Gençlerin yaratıcı endüstrilerde kariyer yapabilmeleri için eğitim ve mentorluk fırsatları sunulmalı, yaratıcı sektörlerde iş gücü kapasitesi artırılmalıdır.
- Sosyal Dahil Edicilik Sağlanmalı: Yaratıcı şehirler, kültürel çeşitliliği ve toplumsal eşitliği teşvik eden projeler geliştirmeli, farklı grupların seslerini duyurabilmesini sağlamalıdır.
- Uluslararası İşbirlikleri Artırılmalı: UNESCO Yaratıcı Şehirler Ağı, şehirler arası bilgi alışverişi ve işbirlikleri için daha fazla fırsat sunmalı, şehirlerin küresel düzeyde tanınırlığını artırmalıdır.
- Dijital Yaratıcılık Desteklenmeli: Dijital platformlar ve teknolojiler, yaratıcı endüstrilerle daha entegre olmalı, dijital sanatlar ve çevrimiçi kültürel projeler için destek sağlanmalıdır.
- Çevre Dostu Projeler Desteklenmeli: Yaratıcı şehirler, çevre dostu ve sürdürülebilir projeleri teşvik etmeli, yeşil tasarım, geri dönüşüm ve doğal kaynakların verimli kullanımı gibi alanlarda inovasyon yapmalıdır.
- Kültürel Mirasın Korunması ve Yenilikçi Yaklaşımlar: Şehirler, kültürel mirası korurken, aynı zamanda bu mirası modern bir şekilde yeniden yorumlayarak yaratıcı endüstrilere entegre etmelidir.
- Turizmi Teşvik Edici Yaratıcı Etkinlikler Düzenlenmeli: Yaratıcı şehirler, kültürel etkinlikler ve festivaller aracılığıyla turizmi desteklemeli, yerel sanatçıların ve girişimcilerin küresel ölçekte tanınmasına olanak sağlamalıdır.
- Yaratıcı Sektörlere Yönelik Politika ve Stratejiler Geliştirilmeli: Yaratıcı endüstrilere yönelik uzun vadeli, sürdürülebilir politikalar oluşturulmalı, yerel yönetimler yaratıcı ekonominin büyümesini desteklemek için daha somut adımlar atmalıdır.

KAYNAKÇA

- Akın, N., & Bostancı, B. (2017). UNESCO Yaratıcı Şehirler Ağı kapsamında Gaziantep: Mevcut raporlar bağlamında bir değerlendirme. *Süleyman Demirel Üniversitesi Vizyoner Dergisi*, 8 (19), s. 110-124.
- Akkuş, Ç., & Yordam, S. (2020). Kastamonu yemek kültürünün UNESCO Yaratıcı Şehirler Ağı kriterleri kapsamında incelenmesi. *Journal of Tourism and Gastronomy Studies*, 8 (2), s. 915-936.
- Alyakut, Ö., & Küçükkömürler, S. (2018). Kacaeli gastronomi potansiyelinin Yaratıcı Şehirler Ağı kapsamında değerlendirilmesi. *Uluslararası Orhan Gazi ve Kocaeli Tarihi-Kültürü Sempozyumu-V, Kocaeli*.
- Dağdelen, Ş., & Pamukçu, H. (2019). UNESCO Yaratıcı Şehirler Ağı gastro-turist profilinin belirlenmesi: Gaziantep ve Hatay ili örneği. *Journal of Tourism and Gastronomy Studies*, 9 (1), s. 341-365.
- Goldberg-Miller, S., & Heimlich, J. E. (2017). Creatives' expectations: The role of supercreatives in cultural district development. *Cities*, 62, s. 120-130.
- Göker, G. (2011). Destinasyon çekicilik unsuru olarak gastronomi turizmi (Balıkesirörneği). *(Yüksek Lisans Tezi)*. Balıkesir Üniversitesi.

10th International CEO Communication, Economics, Organization & Social Sciences Congress

- Güldüran, Ç., & Arıkan Saltık, I. (2020). Sahnede şehirler! Türkiye'nin UNESCO Yaratıcı Şehirler Ağı - Film alanı açısından değerlendirilmesi. *IBAD Sosyal Bilimler Dergisi* (Özel Sayı), s. 335-358.
- Hatunoğlu, H. (2021). Adana'nın Unesco Yaratıcı Şehirler Ağı kapsamında "Gastronomi Kenti" olabilirliğine ilişkin paydaş görüşleri ve geleceğe yönelik öneriler. (*Yüksek Lisans Tezi*). Kastamonu Üniversitesi, Kastamonu.
- Kakiuchi, E. (2016). Culturally Creative Cities in Japan: Reality and prospects. *City, Culture and Society*, 7, s. 101-108.
- Karasar, N. (2016). Bilimsel araştırma yöntemi. Ankara: Nobel Yayıncılık.
- Namyślak, B. (2014). Cooperation and forming networks of Creative Cities: Polish experiences. *European Planning Studies*, 22 (11), s. 2411-2427.
- Özgürel, G., & Gülü Demirbulat, Ö. (2024). "The Best Tourism Villages Initiative: A Review on the Current Situation in Türkiye". H. Koç, & L. A. Sulejmani içinde, *ITEC'24 International Congress On Tourism, Culture And Economy* (s. 41-53). Skopje, North Macedonia.
- Özkan, B. İ. (2023). UNESCO Yaratıcı Şehirler Ağı zanaat ve halk sanatları teması bağlamında Van'daki savat işçiliğinin değerlendirilmesi. *Ahi Evran Üniversitesi Sosyal Bilimler Enstitüsü Dergisi (AEÜSBED)*, 9 (3), s. 1008-1027.
- Parson, D., & Pearson, T. (2017). Branding food culture: UNESCO creative cities of gastronomy. *Journal of Food Products Marketing*, 23 (3), s. 342-355.
- Smith, R., & Warfield, K. (2008). The Creative City: A matter of values". P. Cooke, & L. Lazzeretti içinde, *Creative Cities, Cultural Clusters and Local Economic Development* (s. 287-312). Cheltenham: Edward Elgar Publishing.
- Şahin, E., & Ünlüönen, K. (2021). Adana'nın Unesco Yaratıcı Şehirler Ağı gastronomi teması kapsamında değerlendirilmesi. *Journal of Tourism and Gastronomy Studies*, 9 (2), s. 1204-1231.
- Tiyapiphat, I. (2017). Basics of creative tourism. *International Journal of Management and Applied Science*, 3 (5), s. 148-152.
- UNESCO Creative Cities Network (UCCN). (2024). *Creative Cities List*. https://www.unesco.org/en/creative-cities/grid?f%5B0%5D=dataset_filters%3Ab64fd24b-e80d-4393-a62e-50ae79e696f3&page=3 adresinden 25.11.2024 tarihinde erişildi.
- UNESCO Türkiye Milli Komisyonu. (2024). *UNESCO Yaratıcı Şehirler Ağı Programı*. <https://unesco.org.tr/Pages/3001/2401/UNESCO-Yarat%C4%B1c%C4%B1-%C5%9Eehirler-A%C4%9F%C4%B1-Program%C4%B1> adresinden alındı
- Yalçınkaya, P. (2018). Çanakkale'nin UNESCO Yaratıcı Şehirler Ağı gastronomi teması kapsamında potansiyelinin değerlendirilmesi. (*Yüksek Lisans Tezi*). Çanakkale Onsekiz Mart Üniversitesi, Çanakkale.
- Yel, Ç. (2024). Mutfak ve kimlik: UNESCO somut olmayan kültürel miras (Cuisine and identity: UNESCO intangible cultural heritage). *Journal of Tourism and Gastronomy Studies*, 12 (3), s. 2049-2063.



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Gastronomi Temelli Kültür Rotaları: Edremit Körfezi Örneği

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ÖZET

Kültürel çeşitliliğin, gastronomik ürünlerin ve tarihi mimariler gibi birçok zenginliğin bulunduğu Balıkesir, Edremit Körfezi bölgesinde barındırdığı değerler ile dikkat çekmektedir. Özellikle zeytin, peynir ve farklı ekmeklerin ilçeler arası değişiklik gösterdiği görülmektedir. İlçelerin sahip oldukları kültürel kimliklerinden etkilenen beslenme alışkanlıkları bu ürünlerin hazırlanması, tüketilmesi ya da işlenmesi aşamalarındaki farklılıkları ortaya koymaktadır. Gerek gastronomik ürünler gerek kültürel imgeler gerekse endüstriyel ve gastronomik miras değerleri bu farklılıkların izlerini taşımaktadır. Çalışmada nitel araştırma yöntemlerinden belgesel tarama tekniği kullanılarak bu kültür değerleri ile ilgili bir rota oluşturulması amaçlanmaktadır. Gastronomik kültür rotaları, bir bölgenin özgün mutfak geleneklerini, yerel malzemelerini ve yiyecek üretim süreçlerini tanıtarak, kültürel ve turistik deneyimler sunan rotalardır. Bu tür rotalar, yerel gastronominin sürdürülebilirliğini destekleyerek hem yerel ekonomilere hem de kültürel mirasın korunmasına katkıda bulunur. Çalışmada, gastronomik kültür rotalarının tanımı, bileşenleri ve işleyişi ele alınmaktadır. Rotaların tasarımında yerel ürünlerin tanıtımı, geleneksel tariflerin korunması ve yerel üreticilerin desteklenmesinin önemli etkenler olduğu gözlemlenmiştir. Ayrıca, bu rotaların turistlerin yerel kültürü daha derinlemesine deneyimlemelerini sağladığı ve gastronomik turizmi teşvik ettiği vurgulanmaktadır. Gastronomik rotaların sürdürülebilir turizm açısından da önemli olduğu görülmektedir. Örneğin doğal kaynakların korunması ve yerel kültürlerin yaşatılması sürdürülebilirlik açısından kritik bir rol oynamaktadır. Ayrıca yerel halkın katılımı ve bilinçlendirilmesi, bu tür projelerin başarısını artırabilir. Aynı zamanda, gastronomik deneyimler, ziyaretçilerin kültürel bağ kurmasına ve yerel kimliğin güçlenmesine yardımcı olur. Sonuç olarak, gastronomik kültür rotaları, turizm ve kültürel sürdürülebilirlik açısından önemli bir araçtır. Bu rotaların geliştirilmesi, yerel halkın ekonomik ve kültürel yararlarını artırırken, ziyaretçilere de eşsiz deneyimler sunabilmektedir.

Anahtar Kelimeler: Gastronomi, Kültür Rotaları, Endüstriyel ve Gastronomik Miras, Edremit Körfezi

Gastronomy Based Culture Routes: The Case of Edremit Gulf

ABSTRACT

Balıkesir, which has many riches such as cultural diversity, gastronomic products and historical architectures, draws attention with its values in the Edremit Gulf region. Especially olives, cheese and different breads vary between districts. The eating habits of the districts, which are influenced by their cultural identities, reveal the differences in the preparation, consumption or processing of these products. Both gastronomic products, cultural images and industrial and gastronomic heritage values bear the traces of these differences. In the study, it is aimed to create a route related to these cultural values by using the documentary scanning technique, one of the qualitative research methods. Gastronomic cultural routes are routes that offer cultural and touristic experiences by introducing the unique culinary traditions, local ingredients and food production processes of a region. Such routes contribute to both local economies and the preservation of cultural heritage by supporting the sustainability of local gastronomy. In this study, the definition, components and functioning of gastronomic cultural routes are discussed. It is observed that the promotion of local products, the preservation of traditional recipes and the support of local producers are important factors in the design of routes. It is also emphasized that these routes enable tourists to experience local culture more deeply and encourage gastronomic tourism. Gastronomic routes are also important for sustainable tourism. For example, the protection of natural resources and the preservation of local cultures play a critical role in sustainability. In addition, the participation and awareness-raising of local people can increase the success of such projects. At the same time, gastronomic experiences help visitors to establish cultural bonds and strengthen local identity. In conclusion, gastronomic cultural routes are an important tool for



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tourism and cultural sustainability. The development of these routes can increase the economic and cultural benefits of local people and offer unique experiences to visitors.

Key Words: Gastronomy, Cultural Routes, Industrial and Gastronomic Heritage, Edremit Bay

1. GİRİŞ

Günümüzde, sürdürülebilir turizmin ve kültürel mirasın korunmasının giderek daha fazla önem kazanmasıyla birlikte, gastronomi turizmi de dünyada dikkat çekici bir büyüme göstermektedir. Dolayısıyla, gastronomi yalnızca bir yeme içme faaliyeti olmanın ötesine geçerek, yerel kültürün, geleneklerin ve doğal kaynakların bir araya geldiği önemli bir turizm deneyimine dönüşmektedir (Sarışık & Özbay, 2015, s. 267). Bahsi geçen türde turizm aktiviteleri, şehirlere ve bölgelere ekonomik katkılar sağlamakla birlikte, aynı zamanda yerel halkın yaşam biçimini ve geleneklerini tanıtmaya fırsatı sunmaktadır. Gastronomi temelli kültür rotaları, bu sürecin bir parçası olarak, yerel mutfak kültürlerini keşfetmek ve bu kültürleri sürdürülebilir bir şekilde tanıtmak için yaratılan özgün turistik deneyimlerdir (Çavuşoğlu & Çavuşoğlu, 2018). Edremit Körfezi, Türkiye'nin batısında yer alan ve zengin gastronomi mirasına sahip olan bir bölge olarak görülmektedir. Hem deniz hem de tarım kaynakları açısından oldukça verimli olan bu coğrafya, benzersiz mutfak lezzetleri ve geleneksel yemekleriyle dikkat çekmektedir. Edremit Körfezi'nin mutfağı, Ege Bölgesi'nin özgün malzemeleri ve yerel tarifleriyle harmanlanarak, hem yöre halkının hem de ziyaretçilerin ilgisini çekmektedir. Zeytinyağlı yemekler, taze deniz ürünleri, zeytin ve zeytinyağı üretimi gibi unsurlar, bölgenin gastronomik kimliğini oluştururken, bölgedeki yerel işletmelerin de ekonomik olarak büyümesine olanak tanımaktadır (Sarioğlu & Yalın, 2021). Gastronomi temelli kültür rotaları, Edremit Körfezi gibi bölgelerde, turizmi çeşitlendirme ve yerel kalkınmaya katkı sağlama potansiyeli taşımaktadır. Gastronomi temelli kültür rotaları, sadece mutfak kültürünü tanıtmakla kalmaz, aynı zamanda bölgenin kültürel mirasını, halk sanatlarını, zanaatlarını ve tarihini de ön plana çıkarmaktadır (Ryu & Jang, 2006, s. 509). Edremit Körfezi'nin zeytinyağı üretimi, bölge halkının el emeği ürünleri, geleneksel festivalleri ve tarım yöntemleri gibi unsurlar, bu rotaların içerisine entegre edilerek, ziyaretçilere kapsamlı bir kültürel deneyim sunmaktadır. Böylece, sadece bir gastronomi deneyimi değil, aynı zamanda zengin bir kültürel keşif de sağlanmaktadır. Edremit Körfezi örneği, bölgedeki gastronomik zenginliklerin, kültürel mirasla birleşerek sürdürülebilir bir turizm gelişimi yaratabileceğini gösteren önemli bir örnektir. Bölgede yerel üreticiler, zeytin ve zeytinyağı gibi önemli ürünlerin tanıtımını yaparken, aynı zamanda ürünlerin üretim süreçlerine dair bilgi vererek turistlere öğrenme merkezli bir deneyim sunmaktadır. Ayrıca, yerel mutfak atölyeleri, yemek tarifleri, şeflerle yapılan etkinlikler gibi unsurlar, gastronomi temelli kültür rotalarının çekiciliğini artıran unsurlar olarak görülmektedir (Yılmaz & Akman, 2018). Edremit Körfezi'nde yerel ürünlerin korunması, organik tarım uygulamaları ve çevre dostu mutfak yöntemlerinin teşvik edilmesi gibi stratejiler, bölgenin doğal güzellikleriyle uyumlu bir şekilde gelişen bir turizm alanı yaratmaktadır (Kızılırmak, Ofluoğlu, & Şişik, 2016, s. 267). Sadece ekonomik fayda sağlamakla kalmayıp, aynı zamanda doğal kaynakların korunmasına ve bölge halkının yaşam kalitesinin artırılmasına da katkı sunmaktadır.

Gastronomi temelli kültür rotaları, yerel halk ile turistler arasında bir kültürel köprü kurmanın yanı sıra, yerel işletmelerin gelişimine de olanak tanımaktadır. Aynı zamanda bu tür rotalar, gastronomi sektöründe faaliyet gösteren küçük ölçekli üreticiler, restoranlar, çiftçiler ve diğer yerel iş gücü için iş fırsatları oluşturmaktadır. Rotaların bulunduğu bölgelerdeki tarım ve gıda endüstrisi, turizmin gelişmesiyle paralel olarak büyüyebilmektedir. Yerel halkın bu süreçten faydalanması, bölgenin ekonomisinin daha dengeli bir şekilde kalkınmasına olanak tanıyabilmektedir (Kızılırmak, Albayrak, & Küçükali, 2014). Sonuç olarak, Edremit Körfezi örneği, gastronomi temelli kültür rotalarının yalnızca bir turizm aracı olmanın ötesine geçtiğini, aynı zamanda bölgesel kalkınma ve sürdürülebilirlik açısından önemli bir fırsat sunduğunu göstermektedir. Gastronomi temelli kültür rotaları, yerel kültürlerin, geleneklerin ve mutfak mirasının korunmasına katkı sağlarken, aynı zamanda turizmin çevresel, ekonomik ve sosyal boyutlarını dengelemeyi amaçlayan projeler olarak görülebilmektedir. Edremit Körfezi gibi

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bölgesel gastronomi rotaları, yerel toplulukların refahını artırmanın yanı sıra, dünya çapında kültürel etkileşimi teşvik eden güçlü birer araç olma potansiyeline sahiptir.

2. TEORİK ÇERÇEVE

2.1. Kültür Rotaları

Kültür rotaları; belirli bir bölgenin kültürel mirasını, tarihini, sanatını ve geleneklerini tanıtmak amacıyla oluşturulmuş özel güzergâhlardır. Kültür rotaları, bir bölgenin ya da ülkenin kültürel kimliğini tanıtmının yanı sıra, yerel halk için ekonomik faydalar yaratmayı da amaçlar. Aynı zamanda kültür rotaları, UNESCO Dünya Mirası listesinde yer alan yerlerden, geleneksel el sanatlarına, yerel festivallere ve mutfak kültürlerine kadar geniş bir yelpazeyi kapsamaktadır (Büyük & Can, 2020, s. 192). Kültürel rotalar, bölgesel kalkınmayı teşvik ederken, aynı zamanda sürdürülebilir turizmin gelişimine de katkı sağlamaktadır. Ek olarak kültür rotaları, sadece turistleri cezbetmekle kalmaz, yerel kültürleri yaşatmaya ve gelecek nesillere aktarmaya yönelik önemli bir araç olarak görev görmektedir (Durusoy, 2016). Kültür rotalarının gelişimi, kültürel turizmin giderek daha popüler hale gelmesiyle paralel bir şekilde artmaktadır. Özellikle Avrupa'da, kültürel mirası tanıtmak ve koruma amacı güden rotalar büyük ilgi görmektedir. Avrupa Konseyi'nin "Kültür Rotaları" programı, kültürel çeşitliliği teşvik etmek ve kıtadaki kültürel mirası dünya çapında tanıtmak için oluşturulmuş bir platformdur (European Institute of Cultural Routes, 2015). Bu program, kültürel rotaları birleştirerek, farklı ülkeler arasındaki işbirliğini artırmayı ve bölgesel ekonomik kalkınmayı desteklemeyi hedeflemektedir. Örneğin, Camino de Santiago (Aziz James Yolu) gibi dini ve kültürel önemi olan rotalar, hem tarihsel hem de turistik açıdan değere sahiptir (Berti, 2015). Kültür rotaları, sadece geçmişe dair bir keşif değil, aynı zamanda mevcut kültürel dinamiklerin de sergilendiği alanlardır. Bu tür rotalar; sanat galerileri, müzeler, konserler, tiyatro gösterileri, folklorik etkinlikler gibi güncel kültürel faaliyetleri içerebilmektedir. Dolayısıyla kültür rotaları, kültürel miras ile modern kültür arasındaki ilişkiyi de pekiştiren bir platform işlevi görmektedir (ICOMOS, 2008). Turistlerin yalnızca tarihi mekanları gezmesi değil, aynı zamanda o bölgedeki kültürel ve sanatsal etkinliklere katılması sağlanmaktadır. Böylece, bir bölgenin tarihsel geçmişi ile günümüz kültürel yaşamı arasında güçlü bir bağ kurulmuş olmaktadır. Bir diğer önemli yönü, kültür rotalarının sürdürülebilir turizm anlayışına katkı sağlamasıdır. Kültür rotaları, yerel halkın katılımını teşvik ederken, doğal ve kültürel kaynakların korunmasına yönelik projeler geliştirmektedir (Yalın, 2024, s. 100). Aynı zamanda kültür rotaları, turizmin sadece büyük şehirlerle sınırlı kalmaması, kırsal alanlar ve küçük kasabalar için de ekonomik fırsatlar yaratması açısından büyük önem taşımaktadır. Kültürel rotalar, yerel ekonomiyi canlandırmanın yanı sıra, çevreye duyarlı ve yerel halkı dahil eden bir turizm modelini benimseyerek, uzun vadeli sürdürülebilir kalkınma hedeflerine ulaşılmasına yardımcı olabilmektedir. Son olarak, kültür rotaları yerel kimliklerin pekiştirilmesinde de kritik bir rol oynamaktadır (ÇEKÜL, 2015). Rotalar, hem yerel halkın kendi kültürüne olan bağlılığını güçlendirir hem de dışarıdan gelen ziyaretçilere o kültür hakkında derinlemesine bilgiler sunar. Kültür rotaları sayesinde yerel halk, geleneksel el sanatlarını, yemek kültürünü, müziklerini ve diğer kültürel özelliklerini hem yaşatarak hem de paylaşarak toplumsal dayanışmayı pekiştirmektedir. Kültürel rotalar, aynı zamanda farklı kültürlerin birbirini tanımasına olanak tanımakta, küresel düzeyde anlayış ve saygıyı teşvik etmektedir. Böylece kültür rotaları, yerel kimlikleri korurken, küresel bir kültürel etkileşimde desteklemektedir (European Institute of Cultural Routes, 2015, s. 15).

2.2. Kültür Rotalarının Gastronomik Yönü

Gastronomi temelli kültür rotaları; yerel mutfak kültürlerini tanıtmak ve sürdürülebilir turizm sağlamak amacıyla oluşturulan önemli bir turizm modeli kabul edilmektedir. Oluşturulan

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rotalar, ziyaretçilere sadece bölgenin yemeklerini deneyimleme fırsatı sunmakla kalmaz, aynı zamanda o mutfağın tarihsel, kültürel ve coğrafi bağlamını da keşfetmelerine olanak tanır (Gazelci & Aksoy, 2024, s. 154). Gastronomi rotaları genellikle yerel üreticiler, şefler, pazarlarda alışveriş yapan çiftçiler ve geleneksel yemek tariflerini yaşatan ailelerle yapılan etkileşimlerle şekillenmektedir. Edinilen deneyimler, ziyaretçilerin bir bölgenin kültürüne dair derinlemesine bilgi edinmelerini sağlar ve yerel ekonomilere önemli katkılar sunar (Okumuş, Xiang, & Hutchinson, 2018). Gastronomi, yalnızca lezzetli bir yemek değil, aynı zamanda yerel kimliği, gelenekleri ve toplumsal yapıyı yansıtan bir kültür ögesi görevi görmektedir. Gastronomi temelli kültür rotaları, turizmi çeşitlendirmek ve ziyaretçilerin kültürel deneyimlerini zenginleştirmek için güçlü bir araçtır. Gastronomi temelli kültür rotaları, ziyaretçileri yerel mutfakların benzersiz yönlerini keşfetmeye davet etmektedir. Bir bölgenin mutfağı, o bölgedeki tarım yöntemlerinden, iklim koşullarına, yerel alışkanlıklara kadar pek çok faktörün birleşiminden ortaya çıkmaktadır (Çavuş & Eker, 2022). Örneğin, bir İtalyan kasabasındaki zeytinyağı üretim süreci, bir Fransız köyündeki peynir yapım tekniği veya Türk mutfağındaki özgün baklava yapım geleneği, yalnızca yemeklerin tadını değil, aynı zamanda bu yemeklerin ardındaki kültürel bağlamı anlamayı sağlamaktadır. Gastronomi rotaları, bölgenin yemek kültürünün ne kadar zengin ve çeşitli olduğunu göstermekle kalmayıp, aynı zamanda bu kültürün korunmasına da katkı sağlamaktadır (Kavak, 2019, s. 5). Bölgesel mutfakların küresel düzeyde tanıtılması, gastronomik rotaların önemli katkılarından biridir. Yerel gastronominin tanıtılması, sadece turizme değil, aynı zamanda bölgedeki üreticilere ve gıda sektörüne de ekonomik yarar sağlamaktadır. Yerel yemekler, organik ürünler ve geleneksel tarifler, genellikle büyük şehirlerde tanınmayan ancak çok değerli olan mutfak öğeleridir (ÇEKÜL, 2015, s. 12). Gastronomi rotaları, bu tür yemekleri dünyaya tanıtarak yerel üreticileri destekler, tedarik zincirlerini güçlendirir ve küçük işletmelerin gelişmesine yardımcı olur. Ayrıca bu rotalar sayesinde, ziyaretçiler yerel pazarlarda alışveriş yaparak, bölgenin tarım ve gıda üretim süreçlerine yaklaşarak yerelle bir bağ kurma şansını yakalar (ÇEKÜL, 2014, s. 32). Sürdürülebilirlik, gastronomi temelli kültür rotalarının temel ilkelerinden biri olarak kabul görmektedir. Gastronomi temelli kültür rotaları, geleneksel yemeklerin korunmasına, organik tarım uygulamalarının yaygınlaştırılmasına ve çevre dostu gıda üretim yöntemlerinin teşvik edilmesine büyük önem vermektedir (Cihangir & Demirhan, 2020, s. 143). Gastronomi turizmi, özellikle doğal kaynakların doğru bir şekilde kullanılmasını ve yerel gıda üreticilerinin desteklenmesini sağlamak açısından büyük bir fırsat sunmaktadır. Yerel mutfakların korunması, fazla tüketimden kaçınılması ve atık yönetimi gibi sürdürülebilir uygulamalar, gastronomi rotalarının tasarımında göz önünde bulundurulması gereken önemli unsurlardır. Böylece, sadece kültürel miras korunmakla kalmaz, aynı zamanda çevresel denge de sağlanmış olur (Gazelci & Akar Şahingöz, 2023, s. 993). Son olarak; gastronomi temelli kültür rotaları, kültürlerarası etkileşimi teşvik eder ve küresel düzeyde bir anlayış oluşturur. Ziyaretçiler, yerel mutfakların ve yemek yapma süreçlerinin bir parçası olduklarında, yalnızca o yemeğin lezzetini değil, aynı zamanda ona yüklenen anlamı ve gelenekleri de öğrenmektedir (Yalın, 2024, s. 100). Etkileşimler, yerel halkla turistler arasında güçlü bir bağ kurulmasına ve karşılıklı anlayışın gelişmesine katkı sağlar. Gastronomi, kültürel mirası keşfetmenin yanı sıra insanların bir araya gelmesini sağlayan bir araçtır (Karayaz, 2023, s. 10). Gastronomi rotaları, farklı kültürlerden gelen insanları bir araya getirerek, kültürlerarası diyalogu teşvik ederken toplumlar arası saygıyı artıracakı öngörülmektedir.

2.3. Edremit Körfezi Peynir, Zeytin ve Ekmek Rotası

Edremit Körfezi, Türkiye’yi doyuran kent unvanını alarak, gastronomik çeşitliliği ile unvanı hak ettiğini kanıtlamıştır (Ürkün, 2024). Edremit Körfezi, zeytin, peynir ve ekmek gibi temel besin maddeleriyle öne çıkan zengin bir gastronomik kültüre sahiptir. Özellikle “Ayvalık Kelle

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Peyniri/Ayvalık Sepet Peyniri, Ayvalık Zeytinyağı, Balıkesir Manda Kaymağı, Burhaniye Zeytinyağı, Edremit Körfezi Yeşil Çizik Zeytini, Edremit Zeytinyağı” ürünleri coğrafi işaret almış gastronomik değerleridir (http-1). Zeytin, peynir ve ekmek, bölgenin mutfak geleneğinde önemli bir yer tutmakta ve Edremit Körfezi'nin kültürel kimliğini yansıtmaktadır. Dolayısıyla peynir, zeytin ve ekmek odaklı bir kültür rotası oluşturulması, hem bölgeye özgü geleneklerin tanıtılması hem de turizm açısından taşıdığı potansiyelin ortaya konması açısından önemlidir. Oluşturulacak rotada ziyaretçiler, bölgenin en bilinen zeytinliklerini, peynir üretim alanlarını ve geleneksel ekmek pişirme yöntemlerini deneyimleyebilir, yerel halkla etkileşime girerek bu kültürlerin kökenlerine dair derinlemesine bilgi edinme fırsatı bulabilirler. Zeytin, Edremit Körfezi'ndeki en önemli tarım ürünlerinden biridir ve bu ürünün farklı çeşitlerinin yetiştirilmesi, bölgenin gastronomik kimliğini oluşturmaktadır. Ayvalık zeytini gibi dünyaca ünlü türler, bu rotada yer alan en dikkat çekici unsurlar olarak görülmektedir. Bölgede zeytin hasadı ve zeytinyağı üretim süreçlerini görmek, bölgenin zeytin kültürüne dair pratik bilgiler almak, ziyaretçi ve turistler için eşsiz deneyim fırsatları yaratacak düzeyde potansiyel barındırmaktadır. Aynı zamanda, zeytinle yapılan geleneksel yemekler ve atıştırmalıklar, bu rotada bir başka deneyim olarak sunulabilir. Zeytin bahçelerinin arasından yapılan yürüyüşler, doğal güzelliklerin yanı sıra yerel zeytin çeşitleri ve zeytinyağının önemini kavrayabilmek için eşsiz bir fırsat olarak değerlendirilebilir (Sarioğlan, Avcıkurt, Koroğlu, & Doğdubay, 2020, s. 679). Peynir, Edremit Körfezi'nin kültür rotasında önemli bir diğer unsurdur. Bölgedeki Ezine Peyniri ve koyun peynirleri gibi geleneksel çeşitler, yerel mutfağın vazgeçilmez parçaları olarak kabul edilmektedir. Bu rotada, ziyaretçiler peynir üretim atölyelerine katılabilir, geleneksel yöntemlerle peynir yapımını gözlemleyebilir ve bu peynirlerin farklı kullanımları hakkında bilgi edinebilirler. Peynirin taze haliyle sunumu, bölgedeki köy kahvaltıları ve yerel restoranlarda farklı lezzetlerin keşfi, ziyaretçilere unutulmaz bir deneyim yaşatır. Peynir ve zeytin eşliğinde yapılan tadımlar, yerel gastronomi kültürünün derinliklerine inmeyi sağlayan bir başka önemli etkinlik görevi görmektedir (İbiş, 2020, s. 101). Ekmek, bölge mutfağının temel taşlarından biridir ve Edremit Körfezi'nde pek çok yöresel ekmek çeşidi bulunmaktadır. Yufka, nohut ekmeği, ekşi mayalı köy ekmeği, bazlama, tahinli ekmek gibi çeşitler, hem bölgenin geleneksel pişirme yöntemlerini hem de yerel malzemeleri yansıtmaktadır. Ekmek yapımı, köylerde hala geleneksel taş fırınlarda veya tandırlarda yapılmakta olup, bu süreç ziyaretçiler için bir deneyim haline gelebilir (Duman & Avcıkurt, 2024). Ayrıca, ekmeklerin kahvaltılarda, öğünlerde ve geleneksel yemeklerde nasıl kullanıldığına dair verilecek bilgiler, ziyaretçilerin bölgeye olan ilgisini artıracaktır. Ek olarak bölgede tarım ve turizm potansiyelinin yüksek olduğunu Çelik Uğuz ve Özgürel (2022, s. 487) çalışmalarında tespit etmiştir. Edremit Körfezi'nde zeytin, peynir ve ekmek etrafında şekillenen bir kültür rotası, gastronomi turizminin yanı sıra bölgenin kültürel mirasını keşfetmek için önemli bir fırsat sunmaktadır.

3. YÖNTEM

Çalışmada nitel araştırma yöntemlerinden belgesel tarama tekniği kullanılmıştır. Karasar (2008, s. 183) çalışmasında belgesel tarama yöntemini bir konuya dair yazılı, görsel veya işitsel materyallerin sistematik bir şekilde incelenmesini kapsayan bir araştırma yöntemidir. Bu yöntem, mevcut belgeleri analiz ederek tarihsel, kültürel veya toplumsal süreçler hakkında bilgi edinmeyi amaçlar. Kullanılan yöntem ile “50 Peynirli Şehir Balıkesir”, “Ekmek Şehri Balıkesir” ve “Zeytin Ülkesi Balıkesir” kitapları içerikleri incelenerek Edremit Körfezi'ndeki peynir, zeytin ve ekmek kültürü ve çeşitliliği ortaya çıkarılmaya çalışılmıştır. Elde edilen bilgiler doğrultusunda gastronomi rotaları oluşturulmuştur.

4. BULGULAR VE TARTIŞMA

4.1. Edremit Körfezi Zeytin Kültürü ve Çeşitliliği

Endüstriyel miras kapsamında, endüstriyel saha, kalıntı, mimari, fabrika makineleri, yerleşkeler ve ürünler Endüstriyel Miras'ın Korunması Uluslararası Komitesi (TICCIH) kapsamında korunmaktadır (Salcan & Tokay, 2018, s. 61). Edremit Körfezi, Türkiye'nin Ege Bölgesi'nde yer alan ve zeytin üretimiyle tanınan önemli bir destinasyondur. Zeytin, Edremit Körfezi'nde binlerce yıldır yetiştirilen ve yerel halkın günlük yaşamının ayrılmaz bir parçasını oluşturan, önem atfedilen değeridir. Bölgedeki zeytin ağaçları, hem tarihi hem de kültürel anlamda büyük bir önem taşımaktadır. Zeytin, bu topraklarda sadece ekonomik bir değer taşımakla kalmaz, aynı zamanda yerel halkın yaşam biçimini, geleneklerini ve mutfak kültürünü şekillendirmektedir (Özgürel & Gülü Demirebulat, 2024). Zeytin, sadece bir gıda maddesi olarak değil, aynı zamanda sosyokültürel bir öğe olarak da öne çıkmaktadır. Edremit Körfezi'nde zeytin hasat dönemi, hem üreticiler hem de bölge halkı için büyük bir öneme sahiptir. Hasat zamanı, yerel festivallerin ve kutlamaların yapıldığı, zeytin işleme süreçlerinin halka tanıtıldığı bir dönem olarak gözlemlenmektedir. Ayrıca, zeytin ile ilgili çeşitli geleneksel tarifler ve yemekler de bölge mutfağının vazgeçilmez parçalarıdır. Zeytinyağlı yemekler, zeytinli ekmekler ve zeytin reçelleri, bu mutfağın en bilinen örneklerindedir. Edremit Körfezi'nin zeytin kültürü, hem geleneksel üretim yöntemleri hem de zeytin çeşitliliğiyle dikkat çekmektedir. Bölgedeki zeytin çeşitliliği, Edremit Körfezi'nin gastronomik zenginliğini artıran önemli bir faktördür. Edremit Körfezi'nde, özellikle Ayvalık ve Edremit gibi ilçelerde yetiştirilen zeytinler, farklı türleriyle tanınmaktadır. Ayvalık zeytinini, bu bölgenin en bilinen ve en değerli zeytin türlerinden biridir. Ayvalık zeytinini, küçük, yuvarlak ve sarımsı bir renge sahip olup, sofralık olarak oldukça tercih edilmektedir. Bunun yanı sıra, zeytinyağı üretiminde de sıkça kullanılmaktadır. Bölgedeki zeytin üreticileri, sürdürülebilir tarım uygulamalarını benimseyerek hem çevresel hem de ekonomik anlamda kalkınmayı hedeflemektedir. Bu sayede, zeytin ve zeytinyağı üretimi, hem bölge halkının refahını artırmaya hem de Edremit Körfezi'nin gastronomik mirasını koruma çabalarına katkı sağlamaya devam etmektedir.

Ayvalık; Ayvalık Zeytin ve Zeytinyağı

Burhaniye; Burhaniye Sele Zeytin, Burhaniye Kıрма Zeytin, Burhaniye Yeşil Zeytin

Edremit; Edremit Körfezi Yeşil Çizik Zeytinini, Edremit Zeytinyağı, Edremit Siyah Sele Zeytin

Gömeç; Gemlik, Domat

Havran; Yeşil Kıрма Zeytin, Sele Zeytin

Fotoğraf 1. Edremit Körfezi Zeytin Rotası



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Fotoğraf 1'e göre Edremit Körfezi'nde zeytin üzerinden oluşturulan rotada bölgelerde yer alan geçmişe sahip ya da sıkça tercih edilen zeytin ve zeytinyağı noktaları tespit edilmiştir. Rotada ilçelerde öne çıkan ziyaret noktaları: Nermin Hanım Çiftliği (Havran), Laleli (Burhaniye), Balıkesir Çiftçi Eğitim Merkezi (BAÇEM/Burhaniye), İdamera (Edremit), Paksoy Zeytincilik (Edremit), Mehmet Akyalı Zeytinyağı Fabrikası (Ayvalık), Ali Kemal Bey Zeytincilik (Ayvalık), Aktepe Zeytinyağı (Ayvalık), Novavera Zeytinyağları (Ayvalık), Özem'le Yaşam (Gömeç) gibi pekçok uğrak nokta haritada gösterilmiştir.

4.2. Edremit Körfezi Peynir Kültürü ve Çeşitliliği

Edremit Körfezi, sadece zeytiniyle değil, aynı zamanda geleneksel peynir çeşitleriyle de tanınan bir bölgedir. Peynir, bölge mutfağının temel öğelerinden biri olup, uzun yıllardır yerel halkın günlük yaşamında önemli bir yer tutmaktadır. Bölgedeki peynir üretimi, tarihsel olarak çok köklü bir geçmişe sahiptir ve bu durum, Edremit Körfezi'nin gastronomik zenginliğine katkı sağlamaktadır. Peynir çeşitliliği, hem yerel üreticiler hem de zeytinle birlikte bölgenin mutfak kültürünün temel taşlarını oluşturmaktadır. Edremit Körfezi'nde üretilen peynirler, hem geleneksel yöntemlerle hem de yöreye özgü malzemelerle yapılarak, her bir peynirin benzersiz bir lezzet profili oluşturmasına olanak tanımaktadır. Edremit Körfezi'ndeki en bilinen peynir çeşitlerinden biri Koyun Peyniri'dir. Bölgedeki koyun yetiştiriciliği, peynir üretimi açısından büyük bir öneme sahiptir. Koyun sütünden üretilen bu peynir, daha yoğun bir aromaya sahip olduğu, kalsiyum ve protein açısından oldukça zengin içeriği bulunduğu bilinmektedir. Yüksek yağ içeriğiyle öne çıkan koyun peyniri, yemeklere, salatalara veya kahvaltılara eklenerek çok farklı şekillerde tüketilebilmektedir. Edremit Körfezi'nde ayrıca Tulum Peyniri gibi daha az bilinen ama lezzetli çeşitler de üretilmektedir. Tulum Peyniri, özellikle dağlık alanlarda yaşayan hayvanların sütüyle yapılan ve doğal koşullarda olgunlaşan bir peynir türüdür. Tulum peyniri, hem sert yapısı hem de keskin aromasıyla tanınmaktadır. Bölgedeki peynir çeşitliliği, aynı zamanda Süzme Peynir ve Yoğurt Peyniri gibi diğer yerel türleri de kapsamaktadır. Süzme peynir, genellikle taze ve hafif tatlı bir lezzete sahiptir. Bu peynir, çeşitli yemeklerin yanında, tatlılarda veya sandviçlerde kullanılabilir. Yoğurt peyniri ise, özellikle bölgedeki geleneksel kahvaltı sofralarının vazgeçilmezlerinden biri olarak görülmektedir. Yumuşak yapısı ve hafif ekşi tadı, bu peyniri özel kılmaktadır. Yoğurt peyniri, hem lezzet hem de besin değerleri açısından oldukça besleyicidir. Son olarak, Edremit Körfezi'ndeki peynir kültürü, sadece yerel tüketimle sınırlı kalmayıp, bölgeyi ziyaret eden turistlere de büyük bir deneyim sunmaktadır. Peynir üretimi, yerel halk için önemli bir geçim kaynağı olduğu gibi aynı zamanda Edremit Körfezi'nin gastronomik mirasını tanıtan bir araç görevi görmektedir. Bölgeye özgü peynirlerin üretimi, sürdürülebilir tarım ve hayvancılık yöntemleriyle desteklenmekte, bu da bölgenin doğal kaynaklarının korunmasına katkı sağlamaktadır. Bölgenin peynir çeşitliliği, hem geleneksel üretim yöntemleri hem de yenilikçi yaklaşımlar ile devamlılık gösterirken, Edremit Körfezi'nin peynir kültürünü dinamik ve zengin bir miras haline getirmektedir.

Ayvalık; Ayvalık-Cunda Kelle Sepet Peyniri, Ayvalık-Cunda Salamura Teneke Tulum Peyniri, Ayvalık-Cunda Sepet Loru, Ayvalık-Cunda Kirlihanım Peyniri, Ayvalık-Cunda Saganaki, Ayvalık Limoni Kekikli Peynir Ezmesi

Burhaniye; Burhaniye Sepet Peyniri, Burhaniye Salamura Tulum, Burhaniye Kelle Peyniri, Burhaniye Saganaki, Mihaliç

Edremit; Edremit Sepet Peyniri, Edremit Koyun Sepet Loru, Hacıhasanlar Zeytinyağıyla Olgunlaştırılmış Beyaz Peynir, Hacıhasanlar Taze Otlu Koyun Peyniri, Edremit Köy Peyniri

Gömeç; Gömeç Sepet Tulum Peyniri, Hacıhüseyinler Yörük Kelle Peyniri, Hacıhüseyinler Yörük Basma Peyniri, Gömeç Yörük Kelle Peyniri

Havran; Havran Otlu Kelle Peyniri, Havran Ala Maya Peyniri, Naneli Kelle Peyniri



Fotoğraf 2'ye göre oluşturulan rotada Edremit Körfezi'nde yer alan "Darbuka Kardeşler (Ayvalık), Kesebir Mandıra (Ayvalık), Şahsi Mandıra (Ayvalık), Peynirci Ferdi (Ayvalık), Yılmaz Mandıra (Burhaniye), Gediz Çiftliği (Burhaniye), Sarıbaş Gurme (Burhaniye/Edremit), Akçay Peynir Sarayı (Edremit), Kocabaş Mandıra (Edremit), Özer Peynircilik (Edremit), Özem'le Yaşam (Gömeç), Havranlı Peynirci Fatih (Havran), Sofuoğlu Peynir (Havran)" başta olmak üzere tarihi mandıralara yer verilmiştir. Ayrıca ürünlere ait görseller ilçelere göre dağılımlarına göre eklenmiştir.

4.3. Edremit Körfezi Ekmek Kültürü ve Çeşitliliği

Edremit Körfezi, zengin mutfak kültürünün bir parçası olarak, ekmek çeşitliliğiyle de dikkat çekmektedir. Bölgedeki ekmek üretimi, hem tarihsel olarak derin bir geçmişe sahiptir hem de Türk halkının tamamında olduğu gibi yerel halkın günlük yaşamında da önemli bir yer tutmaktadır. Ekmek, Edremit Körfezi'ndeki sofraların vazgeçilmez öğelerinden biridir ve çeşitli şekillerde tüketilmektedir. Yörenin iklimi, tarım alanları ve geleneksel pişirme yöntemleri, bölgeye özgü ekmek çeşitlerinin ortaya çıkmasında büyük rol oynamaktadır. Ekmek, sadece temel bir gıda maddesi değil, aynı zamanda bölgenin kültürünü ve yaşam biçimini yansıtan önemli bir unsurdur. Bölgede öne çıkan ve köklü bir geçmişe sahip olan ilk ürün "Ekşi Mayalı Ekmek" olarak tespit edilmiştir. Akabinde yufka ekmeği, bölgedeki en yaygın ekmek çeşitlerinden biridir ve özellikle köylerde sıklıkla yapılmaktadır. Yufka ekmeği, özellikle kahvaltılarda, zeytin ve peynir gibi yöresel ürünlerle tüketilmektedir. Yufka, aynı zamanda bazı geleneksel yemeklerin yanında da tüketilen bir ekmek türüdür. Bir diğer önemli ekmek çeşidi ise keşkek ekmeğidir. Bu ekmek, özellikle geleneksel tariflerle pişirilen ve köylerde çokça tercih edilen bir çeşit olup, buğday unu ve maya kullanılarak yapılmaktadır. Keşkek ekmeği, genellikle tandırda pişirilmekte ve yoğun, nefis bir lezzet sunmaktadır. Tahinli ekmek, Edremit Körfezi'nin bir diğer özgün ekmek türüdür. Tahin ekmeği, tahinle yoğrulmuş hamurun pişirilmesiyle hazırlanır ve özellikle kahvaltılarda tercih edilmektedir. Aynı zamanda bölgedeki otantik tatları ve yerel malzemeleri yansıtarak, Edremit Körfezi'nde yaşayanların mutfak kültürünün ne kadar çeşitli olduğunu göstermektedir. Tahinli ekmek, bölge halkı tarafından genellikle geleneksel kahvaltılarda veya tatlı niyetine yenmektedir. Bazlama ekmeği, Edremit Körfezi'nde sıkça tüketilen bir diğer geleneksel ekmek türüdür. Bu ekmek, genellikle kabarık ve yumuşak dokusuyla dikkat çekmektedir. Bazlama, genellikle tandırda veya sacda pişirilmektedir. Bazlama, geleneksel köy yaşamının bir parçası olup, özellikle kahvaltılarda, zeytinyağlı yemeklerin ve peynirlerin yanında sıklıkla tüketilmektedir. Edremit Körfezi'ndeki ekmek kültürü, bu bölgedeki tarımsal çeşitliliği ve geleneksel pişirme yöntemlerini yansıtarak, bölgenin gastronomik mirasını zenginleştirmektedir. Bölgede çavdar, yarma arpa, mısır unu, kinoa, greçka, tam buğday, kepek, sarı buğday gibi çeşitli buğday ve tahilla ekmek

10th International CEO Communication, Economics, Organization & Social Sciences Congress yapılmaktadır. Farklı un türlerinin kullanılması, ekmeklerin şekil ve tat çeşitliliğine yol açmaktadır. Bölgedeki ekmekler, yerel halkın geçmişten gelen mutfak geleneğini yaşatırken, aynı zamanda misafirperverliği de simgelemektedir.

Ayvalık; Ekşi Mayalı Ekmek, Gelin Pidesi, Peksimet (Arpa Ekmeği), Nohut Ekmeği, Ayvalık Tostu Ekmeği

Burhaniye; Glutensiz Ekmek (Greçka-Kinoa/Ata Tohum Buğday), Nohut Ekmeği, Ekşi Maya Ekmek, Gelin Ekmeği

Edremit; Ekşi Mayadan Somun Ekmek, Edremit Isırganlı ve Kekikli Ekmek, Keşkek Ekmeği, Tahinli Ekmek

Gömeç; Gömeç Gelin Ekmeği, Hacıhüseyinler Ekmek Böreği, Ev Yapımı Karanfilli Ekşi Mayalı Ekmek, Ekşi Mayalı Köy Ekmeği

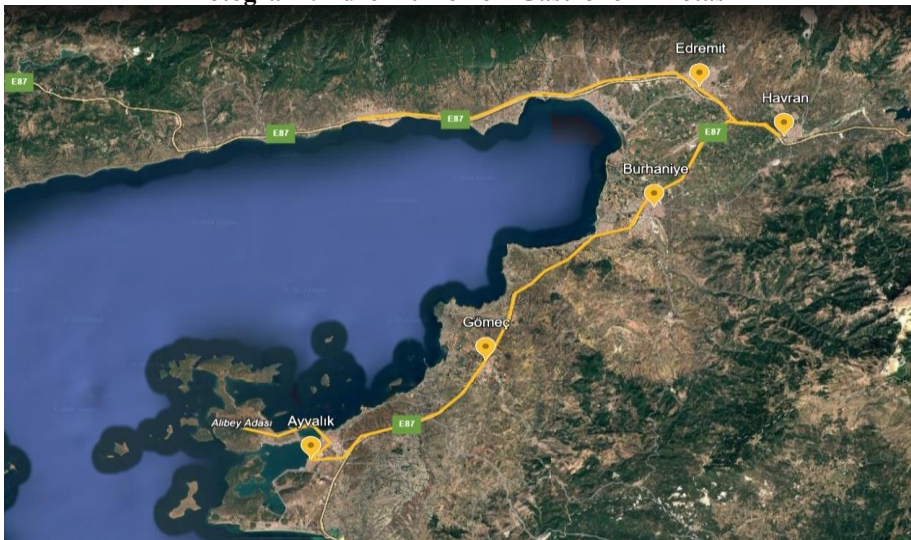
Havran; Havran Kalabak Ekmeği, Karanfilli Otlı Ekmek, Ekmek Aşı, Yarma Buğdaylı Ekmek

Fotoğraf 3. Edremit Körfezi Ekmek Rotası



Fotoğraf 3'e göre oluşturulan rotada "Mavi Simit Fırını (Ayvalık), Tarihi Macaron Fırını (Ayvalık), Evin Ana Taş Fırını (Burhaniye), Beksan (Burhaniye), Tarihi Güre Fırını (Edremit), Dörtel Unlu Mamülleri (Edremit), Babayiğit Ekmek ve Unlu Mamülleri (Gömeç), Öz Havran Taşfırın Ekmeği (Havran) işletmeleri başta olmak üzere bölgedeki tarihi fırınlara yer verilmiştir.

Fotoğraf 4. Edremit Körfezi Gastronomi Rotası



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Fotoğraf 4'te Edremit Körfezi'nde "Peynir-Zeytin-Ekmek" ürünleri baz alınarak gastronomi rotası oluşturulmuştur. Oluşturulan rotada Edremit Körfezin'de bulunan Balıkesir'e bağlı ilçeler incelenerek, Cunda Adası'ndan başlayıp Altınoluk'ta biten bir rota çizilmiştir.

5. SONUÇ VE ÖNERİLER

Edremit Körfezi, zengin tarım ürünleri ve geleneksel lezzetleriyle, özellikle peynir, zeytin ve ekmek gibi temel gıda maddeleri açısından büyük bir öneme sahiptir. Bu bölgede oluşturulacak gastronomi rotası, hem yerel üreticilerin hem de ziyaretçilerin farklı lezzetleri keşfetmesine olanak tanıyacak, bölgenin mutfak kültürünü tanıtmada etkili bir araç olacaktır. Ayrıca, bu tür bir rota, sürdürülebilir turizmi teşvik ederek, yerel ekonomiyi canlandırmak ve bölgedeki zanaatkarların emeğini görünür kılmak adına önemli bir fırsat sunmaktadır. Peynir, zeytin ve ekmek, Edremit Körfezi'nin bilinen ve değerli ürünleri olarak tespit edilmiştir. Peynir çeşitleri, özellikle koyun ve keçi sütünden üretilen geleneksel lezzetler, bölgenin iklim koşulları ve üretim tekniklerinin benzersiz birleşiminin bir yansımasıdır. Zeytin ve zeytinyağı üretimi, yüzyıllardır devam eden bir gelenek olup, bu ürünler yerel mutfağın vazgeçilmez unsurları arasında yer almaktadır. Ekmek ise bölgenin günlük yaşamında önemli bir yere sahip olup, özellikle taş fırınlarda pişirilen çeşitleriyle meşhurdur. Oluşturulan gastronomi rotası, hem yerel halkın hem de dışarıdan gelen turistlerin, Edremit Körfezi'nin en doğal ve otantik lezzetlerine ulaşmalarını sağlayacaktır. Ayrıca, bu rotanın oluşturulması, gastronomi turizminin gelişmesini ve yerel üreticilerin ürünlerinin daha geniş kitlelere ulaşmasını mümkün kılacaktır. Turistler, her bir durakta farklı bir lezzet deneyimi yaşarken, bölgenin kültürel ve tarihsel zenginliklerini de keşfedeceklerdir. Sonuç olarak, Edremit Körfezi'nin peynir, zeytin ve ekmek gibi geleneksel ürünlerini ön plana çıkaran bir gastronomi rotası, bölgeye olan ilgiyi artıracak, yerel halkın ekonomik refahını destekleyecek ve bölgenin gastronomi turizmi alanında tanınmasını sağlayacaktır. Böyle bir rota, sadece yemek kültürünü tanıtmakla kalmayıp, aynı zamanda bölgenin kültürel mirasına da katkıda bulunacaktır. Bu bilgiler doğrultusunda öneriler aşağıda belirtilmiştir;

- **Yerel Üreticilerin Desteklenmesi:** Edremit Körfezi'ndeki peynir, zeytin ve ekmek üreticileriyle işbirliği yaparak, onların üretim süreçlerini ve ürünlerini tanıtan etkinlikler düzenlenmelidir. Bu sayede hem yerel üreticiler desteklenir hem de geleneksel üretim yöntemlerinin korunması sağlanır.
- **Gastronomi Turu Rehberliği:** Bölgeye özel gastronomi turlarına rehberlik edecek, yerel mutfak kültürünü iyi bilen uzmanlar yetiştirilmelidir. Rehberler, ziyaretçilere bu ürünlerin tarihini, üretim süreçlerini ve kültürel önemini anlatmalıdır.
- **Zeytin Hasat Etkinlikleri:** Zeytin hasadı döneminde turistlere katılabilecekleri etkinlikler düzenlenerek, zeytin toplama ve zeytinyağı üretim süreçleri deneyimletilmelidir. Bu etkinlikler, ziyaretçilerin bölgeye olan ilgisini artırabilir.
- **Geleneksel Peynir Üretim Atölyeleri:** Peynir üretimi konusunda atölyeler düzenlenmeli ve katılımcılara peynir yapımı öğretilmelidir. Bu, yerel üretim tekniklerinin tanıtılması ve deneyimsel öğrenme fırsatları sunulması açısından faydalı olacaktır.
- **Yerel Ürün Pazarı Oluşturulması:** Edremit Körfezi'nde, peynir, zeytin ve ekmek gibi yerel ürünlerin satılabileceği bir pazar oluşturulmalıdır. Bu pazar, hem bölge sakinlerine hem de turistlere, doğrudan üreticilerden ürün alma imkanı tanıyacaktır.
- **Gastronomi Rotası Haritası ve Uygulaması:** Ziyaretçilerin kolayca gezebileceği bir gastronomi rotası haritası ve mobil uygulama oluşturulmalıdır. Bu uygulama, rota üzerindeki önemli noktaları, restoranları, çiftlikleri ve üreticileri harita üzerinde gösterecek ve kullanıcı dostu olmalıdır.

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- Etkinlik ve Festivaller Düzenlenmesi: Yıllık olarak peynir, zeytin ve ekmek temalı festivaller düzenlenebilir. Bu etkinliklerde, yerel ürünler tadılabilir, üreticilerle tanışılabilir ve bölgenin mutfak kültürü daha geniş kitlelere tanıtılabilir.
- Gastronomi Rotalarına Özel Konaklama Seçenekleri: Rotalar boyunca yerel otel ve pansiyonlarla işbirliği yaparak, konaklama paketleri oluşturulabilir. Bu paketler, misafirlere gastronomik turlar ve atölye deneyimlerini bir arada sunmalıdır.
- Sürdürülebilirlik ve Eğitim Programları: Gastronomi rotasının sürdürülebilirliğini sağlamak adına, çevre dostu üretim yöntemleri ve organik tarım konusunda yerel üreticiler için eğitim programları düzenlenmelidir. Ayrıca, ziyaretçilere de sürdürülebilir turizm hakkında bilgilendirmeler yapılabilir.

KAYNAKÇA

- Aksoy Biber, N., & Bal Onur, B. (2022). Zeytin ülkesi Balıkesir. Balıkesir: Balıkesir Tarım Ürünleri Yayınları.
- Aksoy Biber, N., & Bal Onur, B. (2023). *Ekmek şehri Balıkesir*. İstanbul: Balıkesir Büyükşehir Belediyesi.
- Bal Onur, B. (2021). *50 Peynirli şehir Balıkesir*. Balıkesir: Balıkesir Tarım Ürünleri Yayınları.
- Berti, E. (2015). Defining the Cultural Routes of the Council of Europe. In European Institute of Cultural Routes. (Ed.). (2015). *Cultural Routes Management: From Theory to Practice*. Strasbourg, France: Council of Europe Publishing
- Büyük, Ö., & Can, E. (2020). Zeytinyağı kültürel rotalarının turizm potansiyeli açısından değeri ve Türkiye’de uygulanabilirliği. *AHBVÜ Turizm Fakültesi Dergisi*, 23(1), s. 191-210.
- Cihangir, E., & Demirhan, Ö. (2020). Peynir turizmi temelli kültür rotaları oluşturulmasına yönelik bir araştırma: Van otlu peynir örneği. *Türk Coğrafya Dergisi*, 75, s. 139-162.
- Çavuş, O., & Eker, Ş. (2022). Coğrafi işaretli ürünlerin sürdürülebilir gastronomi turizmi bağlamında değerlendirilmesi: Bolu kanlıca mantarı Mengen örneği. *Türk Turizm Araştırmaları Dergisi*, 6(1), s. 303-320.
- Çavuşoğlu, M., & Çavuşoğlu, O. (2018). Gastronomi turizmi ve Kıbrıs sokak lezzetleri üzerine bir araştırma. *Güncel Turizm Araştırmaları Dergisi*, 2(Ek1), s. 637-651.
- ÇEKÜL Vakfı. (2014). Gaziantep kültürel rotalar sistemi. Mekansal planlama rehberi kültür öncelikli bölgesel yol haritaları. Erişim Adresi https://drive.google.com/file/d/0BxSivI_0YdzVeTZwUE9pdjLlSG8/view
- ÇEKÜL Vakfı. (2015). Kültür rotaları planlama rehberi. Tarihi kentler birliği yayınları kılavuz kitapçıklar dizisi 3. İstanbul. Erişim adresi https://www.tarihiKentlerBirligi.org/wp-content/uploads/rota-rehberi_press.pdf.
- Çelik Uğuz, S., & Özgürel, G. (2022). Edremit Körfezi’nde tarım turizmi: Üreticiler üzerinden bir inceleme. *Academic Researches and Studies in Sciences*, s. 478-492.
- Duman, H., & Avcıkurt, C. (2024). Somut olmayan kültürel miras değeri olarak yöresel yiyeceklerin duyulma, tüketilme ve beğenilme düzeylerinin belirlenmesi: Edremit Körfezi örneği. *Badem ve Fidan / Journal of Gastronomy, Hospitality and Travel*, 7(2), s. 386-396.
- Durusoy, E. (2016). *Tarihi yoldan kültürel rotaya: Milas ile Labraunda arasındaki yolun korunması ve yönetimi*. Ankara: ODTÜ Yayıncılık.
- European Institute of Cultural Routes. (2015). *Cultural routes management: from theory to practice*. Strasbourg, France: Council of Europe Publishing
- Gazelci, S. C., & Akar Şahingöz, S. (2023). Ankara yerel gastronomi rotası ve lezzet haritası. *Journal of Tourism and Gastronomy Studies*, 11(2), s. 991-1007.
- Gazelci, S. C., & Aksoy, M. (2024). Türkiye’de oluşturulan teorik gastronomi rotalarının bibliyometrik analizi. *Seyahat ve Otel İşletmeciliği Dergisi*, 21(1), s. 149-167.
- ICOMOS Charter on cultural routes. (2008). http://www.icomosciic.org/ciic/charter_cultural_routes.pdf
- İbiş, S. (2020). Gastronomi turizmi potansiyelinin tespiti ve geliştirilmesi kapsamında Balıkesir’in değerlendirilmesi. *Güncel Turizm Araştırmaları Dergisi*, 4(1), s. 87-104.
- Karasar, N. (2008). *Bilimsel araştırma yöntemi*, Ankara: Nobel Akademik Yayıncılık.
- Karayaz, A. C. (2023). Mezelerin gastronomik aşinalığının tüketici tutumlarına ve davranışsal niyetlerine etkisi: Edremit Körfezi örneği. (*Yüksek Lisans Tezi*). Balıkesir Üniversitesi, Balıkesir.
- Kavak, M. (2019). Frig Yolu’nun turizm ve kültür rotası açısından değerlendirilmesi. (*Yüksek Lisans Tezi*). Ege Üniversitesi, İzmir.
- Kızıllırmak, İ., Albayrak, A., & Küçükali, S. (2014). Yöresel mutfağın kırsal turizm işletmelerinde uygulanması: Uzungöl örneği. *Uluslararası Sosyal Ve Ekonomik Bilimler Dergisi*, 4(1), s. 75-83.
- Kızıllırmak, İ., Ofluoğlu, M., & Şişik, L. (2016). Türkiye’de uygulanan gastronomi turları rotalarının Web tabanlı analizi ve değerlendirilmesi. *Journal of Tourism and Gastronomy Studies*(4/Special issue1), s. 258-269.
- Okumuş, B., Xiang, Y., & Hutchinson, J. (2018). Local cuisines and destination marketing: cases of three cities in Shandong, China. *Asia Pacific Journal of Tourism Research*, 23, s. 1-16.



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- Özgürel, G., & GÜdü Demirbulat, Ö. (2024). *İnsanlığın ortak mirası zeytin ve zeytinyağı kültürü ile zeytin turizmine kişisel bir yolculuk*. VI International Congress On The VI International Congress On Sustainable Development, s. 211-222.
- Ryu, K., & Jang, S. (2006). Intention to experience local cuisine in a travel destination: The modified theory of reasoned action. *Journal of Hospitality & Tourism Research*, 30(4), s. 507-516.
- Salcan, E., & Tokay, H. Z. (2018). Osman Nuri Özer Zeytinyağı İmalathanesi'nin endüstriyel miras kavramı ışığında ele alınması ve sürdürülebilirliğinin sağlanması doğrultusunda bir araştırma. *Eurasian Studies Journal*, 9, s. 59-72.
- Sarışık, M., & Özbay, G. (2015). Gastronomi turizmi üzerine bir literatür incelemesi. *Anatolia: Turizm Araştırmaları Dergisi*, 26(2), s. 264-278.
- Sarioğlan, M., & Yalın, G. (2021). *Edremit körfezine özgü yöresel yiyecek-içecek öğelerinin gastronomi turizmine kazandırılması*. Livre de Lyon.
- Sarioğlan, M., Avcıkurt, C., Köroğlu, A., & Doğdubay, M. (2020). Gastronomi turizminin geliştirilebilirliğine yönelik bir araştırma: Edremit Körfezi örneği. *Journal of Tourism and Gastronomy Studies, Special Issue* (4), s. 677-694.
- Ürkün, K. (2024). Kültürel kimlik teorisi çerçevesinde Edremit Körfezi'ndeki yiyecek içecek işletmelerinin gastronomik açıdan değerlendirilmesi. (*Yüksek Lisans Tezi*). Balıkesir Üniversitesi, Balıkesir.
- Vakfi, Ç. v. (2015). *Kültür rotaları planlama rehberi*. İstanbul: ÇEKÜL Vakfı - Tarihi Kentler Birliği Yayınları.
- Yalın, G. (2024/2). Zeytinyağı turizmi: Balıkesir ili Edremit Körfezi zeytinyağı kültür rotası. *Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*(49), s. 97-119.
- Yılmaz, G., & Akman, S. (2018). Sürdürülebilir gastronomi çerçevesinde Edremit Körfezi yöresel mutfakları. *Journal of Tourism and Gastronomy Studies*, 6(4), s. 852-872.

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<https://ci.turkpatent.gov.tr/cografisi-isaretler/liste?il=10&tur=&urunGrubu=&adi=> adresinden 07.12.2024 tarihinde erişilmiştir.



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Günümüz Dünyasında Eğitim-Öğretimin Amaçları

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ÖZET

İnsanoğlu başlangıçta yaşamı için gerekli olan öncelikle açlık, susuzluk, barınma gibi temel ihtiyaçlarını karşılamak için deneme yanılma yöntemi ile öğrenmeyi öğrenmiştir. Bu durumun yerleşik yaşama geçinceye kadar sürdürüldüğü söylenebilir. Yalnız barınma, korunma, yemek, içmek ve giyim kuşam gibi temel ihtiyaçlara genel olarak bakıldığında, öğrenme sürecinin deneme yanılma yönteminden, deneyim sonuçlarına dayanan ve özel resmi kişi, kişiler aracılığıyla yürütülen eğitim-öğretimin kurumsallaştığı görülür. Bu süreç çeşitlilik gösterse de hemen hemen tüm dünyada aynıdır. Kurumsal olarak 1. İlk Okul, 2. Orta Okul, 3. Lise, 4. Üniversite. Kurumsal eğitim-öğretimde mekân zaman bellidir. Belirli kurallar çerçevesinde eğitim-öğretim yapılır. Bu uygulama geçmişten bugüne süre gelmektedir. Belirli meslekler ön plandadır. Özellikle bireyler, eğitim gördükleri alanda çalışma imkanına kolaylıkla erişebilirler. Yalnız 1980 sonrası, bu durum yeni boyut kazanır. İletişim sektörünün insanlığın hizmetine sunduğu gün ve gün değişen yeni imkanlar, özellikle amaç, zaman, mekân açısından eğitim-öğretimin birey ve eğitim kurumlarının amaçlarının hızla değişmesine neden olmuştur. Bu çalışmada, öğrenmenin ve eğitim-öğretimin amaçlarının neler olabileceği hususa, nitel bir yöntem ve fenomenolojik bir yaklaşımla, günümüz dünyası açısından incelenmiştir.

Anahtar Sözcükler: Amaç, Deneyim, Eğitim-öğretim, İnsanoğlu.

Purposes of Education in Today's World

ABSTRACT

Human beings initially learned to learn by trial-and-error methods to meet their basic needs such as hunger, thirst and shelter. It can be said that this situation continued until they adopted a settled life. However, when we look at basic needs such as shelter, protection, food, drink and clothing in general, we see that the learning process has changed from trial -and- error method to institutionalization of education and training based on experience and carried out through special official persons. Although this process varies, it is almost the same all over the world. Institutionally: 1. Primary School, 2. Middle School, 3. High School, 4. University. In institutional education and training, the place and time are certain. Education and training are carried out within the framework of certain rules. This practice has continued from the past to the present. Certain professions are at the forefront. Individuals can easily access the opportunity to work in the field they are educated in. However, after 1980, this situation gained a new dimension. The new opportunities that the communication sector offers to the service of humanity, which change day by day, have caused the aims of individuals and educational institutions to change rapidly, especially in terms of purpose, time and space. In this study, the possible aims of learning and education have been examined with a qualitative method and a phenomenological approach in terms of today's world.

Keywords: Purpose, Experience, Education and training, Human beings.

1. GİRİŞ

1.1.Öğrenme ve eğitim-öğretime genel bakıldığında, öğrenme, çoğunlukla bireysel bir çabayı gerektirir. Eğitim-öğretim ise bir disiplin çerçevesinde yürütülmeyi gerektiren faaliyettir. Bugün bireysel olarak eğitime bakıldığında 1. Kişisel gelişim eğitimi. 2. Mesleki eğitim olarak görülmektedir. Her iki eğitim, kurumsal eğitim-öğretim müfredatı içinde yer alır. Bu uygulama yüzyıllardır uygulanmaktadır.

1.2.Günümüz dünyası, geçmişe nazaran hemen hemen her alanda ilkleri yaşamaktadır. Eğitim alanında da bu durum söz konusudur. Eğitim-öğretimle ilgili bilinen atasözü “eti senin kemiği benim” dönemi çoktan bitmiş durumda denilebilir. Öte yandan iletişim sektörünün eğitim dünyasına kazandırmış olduğu imkanlar, anne- babaya, öğretmenler kadar sorumluluk getirmektedir. Bu sorumluluk ile yetişkinlerin eğitiminin önemi de göz önünde bulundurulmalıdır. Bu çalışmanın amacı, eğitimin çerçevesini çizmek ve neler olduğunu vurgulamaktır.

2. LİTERATÜR TARAMASI

Eğitim-öğretim sözcüğüyle literatür taraması yapıldığında binlerce çalışmayla karşılaşılmaktadır. Ancak eğitimin amaçları açısından imkanların elverdiği ölçüde yapılan tarama sonucunda, çok da doğrudan bir çalışmaya rastlanılmamıştır. Ancak genel olarak belirlenmiş olan kaynaklar; İsmail Aytaç, (1972- 2009) Avrupa Eğitim Tarihi, Yahya Akyüz, (2015. 27. Baskı) Türk Eğitim Tarihi, Yeni Türkiye Türk Eğitimi Özel Sayısı (2014. I, II), Yusuf Has Hacib (1999) Kutadgu Bilig, Manguel, A. (2013) Okumanın Tarihi, P. Burke (2004) Bilginin Toplumsal Tarihi, Seçilmiş Atasözleri. Araştırma konusuyla ilgili, Cenap Şahabettin, eğitim- öğretimi, şöyle ifade etmektedir: “Bir kitap ilmi vardır, bir de hayat ilmi. Olgun insan, her ikisine de vakıf olana derim.” (Yılmaz, 2019, 22), (vakıf: bilen, farkında olan. Türkçe Sözlük, 2023. 3462).

3. METODOLOJİ

Bu çalışmada fenomenolojik bir yaklaşım benimsenmiş ve nitel bir yöntem izlenmiştir. Kaynak, gönüllülük esasına göre yüz yüze görüşmeler (Eğitim-öğretimle ilgili daha önce başlatılmış ve halen devam eden araştırmalar) sonucu, belirlemeler ve genel değerlendirme, karşılaştırma. 1. Bir disiplin çerçevesinde yürütülen eğitim- öğretim, 2. Bireysel çabalarla yürütülen eğitim-öğretim, 3. Kişiye ve koşullara göre değişen bireysel eğitim-öğretim olmak üzere üç başlıkta ele alınmıştır.

4. BULGULAR VE DEĞERLENDİRME

4.1. Bir Disiplin Çerçevesinde Yürütülen Eğitim- öğretim

Anaokulu, ilkokul, ortaokul, lise ve üniversite. Kişiliğin gelişmesi ve yaşamın olumlu ve olumsuzluklarına, gelecek adına mücadele etmede olmazsa olmaz eğitim süreci. Gönüllülük esasına dayanılarak, bireylere şu soru yöneltildi. “Bugün itibarıyla, aldığınız eğitimi yeterli buluyor musunuz? Bu durumu nasıl açıklarsınız? Sorusuna verilen cevaplar beş başlık altında toplanmıştır.

4.1.1. İstedğim eğitimi aldım. Yalnız iş imkanı kısıtlı olduğundan, şu anda görev yaptığım işimi tercih etmek zorunda kaldım. Sizce yeterli mi? hayır. Neden? Çünkü, geçmişe nazaran bugün benim aldığım eğitimi almış binlerce iş adayı var. İşimi daha verimli yapabilmem için yeni yetenekler arayışı içindeyim, ayrıca daha iyi koşullarda yaşamımı sürdürebilmem için

10th International CEO Communication, Economics, Organization & Social Sciences Congress üniversite sonrası aldığım bir eğitimle edindiğim yeni mesleğimle ilgili iş görüşmelerine gitmekteyim.

- Eğitim dalında mezun çok. İş imkanı kısıtlı. Bir başka iş tercihi. Yeni yetenek arayışı.

4.1.2. Zorunlu eğitim sonrası...Üniversitenin...bölümünden mezun oldum. İş imkanı yok denecek kadar az. Kişisel gelişimim için aldığım eğitimden memnunum. Yanlış benimle aynı eğitimi almış binlerce kişi var. Ancak bugün benim yaşamımı idame ettirmek için bana bir kazanç kapısı imkanı sağlamıyor. Bu nedenle baba mesleğini sürdürüyorum.

-Eğitim dalında mezun çok. İş alanı yok denecek kadar az. Tercih baba mesleği.

4.1.3. İstedğim eğitimi aldım. Hem kişisel gelişimimi tamamladım, hem de yaşamımı idamı ettirebileceğim bir meslek edindim. Mesleğimle ilgili bir işte çalışıyorum. Yanlış yeterli bulmuyorum. Yeni bir yetenek edinmek için kursa gidiyorum. Neden? Daha yüksek ücretli bir işte çalışmak için.

-Mezun olduğu eğitim dalında mesleğini yapıyor. Yeterli görmüyor.

4.1.4. İstedğim eğitimi aldım. Hem kişisel gelişimimi tamamladım, hem de yaşamımı idamı ettirebileceğim bir meslek edindim. Ancak şimdilik işsizim. Başvurularımda deneyim istiyorlar.(“Dinle, deneyimli ihtiyar ne der; deneyimli ihtiyarların sözü sözlerin mayasıdır.” Kutadgu Bilig 1: 63. Bugün ise gençlerden deneyim isteniyor). Bu durumu ortadan kaldırmak için yeni yetenek kazanmak için kursa gidiyorum.

-Eğitim ve meslek eğitimini tamamlamış. İşsiz. Deneyim isteniyor.

4.1.5. Zorunlu eğitim sonrası...Üniversitesinden iyi derece ile mezun oldum. Yalnız hala işsizim. Başvurularımda, deneyim isteniyor. Zamanımı değerlendirmek adına dil kursuna gidiyorum.

-Eğitimini iyi derece ile tamamlamış. İşsiz. Başvurularında deneyim isteniyor. Dil kursuna gidiyor.

4.2. Bireysel Çabalarla Yürütülen Eğitim- Öğretim

Özel yetenek gerektirecek kurslara katılmak, yaşamı kolaylaştıracak yeni yetenekler kazanmak, yeni bir dil öğrenmek, yaratıcılık kurslarına katılmak, sorunların üstesinden gelebilmek için yeni bilgiler edinmek, kişilik geliştiren kurslara katılmak,

Yine gönüllülük esasına dayanılarak, bireylere yukarıda kaydedilmiş olan bireysel çabalarla edinilen öğrenmelerle ilgili ne düşünüyorsunuz? Sorusu yöneltildi.

4.2.1. İşimde daha iyi pozisyonlara gelmek için gerekli olan ikinci bir dil öğrenmem gerekiyor. Bu nedenle işimden arta kalan zamanda dil kursuna gidiyorum.

Mesleği gereği ikinci dil öğrenme.

4.2.2. Üniversite mezunuyum. İşsizim.

Yeni bir yetenek edinmek için kursa gidiyorum.

4.2.3. Emekliyim. Resim kursuna gidiyorum. Hobi olarak başladım. Hem resim yapma yeteneğimi geliştiriyorum, hem de az da olsa tablolarımı satarak gelir elde etmeye çalışıyorum.

4.2.4. Öğrenciyim, ailemin desteğiyle, bilgisayar kursuna gidiyorum. Çünkü mezuniyet sonrası iş yaşamımı kolaylaştıracağına inanıyorum.

-Öğrenci. Aile desteği vurgulanıyor.Bilgisayar öğrenme.

4.2.5. Ev hanımıyım. Benim ve aile bireylerimin giyim- kuşama dair temel ihtiyaçlarını daha ucuza mal edebilmem için yaratıcılık ve dikiş kursuna gidiyorum.

- Yeni yetenek kazanma.

4.3. Kişiyeye ve Koşullara Göre Değişen Bireysel Eğitim-Öğretim

Bu kez yine gönüllülük esasına göre bireylere şu soru yöneltildi. Teknolojik gelişmelere paralel olarak gelişen hizmet sektörünün gün ve gün değişen model, boyut, içerik ve bu gibi özellikleriyle üretimi sürdürülen ürün(televizyon, bilgisayar, telefon ve bu gibi) çeşitlerinden satın aldıklarınızdan, ödediğiniz bedelin karşılığında yararlandığınıza inanıyor musunuz?

4.3.1. Genel görüş hayır. Çünkü tam onu nasıl daha iyi kullanacağımı öğrendiğimde yeni bir modeli çıkıyor, bu kez onu tercih ediyorum, tam onu daha verimli nasıl kullanabileceğimi öğreniyorum, bu kez yine yeni modeli çıkıyor. Bu durum kısır bir döngü olarak sürüp gidiyor. Hiç birinden, ödenen bedeli karşılayacak hizmet alındığı söylenemez.

-Ödenen bedele karşın daha düşük yararlanma.

4.3.2. Hayır. Bu konuda tüketicileri bilgilendirecek kurslar olsa katılırım.

-Ödenen bedele karşı, yararlanmada bilgi eksikliği.

4.3.3. İletişim sektöründe çalışıyorum. Yanlış satın aldığım her üründen tam yararlandığımı söylenemez.

-Alınan üründen yararlanamamanın nedeni bilgi eksikliği.

4.3.4. Hayır. Çünkü tam anlamıyla nasıl yararlanabileceğimi öğrenmiş değilim.

-Yararlanamama nedeni bilgi eksikliği.

4.3.5. Evet. Çünkü belirli bedel ödeyerek aldığım her hizmet hakkında ikna edilene kadar bilgi sahibi oluyorum.

- Bedeli ödenerek alınan hizmetten uzun vade yararlanmanın yolu bilgi.

5. TARTIŞMA

Yukarıda belirlenmiş olan bulgular ve değerlendirme gözden geçirildiğinde, şu soruların akla gelebileceği düşünülebilir mi?

Sosyal refahı yakalamış ya da yakalamaya çalışanların gün ve gün hizmet satın alma güçlerinin zorlaştığı günümüz dünyasında, özel veya resmi eğitim kurumlarının gelecek adına bireylerin her türlü engelin üstesinden gelebilecek donanıma sahip olmalarını sağlayacak müfredata sahipler mi? Bireylerin yeteneklerini gerektiğinde gün yüzüne çıkarabilecekleri bir mevcut müfredatlarının dışında bir eğitim-öğretim uygulamaları var mı? Hangi eğitim dalı olursa olsun,

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eđitim-öđretim süreçleri boyunca, alanlarıyla ilgili deneyim kazanmalarına ilişkin bir uygulama imkanları var mı?

Ayrıca, bir başka husus, hızına ayak uydurulamayacak hale gelen teknolojik gelişmeler, bireyin sosyal refahını kolaylaştırdığı gibi, sürdürülebilir kılmasını zorlaştırdığından, bu duruma ilişkin bireyleri doğrudan bilgilendirecek bir uygulamanın yaşama geçirilip geçirilemeyeceđi?

6. ÖNERİLER

6.1. Bugün uygulamada olan çocukların eğitim- öğretim sisteminin amaçlarının, teknolojik gelişmelere paralel olarak deđiştirilmesi gerektiđi söylenebilir,

6.2. Hangi alanda mezun olunursa olunsun, mezuniyet sonrası bireyin kendini geliştirebilmesi ve teknolojik gelişmeleri takip ederek kullanım yeterliliđine sahip olması önerilebilir,

6.3. Mezuniyet sonrası ister mesleki ister farklı bir iş kolunda çalışılsın, kişinin yeni yetenekler ve donanımlarla kendini geliştirmesinin zorunlu bir hale geldiđi söylenebilir,

6.4. Mezuniyet sonrası deneyiminiz var mı? sorusuyla karşılaşmamak için, eğitim süresinde ileride yaşamı idame ettirmek için yapılacak işi planlayıp, deneyim kazanmak izlenecek en akıllı yol denilebilir,

6.5. Özellikle çok sayıda mezun veren eğitim kurumlarından mezun olmuş olanların, daha iyi iş imkânı olan bir başka mesleki eğitim yapmayı hedeflemeleri zorunlu hale gelmiş denilebilir,

6.6. Özel yaşamda ve iş sahasında teknolojik imkanlardan yararlanırken hem alınacak hizmet hem de bu hizmetin bedeli hakkında çok iyi bilgi edinilmesi ihmal edilmemeli denilebilir.

(“Sen bana yanılmayan bir kimse söyleyebilir misin; ben sana yanılan binlerce insan göstereyim.” Kutadgu Bilig .1999: 25).

SONUÇ

Öncelikle insanođlunun başlangıçtan bugüne başlıca mücadelesi olan yaşamını sürdürebilmesi için temel olan öğrenmeleri, bugün eğitim- öğretiminde temel amacı denilebilir. Bugünün geçmişten farkı, ilkleri yaşayan insanođlu, hızına yetişilemeyecek hale gelen teknolojik gelişmeleri takip edip, özel ve iş yaşamında kullanabilme yeterliliđine sahip olma mücadelesi vermesidir. Bu durum bireye bilgiye erişimi, yaşam boyu öğrenmeyi zorunlu kılmaktadır. Sonuç olarak, eğitim- öğretime bir çerçeve çizme düşünülürse; kişisel gelişim ve mesleki eğitimi içine alan anaokulundan başlayıp, üniversitede son bulan eğitim sürecinin amacının; bireyin yaşamının her evresine cevap verecek nitelikte ve donanımda olması gerekmektedir. Çünkü günümüz yaşam koşulları bunu zorunlu kılmaktadır denilebilir.

KAYNAKÇA

- (1) Akyüz, Yahya, (2008, 2015) Türk Eğitim Tarihi. 27.Baskı. Ankara.
- (2) Aytaç, K, (1972, 2009) Avrupa Eğitim Tarihi, Antik Çađdan 19.Yüzyılın Sonlarına Kadar, Dil ve Tarih Coğrafya Fakültesi Yayını.
- (3) Burke, P, (2004) Bilginin Toplumsal Tarihi, çev. Tuncay. M, İstanbul, M. Tarih Vakfı, Yurt Yayını.
- (4) Coşkun, Y. D, (2009) “Üniversite Öğrencilerinin Yaşam Boyu Öğrenme Eğilimlerinin Bazı Deđişken Açısından İncelenmesi,” Basılmamış Doktora Tezi, Ankara, Hacettepe Üniversitesi, Sosyal Bilimler Enstitüsü.
- (5) Davis James C, (2071.13.Baskı) Taş Devrinde Bugüne Tarihimiz İnsanın Hikayesi, Çev. Barış Bıçakçı, İstanbul, Türkiye İş Bankası Yayınları.



10th International CEO Communication, Economics, Organization & Social Sciences Congress

- (6) Güneri, Mukadder, (2019) “Information Education Training And Digital Environment,” Recognition And Appreciation Of Research Contributions To International Conference On Evolving Trends In Interdisciplinary Research & Practices 19-23 Manhattan, New York.
- (7) Güneri, Mukadder, (23-24 Kasım 2019) “Türk Eğitim Tarihi ve Başöğretmen,” Uluslararası 24 Kasım Başöğretmen Eğitim ve Yenilikçi Bilimler Sempozyumu, Ankara.
- (8) Güneri, Mukadder, (2-3 Marc 2018) “life And Education,” 14. International Conference On Social Science, Goethe University, Frankfurt-Germany.
- (9) Güneri, Mukadder, (06-07 October 2017) “Innovation and Sustainability” 13. International Conference On Social Sciences, Wien University, Vienna. 2017.
- (10) Güneri, Mukadder, (20-21 January 2017) “Why Life Learning” 11. International Conference On Social Sciences, Aalto University, Helsinki-Finland.
- (11) Güneri, Mukadder, (31 Mayıs- 02 Haziran 2012) “Eğitim Ve Yaşam”, Eğitim Odağında Artvin Sempozyumu, Artvin Çoruh Üniversitesi, Artvin.
- (12) Güneri, Mukadder, (Ankara 29 Nisan-1 Mayıs 2009) Uluslararası Karşılaştırmalı Edebiyat, Edebiyat ve Dil Eğitimi Kongresi. “Atasözü ve Deyimlerin Eğitici ve Öğretici Yönü” adlı bildiri, Gazi Üniversitesi, Ankara.
- (13) Knapper, C, Cropley. A, (2000) Lifelong Learning in Higher Education, London.
- (14) Manguel, A, (2013) Okumanın Tarihi, çev. F. Eloğlu, İstanbul, Yapı Kredi Yayınları.
- (15) Şahabettin, Cenap, (2019) Tiryaki Sözlük, Haz. Bahar Yılmaz, Ankara.
- (16) Şişman, M, (2002) Eğitimde Mükemmellik Arayışları, Pegem Yayınları, Ankara.
- (17) (2023) Türkçe Sözlük, Atatürk Kültür Dil ve Tarih Yüksek Kurumu Türk Dil Kurumu Yayınları, Ankara.
- (18) (2014), Türk Eğitimi Özel Sayısı I.II, Yeni Türkiye Stratejik Araştırma Merkezi yayını, Ankara.
- (19) Yusuf Has Hacib, (1999), Kutadgu Bilig, 4. Baskı, Ankara, Çeviren: Reşit Rahmeti Arat, Atatürk Kültür Dil ve Tarih Yüksek Kurumu Türk Dil Kurumu.
- (20) <http://line.fi/en/article/researc/220132/three-perspectives-on-active-citizenship-in-lifelong-and-life-wide-education-research>.



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Restoration of the Silk Road, China's One Road One Generation Project
and the Importance of the Road for Nakhchivan

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ABSTRACT

According to Montesquieu, "Trade is the greatest service to the state. The history of trade is the history of human communication. Of course, it is carried out with the spirit of trade; with care, modesty, diligence, common sense, security and discipline." As Montesquieu pointed out, trade is like a self-developing ecosystem network that causes human beings to socialize and cultures to merge. As it is known, trade has been very important for human existence from the past to the present and continues to be so. In ancient times, merchants used safe caravan routes to carry exports and imports, one of which was the Silk Road. The Silk Road was an important trade route between China and Europe. In our age, this road is one of the main roads. While this road is beneficial to the states in the region, its main advantage is to provide profit to China. In order to revive the Silk Road, China provides a large amount of financial resources to the countries located on the route for the repair of the road. There is a geopolitical interest as well as a commercial interest in the implementation of this project. Since the historical Silk Road is of great importance and advantage to the countries located on its route, the surrounding states should contribute to the restoration of the section passing through their own lands.

Keywords: Nakhchivan, Silk road, Trade, China, Project, Modernity

The road network has an important place in the development of the trade cycle. Since ancient times, land roads have been considered the main route. , sea transport began to develop along with this route. In later periods, with the invention of the steam engine, coal-fired devices increased rapidly, train transport became the basis of land transport, and railways began to play an important role in the transportation of heavy loads. Later, in the history of the new era, thanks to the invention of the airplane and the development of air transport, there was a transition from subjective development to objective development in transport.

If we were to evaluate this development in terms of stages, we should state that stage A is land route, stage B is sea route, and stage C is air route. As a result, our stage A provides more advantages than our B and C phases. When we consider the security dimension, stage A is safer than other areas in transportation and due to its high cargo transportation capacity, it occupies a large place in the transportation of goods from one region to another. Former Chancellor of Germany, Otto von Bismarck, was aware of the importance of the highway and during his term, Germany expanded its railway transportation from Berlin to Baghdad. As for the Silk Road, which constitutes our stage A, the length of the Silk Road is 6,437 km according to some sources and over 8,000 km according to some sources.

Today, this road, the world's first \$1 trillion infrastructure project, attracts the world's attention due to its width and transformation potential. In May 2017, Chinese President Xi Jinping announced the "One Belt, One Road" model to the world. The international focus is on rail travel from China to London, roads and pipelines across Asia, and rapid growth trajectories. In China, the program is presented as "a major effort that will benefit the nations of the world". This mega investment and infrastructure program will significantly affect the countries it passes through. However, the sovereignty issue, costs and liabilities in some countries where the road will pass have not yet been resolved. In ancient times, the main product traded on the Silk Road was silk, and "merchants would buy raw or processed silk from the Chinese and take it to the Roman Empire for use. However, this was not the only product. For example, in addition to silk, handmade porcelain plates, vases and various handicrafts were also imported to China.

1. History of the Silk Road

Central Asia is considered the main region of the Silk Roads, Alexander the Great died here in his quest for empire, Italian traveler Marco Polo sought the Silk Roads to Venice, the Silk Roads between China and Venice. Western empires used Central Asia only as transit stations along the route. The Dzungar Gate on the China-Kazakhstan border and the road from Kashgar to Naryn in Kyrgyzstan, the Torugart Pass in the Tien Shan and Pamir Mountains were the transit points of caravans (Sternberg, T et al. 2017:2-3).

The famous Italian traveler Marco Polo (1254-1324) traveled to India and China. Polo was the first Venetian and European traveler to provide information about Eastern cultures. Before Marco Polo, his father Niccolò and uncle Maffeo had traveled to China for trade purposes. In 1254, the Polo brothers went from Venice to Constantinople, then to Southern Crimea, and from there they proceeded southeastward over the Volga and Ural rivers to Urgench, Uzbekistan. From this city, they went to Bukhara, Samarkand and Urumchi, respectively and to the residence of the great Mongol Khan Kubilay of Khanbalik, located north

10th International CEO Communication, Economics, Organization & Social Sciences Congress of the current city of Beijing. Marco Polo also passed through Tabriz, one of the ancient cities of Azerbaijan, with his uncle and father during his trip (Osmanov 1970: 37). The meaning of the word silk; It is pronounced as "si/sí" in Chinese and is called "San gu" which means "third aunt". It is also known as one of the products blessed by the goddess of production. There is evidence that silk production reached the 2nd millennium BC. In Anyang, one of the capitals of the Shang dynasty, there was a bronze axe decorated with handles wrapped in silk; this is a clear example of how important silk was at the center of Chinese culture. The name "silk" was first recorded in Western sources in the 4th century BC (Şahin, 2020: 74). The Silk Road refers to a network of routes that merchants used for over 1,500 years, starting with the Han Dynasty in China beginning trade in 130 BC. However, this continued until 1453, when the Ottoman Empire severed trade ties with the West. The German geographer and traveler Ferdinand von Richthofen first used the term "Silk Road" in 1877 to describe a well-traveled route of goods between Europe and East Asia. The term also serves as a metaphor for the exchange of goods and ideas between different cultures. Although the trade network is commonly referred to as the Silk Road, some historians prefer the term Silk Roads because it better reflects the many routes that merchants followed (Nationalgeographic).

According to Tamara Chin: The "Silk Road" begins with Indo-European migrations four thousand years ago. The expansion of the Russian and Qing empires into Central Asia in the 17th century emphasizes that the Silk Road recreated the Central Eurasian pastoral (Chin, 2013: 105). Brought to the West from China, silk initially formed the basis of aristocratic families' clothing. Just as with the discovery of the New World, tobacco was first used by elite families, and these goods were later introduced to the lower class. "It is difficult to overstate the historical significance of the Silk Road. Beliefs and ideas spread like commodities along the Silk Road. Settlements along the route became multicultural cities. Sharing of knowledge led to new technologies and innovations that would change the world. Horses brought to China increased the power of the Mongol Empire, and gunpowder from China changed the nature of warfare in Europe and beyond. Diseases also spread along the Silk Road. Some studies suggest that the Black Death, which devastated Europe in the late 1340s AD, probably spread from Asia along the Silk Road. The Age of Exploration led to faster routes between East and West, but parts of the Silk Road remained critical routes between different cultures" (Nationalgeographic). Part of the Silk Road is now a UNESCO World Heritage Site.

2. Political Dimension of the Road

The further development of the Silk Road will reconnect Europe to Asia and Asia to Europe. However, it is also necessary to consider the possibility that China will put pressure on the countries along the route. This road, once under the influence of Chinese hegemony, later passed into Turkish and Mongolian hegemony. The Turks actively used this route. As a result of the increase in geographical discoveries, sea trade developed for a while and was replaced by land routes. Sea routes were actively used mainly by Europe. In fact, the Western world was forced to use the sea route. Because the Aegean Sea turned into a lake for the Ottoman Empire, It forced European states to open up to new discoveries. As a result of the strengthening of colonialism in Europe, seafaring began to develop. However, the fact that the use of sea routes

10th International CEO Communication, Economics, Organization & Social Sciences Congress was not suitable in terms of economy and security caused the Silk Road to regain its importance over time.

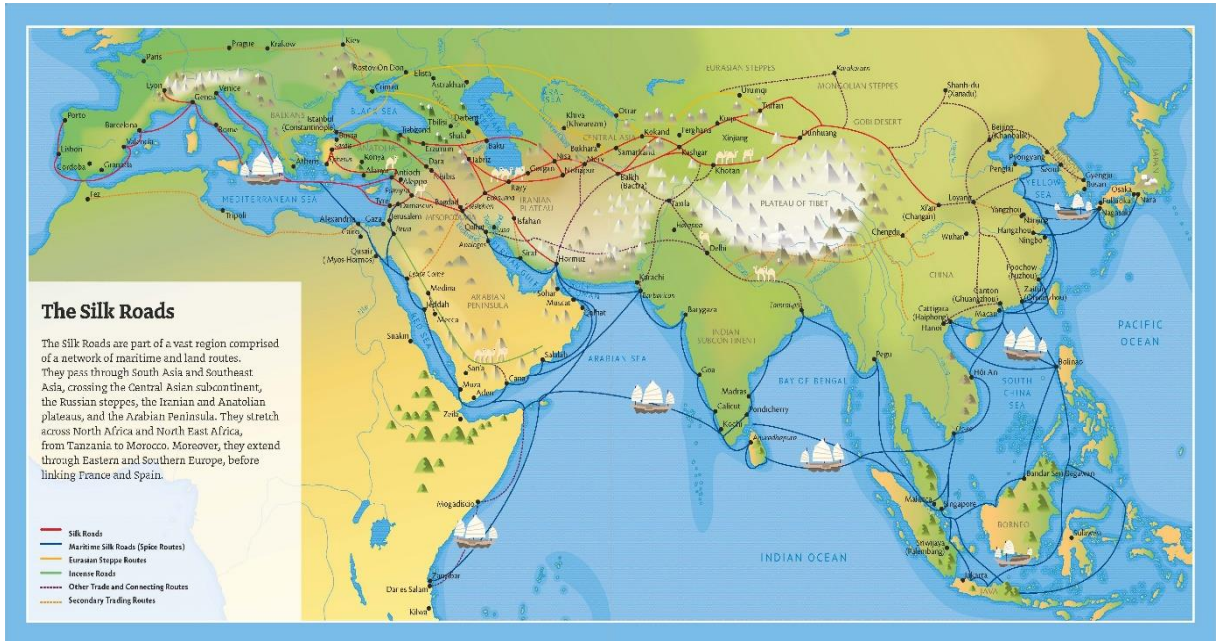


Figure 1. Trade route network (Unesco)

The route of the Silk Roads is clearly marked on the map published on UNESCO's official website. When looked at closely, the Silk Road has a short commercial distance between China and Europe, as well as the ability to deliver both imports and exports to the other side in a short time and has financial advantages. The fact that these roads pass through Azerbaijan is also of great interest to the country. The revival of the Silk Road may have caused many projects to be put forward by countries. Because the Zangezur corridor and the Southern corridor are examples of this. Today, the Zangezur corridor has an important place for the region. Because this road also serves the interests of the people of the region, but it has caused animism disorder in some of Iran's administrative levels, which defines itself as the unprofitable side.

It is estimated that with the start of operation of the Zangezur Corridor, the surrounding cities will develop financially and socially. The opening of this corridor will serve not only the interests of Azerbaijan but also the interests of the entire region. According to Malysheva, the Southern corridor will become an important route from Russia to Azerbaijan and through Iran to the Persian Gulf, and this corridor has become one of the most important corridors for Russia in terms of both overcoming international isolation and organizing import-export operations. This corridor will provide Russia with the support to overcome Western sanctions and the activities of Russian companies Moscow is in talks with Azerbaijan and Iran to support the implementation of the international transport corridor. However, the political crisis that has darkened Iran-Azerbaijan relations since January 2023 is also not in Russia's interests (Malysheva, 2023: 93). The Zangezur corridor project and the Southern corridor project are projects for the benefit of the surrounding states.

It would be illogical to think that the Silk Road is just a straight line, because this road is like a plant with green branches, and this road will also benefit Iran, because the complete

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opening of Iran's Caucasus road will create commercial profit for Iran. The advantage in terms of commercial relations with Iran also means increasing commercial relations with the states of Russia's Middle East region. Russia, Turkey, and Azerbaijan understand the importance of this road well. However, Iran's suspicions cause suspicion and pressure on the Armenians. Armenia also needs to understand that remaining closed in the region creates an economic crisis within itself.

3.The Importance of Azerbaijan's Location on the Silk Road

Azerbaijan has developed trade relations with Asian and European countries since ancient times. European countries have been interested in the South Caucasus since the Middle Ages. For example: Yagub Mahmudov has expressed this very clearly in his work "Let Travelers Come to Azerbaijan". The work contains various information about the arrival of Italian and British travelers to Azerbaijan. Various goods were exported from Tabriz, Barda, Ardabil, Ganja, Maragha, Nakhchivan, Sheki, Shamakhi and other cities of Azerbaijan to the surrounding countries. Among the main exported goods; various silk, wool, linen fabrics, carpets, precious stones, curtains, coatings, jewelry, pottery, copper, saffron, dried fruits, cattle, etc. According to the information of al-Masudi, one of the famous travelers of Arabia, in the first half of the 9th century, white oil was exported from the city of Baku to various places (Mahmudov, 1996: 55).

Trade in Azerbaijan developed further during the Safavid Empire. An example of this is the visit of the British delegation to Azerbaijan. Upon the order of Queen Elizabeth Tudor of England, Anthony Jenkinson and his team left London on the British ship "Swallow" to go to the Safavid palace. In 1561, the Swallow ship approached the Caspian shores. The British aimed to sell British goods in Azerbaijan, as well as domestic goods in England. England's trade relations with Azerbaijan were also profitable for them. During the reign of Elizabeth Tudor alone (1558-1603), six trade expeditions came. High-quality raw silk, zarkhara, bafta and other valuable silk fabrics, jewelry, spices, etc. were sold in the London market. Moscow, which began to understand this situation, further expanded its trade relations with Azerbaijan (Mahmudov, 1970: 11). The passage of the Silk Road through Azerbaijan contributed to the development of the trade cycle in Azerbaijan.

In our age, the Silk Road has a multi-directional pipeline network with energy transported from the Caspian Sea basin due to its location on a plain extending from east to west. As a result of the revival of the Silk Road, the prosperity of the region will be contributed in the near future. At the beginning of the 15th century, geographers, travelers and researchers wrote about the petroleum solution that emerged on the surface of the Absheron region in their works. This solution was used to obtain the "Greek fire", which was of commercial importance. Caravans equipped by Gidyan merchants carried petroleum products to all parts of the Caucasus, including the Punjab (Faygl, 2009: 173).

4.Nakhchivan on the Silk Road

B.C. Nakhchivan city was ruled by "marzbans" of Sassanid Empire in the early Middle Ages. Since the beginning Nakhchivan served as a bridge between Eastern and Western states located on the caravan routes. The caravan route passed from Europe to Turkish lands, from Turkey to

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Nakhchivan, from there to Iran, India, Central Asian cities, China and other countries. During this period Nakhchivan is considered one of the most beautiful and famous cities in the world. During the first movement of the armies of Arab caliphate (VII-VIII centuries), Nakhchivan, like many other cities, was destroyed as a result of occupation and lost its former social and economic role. Later, Arab emirs restored some cities, including Nakhchivan. The main reason for this was the great material and cultural importance of the revived cities. As a result of the increase in production from the middle of the 19th century, Azerbaijan entered a period of economic growth. This rise also had an impact on the city of Nakhchivan (Göyüsoy, 1986: 129).

Nakhchivan was one of the economic, cultural and social centers during the Seljuk and Eldeniz rule. During the reign of Atabey Shemseddin Ildeniz, Nakhchivan became the capital of the Ildeniz people. This period was the period when the city was at its peak. Nakhchivan, which was a very important military-strategic station on the Araz coast of Azerbaijan, was surrounded by strong fortress walls. It was a great center of handicrafts. The rare pieces made by Nakhchivan craftsmen, all kinds of kitchenware, especially bowls, bowls, iron boards, gold, silver, copper, handicrafts and other products not only met the domestic demand but were also exported to foreign countries (Mahmudov, 1996: 51).

As we observe, the city of Nakhchivan has been one of the trade centers since the beginning. Nakhchivan still maintains its importance today. It is worth mentioning that the fact that the city of Nakhchivan is located in a strategic region has attracted great interest and that the name of the city of Nakhchivan is frequently heard in the foreign press. The fact that Nakhchivan is referred to as the "Gate of the Turkish World" in the works of many scientists of the Turkish states has revealed the importance of the region once again. The restoration of the Silk Road, which China wants to revive, together with the Zangezur corridor will benefit the people of the region and will contribute economically and socially to the city of Nakhchivan in Azerbaijan. It is certain that the further development of the city will increase its level of prosperity to even higher levels. As it is said, a planned job will bring more profit.

CONCLUSION

If the development of the industry in the city of Naxchivan is given more momentum in the near future, the new generation of caravans passing through the city and marketing the goods imported here to other countries will have a greater impact on the development of Naxchivan. is. For this, ten-year development plans should be prepared in Naxchivan, and the industry, which develops step by step every year, will greatly contribute to the creation of new workplaces. Just as the reason for China's revival of the Silk Road stems from the development of its industry, the development of our city will also stem from our industry. Of course, it is a fact that the Silk Road will also have great importance here. The Silk Road has become one of the modern subjects in the recent era. This road extending from Asia to Europe It is one of the largest highways in the world. If more contributions are made to the development of industry in Nakhchivan in a short time, the new caravan route passing through the city will also affect the development of Nakhchivan by marketing imported goods to other countries.

For this, 10-year growth plans should be prepared in Nakhchivan and the industry that develops step by step every year will make a great contribution to the creation of new employment. Just as the revival of China's Silk Road is due to the development of its industry,



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the development of our city will also be due to the development of our industry. Of course, it is also a fact that the Silk Road will be of great importance here.

SOURCE

- Chin, T. (2013). "Invention of the Silk Road 1877". The University of Chicago Press, 40(1) 194-219.
- Fayql, E.(2009). "İpek Yolu Üzərindən Odlar Yurdu". Azərtac.
- Göyüşov, R. (1986). "Azərbaycan Arxeologiyası". İşiq, Bakı.
- Mahmudov, Y (1996). "Azərbaycan Tarixi İntibah Dövrü". Altay Dünyası, Bakı.
- Mahmudov, Y. (1980). "Odlar Yurduna Səyahət". Gənclik, Bakı.
- Monteskye, B. (2021). "Kanunların Ruhu Üzerine". İş Bankası, İstanbul.
- Osmanov, O. (1970). "Məşhur Səyyahlar və Coğrafiyaçılar". Azərbaycan Dövlət Nəşriyyatı, Bakı.
- Sternberg, T. Ahearn, A and McConnell, F. (2017). Central Asian Characteristics`on China`s New Silk Road: The Role of Landscape and the Politics of Infrastructure, Land, 6(3): 1-16.
- Şahin, T.E. (2020). "İpek yolu: tarihsel keçmişi, kultüri ve türk dünyası için önemi". Tarih Araştırmalar Dergisi, 39(67):71-97.
- Yılmaz, E. (2017). "İpek Yolu Hakkında Kısa Bir Değerlendirme", e-Şarkiyat İlmi Araştırmalar Dergisi, 9(2):672-683.
- <https://education.nationalgeographic.org/resource/silk-road/>
- <https://en.unesco.org/silkroad/about-silk-roads>



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**Endüstri 4.0 ile Engelli Girişimciliğinde Yeni Ufuklar:
Teknolojik Fırsatlar ve Katılım Stratejileri**

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ÖZET

Araştırma Türkiye’de Endüstri 4.0’ın sunduğu teknolojik fırsatlar ve katılım stratejilerinin engelli girişimciliği üzerindeki etkilerini incelemeyi amaçlamaktadır. Engelli bireylerin iş hayatında karşılaştıkları olumsuz durumlar göz önünde bulundurularak, girişimcilik faaliyetlerinin, engelli bireyler için bir alternatif yol olabileceği vurgulanmaktadır. Araştırma, Endüstri 4.0 teknolojilerinin (dijital işler, uzaktan çalışma, sanal ve artırılmış gerçeklik, 3D yazıcılar gibi) engelli bireyler için sunduğu fırsatların, girişimcilik sürecinde karşılaşılan zorlukları aşmada nasıl etkili olabileceğini ve sürdürülebilir iş modelleri oluşturulmasına nasıl katkı sağlayabileceğini tartışmaktadır. Bu bağlamda, engelli bireylerin iş dünyasına katılımını artırmaya yönelik stratejik yaklaşımlar geliştirilmiştir. Yöntem olarak, Türkiye’de engelli girişimciliği ile ilgili yazılmış Türkçe makaleler taranmış ve bu makaleler içerik analizi yöntemiyle incelenmiştir. Araştırma, hem akademik literatüre yenilikçi bir katkı sunmayı hem de engelli girişimciliği için uygulanabilir stratejiler geliştirmeyi hedeflemektedir.

Anahtar Kelimeler: Endüstri 4.0, Engelli Girişimciliği, Sürdürülebilir Kalkınma, Katılım Stratejileri, İş Modeli

New Horizons for Disabled Entrepreneurship by Industry 4.0: Technological Opportunities and Participation Strategies

ABSTRACT

The study aims to examine the impact of technological opportunities and participation strategies provided by Industry 4.0 on disabled entrepreneurship in Turkey. Considering the negative circumstances disabled individuals face in the labor market, the research emphasizes that entrepreneurship may be an alternative path for them. The study discusses how Industry 4.0 technologies (such as digital jobs, remote work, virtual and augmented reality, 3D printers) may provide opportunities to overcome the challenges encountered in the entrepreneurial process and contribute to the development of sustainable business models. In this context, strategic approaches to increase the participation of disabled individuals in the business world are developed. As for the methodology, Turkish-language articles on disabled entrepreneurship in Turkey were reviewed and analyzed through content analysis. The study aims to make an innovative contribution to the academic literature and propose actionable strategies for disabled entrepreneurship.

Keywords: Industry 4.0, Disabled Entrepreneurship, Sustainable Development, Participation Strategies, Business Model

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Introduction

Disability has been perceived in various ways as a societal phenomenon throughout history. Since the mid-19th century, with the effects of industrialization, disability was explained through the medical model, and people with disabilities were seen as dysfunctional, weak, and dependent on care, often excluded from society (Öztürk, 2014: 15-17). After the human rights movements in the United States and activist developments in the United Kingdom in the 1960s, the social model of disability emerged. According to the social model, disability is not caused by individuals' physical deficiencies but by barriers created by society. Thus, the understanding that disability is an "individual problem" in the medical model began to be replaced by the social model's view of disability as a "situation of exclusion by society" (Erten, 2019: 892).

Social inclusion policies implemented to ensure equal participation of people with disabilities in social life aim to solve the problems faced by disadvantaged groups. These policies aim to ensure that disadvantaged individuals are fully and equally included in social, political, and economic life (Çaha, 2016: 124). In Turkey, various policies and regulations have been implemented to increase the integration of people with disabilities into society. Employment for people with disabilities is generally based on policies such as paid job opportunities and the quota system. While quota systems are common globally, they have proven to be inadequate in solving employment problems. As a result, countries like the United States and the United Kingdom have moved away from the quota system and adopted alternative approaches. In this context, disabled entrepreneurship has emerged as an effective option in recent years to increase employment (Akögretmen & Orhan, 2020). In Turkey, the situation of people with disabilities in the workforce presents a similar picture. Existing data reveals that this issue cannot be solved solely by traditional methods such as the quota system.

Entrepreneurship is seen as an important element of economic development, contributing to increasing national income and raising societal welfare levels. Economic development includes not only economic progress but also social development. This process involves increasing income per capita and production, as well as enhancing cultural and social structures (Aydın, 2017: 377). In this context, the participation of people with disabilities in economic and social life through entrepreneurship offers a significant opportunity to improve their individual living standards and contribute to social development. In this way, disabled entrepreneurs will not only contribute economically but also play an active role in changing societal prejudices towards people with disabilities.

Thanks to the technologies provided by Industry 4.0, entrepreneurship creates an alternative employment area for people with disabilities by removing the physical and spatial limitations encountered in formal work arrangements. Additionally, thanks to digital infrastructures and internet access, people with disabilities can more easily access information from home, which can guide them towards various entrepreneurial activities. These processes create significant opportunities that allow people with disabilities to be productive in their home environment (Cooney, 2008). In summary, redesigning employment for people with disabilities has become a necessity in today's conditions. The use of the opportunities offered by Industry 4.0 in this context can yield positive results. Flexibilities unique to Industry 4.0, such as digitalization, automation, and remote work opportunities, will significantly increase the participation of people with disabilities in the workforce.

10th International CEO Communication, Economics, Organization & Social Sciences Congress Purpose of the Study

The study aims to investigate the impact of the technological opportunities and participation strategies offered by the Industry 4.0 era on disabled entrepreneurship in Turkey. In this context, the research explores the opportunities provided by Industry 4.0 components for enabling individuals with disabilities to play a more active role in the business world. Additionally, the study examines how the challenges faced by people with disabilities in entrepreneurship can be overcome through Industry 4.0 technologies and the creation of sustainable business models. Furthermore, strategic approaches to increase the participation of disabled entrepreneurs in the business world will be proposed.

Significance of the Study

The equal participation of people with disabilities in social and economic life is critical to achieving sustainable development goals. However, Turkey has not yet reached the expected level in this regard. The current national literature mainly focuses on disabled employment, while disabled entrepreneurship has not been adequately addressed. To fill this gap, the study focuses on the opportunities provided by Industry 4.0 technologies that will enable people with disabilities to become more actively and sustainably involved in the entrepreneurial ecosystem. In this context, the study will contribute innovatively to the academic literature and will also provide strategic recommendations for entrepreneurship actors.

Method

The research involved reviewing articles related to disabled entrepreneurship in Turkey. The criteria sampling method was chosen, which emphasizes selecting studies with specific characteristics related to the problem (Büyüköztürk et al., 2009). This method ensures that the research focuses exclusively on disabled entrepreneurship and the effects of Industry 4.0 technologies in Turkey, limiting it to articles that meet specific criteria. For this study, articles written in Turkish and published between September 2024 and November 2024, which could directly answer the research question, were evaluated. The selected articles were analyzed using content analysis methodology.

Theoretical Framework: Industry 4.0 and Disabled Entrepreneurship

The Industry 4.0 revolution, introduced at the 2011 Hannover Fair in Germany, refers to the integration of automated processes with technology. The aim of this transformation is to ensure the production of higher-quality goods and services with lower costs through more flexible, faster, and efficient systems (TÜSİAD, 2016). The Industry 4.0 process, which revolutionized industrial production, includes subcomponents such as cyber-physical systems, the Internet of Things (IoT), smart factories, digitization of services, cloud computing, big data, data science and mining, horizontal and vertical integration, artificial intelligence (AI), and cybersecurity. The digitization of industrial production through Industry 4.0 components has increased the new digital market processes, including data-driven consumers (Sarıç & Özutku, 2024: 143-150).

Among the key technologies of Industry 4.0 are the Internet of Things (IoT), cloud computing, big data, horizontal and vertical integration, augmented reality (AR), autonomous robots, cybersecurity, simulation, and additive manufacturing. The Internet of Things increases

10th International CEO Communication, Economics, Organization & Social Sciences Congress efficiency in production processes through data exchange via smart sensors, while cloud computing provides remote storage and processing of data. Big data enables the analysis of large volumes of data to transform them into meaningful insights. Horizontal and vertical integration regulates the interaction between an organization's internal and external stakeholders. Augmented reality facilitates the integration of digital and physical worlds, while autonomous robots perform tasks without human intervention. Cybersecurity ensures data protection, simulation models production processes in a virtual environment, and additive manufacturing enables customized production with 3D printing (Türkyılmaz, 2024: 157).

The Industry 4.0 era presents both opportunities and challenges. For instance, the advancement of digital technologies and the effects of globalization have created a competitive environment regarding the transition of physical documents to digital platforms. Today, communication among business owners, managers, and employees is largely conducted through internet-based networks. Digitalization is also a process of "adaptation and transformation." In this process, long-term strategies and projects aimed at change hold greater importance than short-term goals. Therefore, achieving success in the Industry 4.0 era is challenging and requires patience (Alkahlout, 2023: 784).

Entrepreneurship refers to the motivation and capacity of a person to identify and evaluate opportunities, creating economic success or value, either independently or within an organization. Leadership plays a more significant role than ownership here. It also involves creating innovative economic organizations to gain profits under uncertainty and risks (Doğan, 2010). Entrepreneurs contribute to production from a growth perspective, while they play more decisive roles in technology and social change from a development perspective. According to Schumpeter, development is related to the economy reaching a higher level through innovation, while growth refers to changes in economic data. Development theories focus on the issues of underdeveloped countries, while growth theories focus on developed economies (Şenturan, 2018; Kınay, 2006).

In entrepreneurship theories and research, disability is often overlooked. It is noteworthy that studies on disabled entrepreneurship in Turkey have only started in recent years. However, people with disabilities face specific barriers that require different policies in order to engage in and sustain entrepreneurship. Disabled entrepreneurship may be defined as the ability of a person to overcome additional barriers presented by society and achieve their envisioned projects to produce goods and services despite their disability.

Despite various policies implemented through legal regulations and government efforts, discrimination against people with disabilities in employment remains prevalent. For some people with disabilities who face discrimination in paid employment, self-employment may offer an alternative as a means to cope with discrimination in the labor market. Especially for individuals with high degrees of disability, entrepreneurship may emerge as the only viable option (Pagán, 2009).

The Definition of "Disability" in Turkey

There are various accepted definitions of disability worldwide. The World Disability Report defines disability as the negative impact faced by individuals with health problems such as cerebral palsy, down syndrome, or depression due to the interaction of personal and environmental factors, such as negative attitudes, inaccessible transportation and public

10th International CEO Communication, Economics, Organization & Social Sciences Congress buildings, and limited social support (WHO, 2011: 1). The Declaration on the Rights of Disabled Persons, adopted by the United Nations General Assembly in 1975 (UN, 1975), defines disability as the inability of an individual to fully meet the social demands of life due to a physical or mental deficiency, either congenital or acquired.

The Turkish Republic's Law No. 5378 on Persons with Disabilities (2013) defines a disabled person as "an individual who, due to a congenital or acquired reason, loses physical, mental, psychological, sensory, and social abilities to various extents and faces difficulties in adapting to social life and meeting daily needs, requiring protection, care, rehabilitation, counseling, and support services."

In line with this definition, the Ministry of Family and Social Services in Turkey developed the National Disability Data System, based on the Disability Health Committee Reports organized by public institutions, to address the data needs concerning individuals with disabilities. However, the data from this system does not cover individuals who have not applied to authorized hospitals for a Disability Health Committee Report or have not interacted with the government to receive services. According to the data in the system, the number of registered disabled individuals in Turkey is 2,511,950 as of 2023. Of these, 56% are male, and 44% are female.

"Disability" in the Turkish Workforce

According to Turkey's Labor Law No. 4857 (2003), special provisions exist for mentally or psychologically disabled individuals employed in sheltered workplaces. Employers, if they pay the salaries of disabled employees on time, are reimbursed for a portion of these payments by the government according to certain legal provisions. These reimbursements are made based on specific amounts, and additional support is provided for each disabled person employed in sheltered workplaces under certain legal regulations. Additionally, employers who employ disabled individuals beyond the mandatory quota are also supported. The details of these payments are determined by regulations issued by the Ministry of Family and Social Policies, in line with the views of the Ministry of Finance, the Ministry of Labor and Social Security, and the Undersecretariat of the Treasury.

However, it is a fact that there has been little progress in the inclusion of disabled individuals in Turkey's workforce. In fact, the current employment rate of disabled individuals in Turkey is quite low. According to data from the Turkish Statistical Institute (TÜİK), more than 1.5 million disabled individuals were in working age as of 2023; however, this figure only includes registered disabled individuals. The target for mandatory disability employment is 123,446 people. Even if this target is reached, approximately 1.4 million disabled individuals will still face the problem of being unable to be employed. Furthermore, only a small portion of the unemployed disabled actively seeks work, which is a significant indicator of passivity in the labor market. Even if disabled individuals enter the workforce, they often foresee or experience the difficulties that lie ahead. These issues may lead to a decline in morale and the development of negative attitudes towards working life. As a result, disabled individuals tend to avoid the idea of working in workplaces or collaborating with others, remaining passive, and staying away from employment.

To increase disabled employment in Turkey, large enterprises are required to employ disabled individuals. When examining the employment targets, it is observed that disabled employment is higher in the public sector compared to the private sector. Furthermore, the number of

10th International CEO Communication, Economics, Organization & Social Sciences Congress disabled employees in workplaces that do not have an obligation to hire disabled individuals is very low. According to TÜİK (2021), given that 99.7% of enterprises in Turkey are small and medium-sized businesses, implementing measures to increase disabled employment in these businesses would likely raise the employment of disabled individuals.

The situation of disabled individuals in the workforce goes beyond personal challenges and emerges as an area where social and structural inequalities become more evident. From education to employment, disabled individuals face various barriers, significantly limiting their active participation in both social life and the labor market. Therefore, understanding the place of disabled individuals in Turkey's working life and the challenges they face is a fundamental necessity to address the existing problems in this area.

The literacy rate among disabled individuals reflects a manifestation of social inequality. The rate of illiteracy among disabled individuals is significantly higher compared to non-disabled individuals, which is a key indicator of the challenges disabled individuals face in acquiring education and vocational skills. After the onset of disability, many disabled individuals are deprived of vocational training opportunities, which negatively impacts their ability to participate in the labor market. The challenges disabled individuals face in the workplace also manifest in the conditions they work under. Disabled workers typically face lower-demand jobs, lower wages, poorer working conditions, and limited opportunities for advancement. Moreover, disabled employees often encounter both intentional and unintentional discrimination in the workplace. They are frequently underestimated, given tasks below their qualifications, and their experiences and personalities are ignored or overlooked. The lack of access to necessary work tools or restricted access to the workplace for disabled individuals is also a common problem (Karademir, 2023: 77; Kağmıçoğlu et al., 2021: 137-138).

In addition, disabled women are in a more disadvantaged position compared to disabled men and non-disabled women. This situation creates intersectional discrimination between gender and disability, leading to greater exclusion of disabled women from the labor market. To address this issue, Gedikli (2022) suggests that solutions such as respect for disabled rights, consideration of gender and intersectional discrimination, increasing educational opportunities, ensuring physical accessibility in workplaces, abolishing quota systems, promoting supportive employment methods, implementing different employment policies based on disability status, strengthening social security, and removing the need for financial dependency for disability allowances may be employed.

Findings and Discussion

This section presents the findings from the literature based on the Turkish articles examined in the study, categorized into four main themes: opportunities created by Industry 4.0 in disabled entrepreneurship, challenges faced, support provided, and participation strategies.

Opportunities Provided by Industry 4.0 for Disabled Entrepreneurship

The UN Convention on the Rights of Persons with Disabilities, which came into force in 2008, covers topics such as education, health, equality, accessibility, anti-discrimination, employment, and participation in political and public life for individuals with disabilities (Convention on the Rights of Persons with Disabilities, 2009). In 2010, the European Union's Disability Strategy 2010-2020 was prepared, outlining activities aimed at removing barriers and empowering people with disabilities in eight main areas, including accessibility, participation,

10th International CEO Communication, Economics, Organization & Social Sciences Congress equality, and employment (European Commission, 2010). In parallel, the Law No. 5378 on the Rights of Persons with Disabilities, a "milestone for persons with disabilities" (Şen, 2017: 236), was passed in 2005, marking the beginning of disability-friendly social policies in Turkey.

One of the most prominent reasons for the global transformation we are experiencing today is the development of Industry 4.0 technologies and their impact on economic and social structures. These technologies present significant opportunities for disabled entrepreneurship. Digital platforms allow disabled entrepreneurs to gain broader visibility in the business world and enable more effective communication with all stakeholders. They also provide opportunities for digital training. According to Irmak (2023), the rapid advancement of information technologies and the internet, combined with commercial thinking, has led to the creation of a digital platform where buyers and sellers can come together. Entrepreneurs who may adapt to this platform have gained the opportunity to expand their business activities. The possibility of online trade has transformed the world into a more global structure, contributing to the acceleration of trade.

Automated systems are crucial in simplifying daily tasks and increasing the independence of disabled individuals. These systems create a more efficient work environment while facilitating the work processes of individuals with disabilities (Cooney, 2008). Artificial intelligence-based assistant technologies provide powerful tools for improving work processes, while e-commerce and access to global markets create new business opportunities for disabled entrepreneurs. The pandemic, in particular, has further emphasized the importance of digital transformation. Digital marketing tools have diversified, and significant contributions have been made to their development (Ballı, 2022). E-business and e-commerce models offer companies the opportunity to access new markets. This market consists of millions of individuals who extensively use the internet in their daily lives and is independent of geographic limitations. Moreover, the speed, low cost, and reliability provided by communication technologies, when combined with marketing strategies, enhance businesses' profitability on a global scale (Marangoz, 2011). Additionally, e-commerce facilitates commercial transactions regardless of geographical distances. In developing countries, businesses have access to global markets with low costs, such as a simple computer, internet browser, and phone connection. This provides affordable entry opportunities, especially for small and medium-sized enterprises in developing countries (Dikkaya & Aytekin, 2018), and represents a significant advantage for disabled entrepreneurs.

However, the strong potential offered by Industry 4.0 technologies will only make sense if used correctly. In other words, these technologies can improve the work processes of disabled entrepreneurs and provide efficiency, but to achieve sustainable success, this potential must be utilized effectively. Sustainability encompasses not only economic success but also environmental and social responsibilities. Therefore, the application of new technologies with social responsibility awareness, in line with sustainability principles, should aim to enhance not only the economic success of disabled entrepreneurs but also their social integration and independence.

Challenges Faced by Disabled Entrepreneurs in the Era of Industry 4.0

Disadvantaged groups, living under inadequate conditions and in need of special protection, are deprived of economic, social, and cultural opportunities and are excluded from social life (Baysal, 2019: 5-6). Their participation in social life does not occur on an equal basis with other

10th International CEO Communication, Economics, Organization & Social Sciences Congress groups in society. This situation also affects disabled individuals, who are a disadvantaged group in terms of entrepreneurship. In fact, entrepreneurship is a challenging process for both disabled and non-disabled individuals. For instance, the Ease of Doing Business Index ranks countries based on various indicators such as starting a business, construction permits, electricity connections, and obtaining credit, considering the suitability of the country's economic environment for starting a business. In this index, Turkey ranked 55th with a score of 69.16 in 2016, but dropped to 69th place with a score of 67.19 in 2017. This indicates that doing business in Turkey is generally difficult (Koç & Şenel, 2017: 40-41) and that entrepreneurship poses significant challenges for everyone.

Cooney (2008) points out that the process of starting a business contains challenges for everyone and emphasizes that businesses established by disabled individuals are as widespread and diverse as those established by non-disabled individuals. Halabisky (2014), while acknowledging that entrepreneurial activities carry various challenges for everyone, states that the challenges faced by disabled entrepreneurs may be more complex and specific. For disabled individuals, the challenges encountered in starting and maintaining entrepreneurial activities are often related not only to physical disabilities but also to social, structural, and economic limitations. Therefore, the difficulties faced by disabled entrepreneurs are not limited to physical barriers; issues such as transportation difficulties, lack of information, insufficient experience, and factors affecting speed can also pose significant obstacles. In this context, the challenges in the entrepreneurial journey for disabled entrepreneurs can be more profound and multidimensional compared to non-disabled individuals; the problems in the entrepreneurial process can often become greater barriers for disabled individuals.

Employers often believe that disabled individuals will work inefficiently, negatively affect the work pace, be emotional, and that necessary physical adjustments in the workplace will be costly. Such prejudices hinder disabled individuals' access to the labor market, leading to exclusion from employment. As a result, disabled individuals either remain unemployed or, if employed, work in low-paid, unskilled jobs. This process leads to the impoverishment of disabled individuals (Albar, 2019: 131-132).

The main challenges faced by disabled entrepreneurs in Turkey include societal prejudices and consumer discrimination against disabled individuals, difficulties in accessing startup capital, misapplication of economic support, lack of business knowledge and skills, the support trap, issues in accessing information on grants and loans, lack of trust or limited motivation, inadequate political and sensitive business support, and a lack of role models (Eliöz et al., 2017). Overcoming these issues is essential for the more effective participation of disabled individuals in the economy and society through entrepreneurship.

Supports Provided for Disabled Entrepreneurship in the Era of Industry 4.0

In Turkey and other developing countries, the contribution of disabled individuals to the economy by establishing their own businesses is relatively low. To improve this situation, the government is taking various steps to provide job opportunities in the public and private sectors for disabled individuals (Eliöz et al., 2017). A critical issue to focus on here is not only the support mechanisms provided by public institutions and non-governmental organizations for disabled individuals in entrepreneurship but also the adequacy of these supports. According to Article 30 of the Labor Law No. 4857: "...the employer's share of the insurance premiums calculated on the lower limit of the insured earnings, as stated in Articles 72 and 73 of the same

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Law, for disabled employees working in sheltered workplaces, and the full insurance premiums for disabled employees who are employed in excess of the quota, shall be covered by the Treasury." This regulation sets an incentive for employing disabled individuals. As a result, according to the March 2023 data from TÜİK, the number of workplaces obligated to employ disabled individuals is only 1,323 in the public sector and 16,646 in the private sector. When examining other supports, it is seen that public institutions like İŞKUR, KOSGEB, and the Ministry of Family and Social Services aim to increase the entrepreneurial capacities of disabled individuals through financial support and training programs. Non-governmental organizations such as the Disabled Life Association and the Turkish Disabled Foundation contribute to the creation of businesses by offering entrepreneurship training and microcredit opportunities.

Two main public institutions supporting disabled entrepreneurship in Turkey are KOSGEB and İŞKUR. According to Namal (2019: 269-270), KOSGEB provides grant support to entrepreneurs under its new entrepreneurship program, but disabled individuals can only benefit from a 10% support available to women, veterans, and martyrs' relatives. İŞKUR, on the other hand, started offering grant support to disabled entrepreneurs in 2015 through the "Project Support Application Guides for Disabled and Former Convicts" after the "Regulation on Administrative Fines Collected from Employers Who Do Not Employ Disabled and Former Convicts" came into force in 2014. However, it has been noted that even after five years, a common database for easier project tracking has not been established. All steps, from application to contract, invoice and material control, accounting, payments, to three years of monitoring and reporting, are still carried out manually by İŞKUR personnel. The lack of a system to support the management of long and detailed processes is evident (Çakır, 2021), and the necessity of utilizing the technological possibilities of Industry 4.0 is clear.

İŞKUR (2024) allows individuals with at least 40% disability, documented by "Health Committee Reports for Disabled Individuals," to submit projects aimed at contributing to production, ensuring their own livelihood, and creating additional employment. It is observed that disabled entrepreneurs are unable to fully access existing support mechanisms or benefit sufficiently, making it difficult to ensure the sustainability of their entrepreneurial activities. Disabled individuals face various problems in accessing support from public institutions. For example, according to Namal's (2019) research findings, the 50,000 TL grant, which has not been increased for a long time, leads to disabled individuals abandoning their projects due to fear of resource shortages. Additionally, lengthy application and approval processes, price hikes in materials, difficulties in finding stores, or alternative job opportunities lead to project cancellations. Furthermore, İŞKUR's policy of making payments only after the invoices for machinery and equipment purchases puts entrepreneurs in situations where they have to take on debt. The lack of technical support also poses an obstacle in the implementation of projects. These situations indicate that disabled entrepreneurs face significant challenges in realizing their projects.

Participation Strategies for Disabled Entrepreneurs in Industry 4.0

It is crucial to provide the necessary training at every step from the beginning of the entrepreneurial process. Indeed, entrepreneurship training positively impacts individuals' attitudes, values, and motivation levels. It helps individuals recognize their own abilities and contributes to acquiring both short- and long-term social skills (Fayolle et al., 2006: 514). This issue is particularly critical for disabled entrepreneurs because the barriers imposed by society

10th International CEO Communication, Economics, Organization & Social Sciences Congress increase the challenges that disabled individuals face on their entrepreneurial journey. To overcome these barriers, Industry 4.0 offers various inclusive strategies to increase the participation of disabled entrepreneurs in the business world.

Technological advancements and the growing service sector production can lead to significant outcomes by promoting disabled entrepreneurship. In this context, increasing access to education for disabled individuals, supporting them along with their families through official institutions, and encouraging entrepreneurship through various means are necessary. Through this potential, disabled individuals can create not only economic value for themselves but also social value for their families, other disabled people, and the communities they belong to (Akögretmen & Orhan, 2020).

Flexible work arrangements, such as flexible working hours, remote work, and job sharing, can facilitate the active participation of disabled individuals in the workforce. This, in turn, offers disabled entrepreneurship an important opportunity to help disabled individuals cope with challenges such as social exclusion and poverty (Ertürk & Erdirençelebi, 2023: 253). Additionally, vocational training and digital skills programs enable disabled individuals to develop their abilities and gain expertise. Awareness training for employers increases their knowledge of inclusive employment opportunities offered by Industry 4.0, while grants and knowledge programs provided through cooperation between the public and private sectors facilitate disabled entrepreneurs' access to financial and technical support.

Conclusion and Recommendations

The fact that disabled individuals, like any other person, have the right to work is a fundamental human right. To enable disabled individuals to effectively exercise their right to work in both the public and private sectors, it is necessary to diversify workplaces and working environments that are suitable for their disabilities and to facilitate these processes. However, data from the literature shows that these conditions have not yet been sufficiently met in Turkey. Additionally, it is well known that disabled employees face various challenges in institutions. Therefore, developing an alternative pathway for disabled individuals has become a necessity. Entrepreneurship, combined with the opportunities offered by Industry 4.0 technologies, holds significant potential as an important alternative for disabled individuals. The adoption of this approach by the government, society, and all related ecosystems is crucial. The opportunities provided by Industry 4.0 can enable the development of existing support and participation strategies, making them more effective and sustainable.

Innovative business models and incentive policies can be implemented to support disabled entrepreneurship with the contributions of Industry 4.0. Thanks to technologies such as smart factories and similar technological infrastructures, the impact of physical barriers can be minimized, enabling disabled individuals to actively participate in production processes. By promoting digital jobs and remote working models, employment opportunities can be increased in fields such as software development, artificial intelligence, data analysis, and content creation. Providing appropriate training and infrastructure will play a critical role in this process. The use of virtual and augmented reality technologies can facilitate access to education for disabled individuals, enabling them to enhance their skills. Moreover, through 3D printers and specialized software, personalized products and job opportunities can be offered to meet the needs of disabled individuals. These innovative approaches will contribute to positioning disabled individuals in a stronger economic and social position. Finally, the development of smart product and service models will enhance the living standards of disabled individuals,

10th International CEO Communication, Economics, Organization & Social Sciences Congress supporting their more active participation in society. These recommendations could contribute to the formation of a sustainable disabled entrepreneurship ecosystem.

References

- Aile ve Sosyal Hizmetler Bakanlığı. Engelli ve Yaşlı İstatistik Bülteni. Nisan, 2023. https://www.aile.gov.tr/media/135432/eyhgm_istatistik_bulteni_nisan_23.pdf, [Erişim tarihi: Kasım 2024].
- Aköğretmen, M., & Orhan, S. (2020). Engelli İstihdamında Bir Alternatif Olarak Engelli Girişimciliği. *Bilgi Sosyal Bilimler Dergisi*, 22(2), 236-256.
- Albar, B. Ö. (2019). Engellilerin Çalışma Hayatındaki ve İşyerindeki Sorunları. *İş Yazıları Dergisi*, Sayı 14, 125-134.
- Alkahlout, O. (2023). Dijital insan kaynakları yönetimi çalışmalarının bibliyometrik analizi (2013-2022). *Pamukkale Üniversitesi İşletme Araştırmaları Dergisi*, 10(3), 783-794.
- Aydın, H. İ. (2017). Girişimciliğin ekonomik büyüme ve kalkınmadaki rolü: Seçilmiş AB ülkeleri üzerine panel veri analizi (2001-2015). *Iğdır Üniversitesi Sosyal Bilimler Dergisi*, 13, 373-392.
- Ballı, A. (2022). Türkiye’de Dijital Dönüşüm ve Girişimcilik. *Third Sector Social Economic Review*, 57(1), 251-279.
- Baysal, Ş. (2019). *Toplum Temelli Rehabilitasyon Modelleri Üzerine Bir İnceleme: Engellilerin Sosyal Rehabilitasyonu*. (Yayımlanmamış Yüksek Lisans Tezi). Marmara Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul.
- Büyüköztürk, Ş., Çakmak, E. K., Akgün, Ö. E., Karadeniz, Ş. ve Demirel, F. (2009). *Örnekleme Yöntemleri Bilimsel Araştırma Yöntemleri Kitabı Sunusu*, <http://msbay.files.wordpress.com/2009/10/9-hafta-arastirmalarda-ornekleme.pdf>
- Cooney, T. M., (2008). Entrepreneurs with Disabilities – Profile of a Forgotten Minority. *Irish Business Journal*. 4(1), 119-129.
- Çaha, H. (2016). Engellilerin Toplumsal Hayata Katılmasına Yönelik Politikalar: Türkiye, ABD ve Japonya Örnekleri. *İnsan & Toplum Dergisi*, 5(10), 123-150.
- Çakır, H. (2021). Engelli Kadın İstihdamı: İŞKUR Aktif İstihdam Politikaları Üzerine Bir Analiz. *Akademik Hassasiyetler*, 8 (16), 151-173.
- Dikkaya, M., & AYTEKİN, İ. (2018). Küresel e-ticaret ve Türkiye. *Ekonomi, İşletme, Siyaset ve Uluslararası İlişkiler Dergisi*, 4(1-2), 66-68.
- Doğan, S. (2010), Avrupa Birliği’nin Girişimcilik Politikası, İstanbul: İstanbul Ticaret Odası Yayınları, 24-29.
- Eliöz, M., Tekin, A., Çebi, M. & Akbuğa, E. (2017). Engelli Bireylerin Yoksulluk ile Mücadelesinde Girişimcilik ve Girişimciliğin Önündeki Engeller. *Kesit Akademi Dergisi*, 10, 570-585.
- Engelli Haklarına İlişkin Sözleşme (2009). <https://www.aile.gov.tr/eyhgm/engellilerin-haklarina-iliskin-sozlesme/>, [Erişim tarihi: Eylül 2024].
- Erten, Ş. (2019). 2030 Sürdürülebilir Kalkınma Gündemi ve Engelliler: Güçlendirme Kavramı Çerçevesinde Bir Değerlendirme. *Selçuk Üniversitesi Sosyal Bilimler Meslek Yüksekokulu Dergisi*, 22(2), 890-902.
- European Commission (2010). European Disability Strategy 2010-2020. <https://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM%3A2010%3A0636%3AFIN%3Aen%3APDF>, [Erişim tarihi: Kasım 2024].
- Ertürk, E., & Erdirencelebi, M. (2023). Engelleri Ortadan Kaldıran Engelli Girişimciliği: İlham Veren Bir Engelli Girişimci Örneği “Halukcerrez. com. *International Journal of Arts and Social Studies*, 6(11), 249-263.
- Fayolle, A.; Gailly, B., & Lassas-Clerc, N. (2006), “Effect and Counter-effect of Entrepreneurship Education and Social Context on Student’s Intentions”, *Estudios de Economía Aplicada*, Cilt: 24, Sayı: 2, s. 509-523.
- Gedikli, B. (2022). İstihdamda Engelli Kadın: Sorunlar ve Çözüm Önerileri. *Marmara Üniversitesi Kadın Ve Toplumsal Cinsiyet Araştırmaları Dergisi*, 6 (1), 83-103.
- Halabisky, D.(2014). Entrepreneurial Activities in Europe - Entrepreneurship for People with Disabilities, OECD Employment Policy Papers, No.6, OECD Publishing. https://www.oecd.org/en/publications/entrepreneurial-activities-in-europe-entrepreneurship-for-people-with-disabilities_5jxrcmkcxjq4-en.html
- Irmak, E. (2023). Uluslararası Ticarete Dijitalleşme: E-Ticaret Kapsamında E-İhracat. *The Journal of Social Science*, 7(14), 180-200.
- İŞKUR (2024). <https://www.iskur.gov.tr/is-arayan/aktif-igucu-programlari/engelli-ve-eski-hukumlu-projeleri/>, [Erişim tarihi: Ekim 2024].
- Kağncıoğlu, D., Şişman, Y., Akgül, T., İlhan, Z. & Boyacı, N. B. (2021). Türkiye’de Engelli İstihdamı, Kota Yöntemi Açısından Durum Analizi.

10th International CEO Communication, Economics, Organization & Social Sciences Congress

- Karademir, A.Ç. (2023). Mobbing ve Engellilik. İçinde Genç, K. Y., Işıklı, Y. M. ve Kaygısız, E.G. *Engelliliğe Dair Güncel Konular*, ss.94-124, Ekin.
- Kınay, H. (2006). Girişimcilik, kalkınma ve Rekabet ilişkisi, Kütahya'da KOBİ'lerin girişimcilik Profili. Anadolu University (Turkey).
- Koç, E., & Şenel, M. C. (2017). Dünyada ve Türkiye'de ekonomik göstergeler-iş yapma/iş kurma kolaylığı endeksi. *Mühendis ve Makina*, 58(685), 17-42.
- Marangoz, M. (2011). Girişimciler için sınırsız ticaret: E-ticaret.
- Mutlu, Sevda (2014), "KOSGEB'in Uygulamalı Girişimcilik Sertifikası Eğitimi Kurslarına Katılan Kursiyerlerin Girişimcilik Potansiyelleri ve Eğilimleri", *Girişimcilik ve Kalkınma Dergisi*, (9;1), s. 1-22.
- Namal, M. K. (2019). İŞKUR Engelli Girişimciliği Destek Programı'nın incelenmesi TR61 Bölgesi örneği. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, (42), 261-272.
- Öztürk, K. (2014). *Dezavantajlı Gruplara Yönelik Ayrımcılık: Engellilerin Çalışma Hayatında Karşılaştıkları Ayrımcılık ve Çözüm Önerileri*. (Yayımlanmamış Uzmanlık Tezi). Çalışma ve Sosyal Güvenlik Bakanlığı, Çalışma ve Sosyal Güvenlik Eğitim ve Araştırma Merkezi, Ankara.
- Pagán, R.(2009). Self-employment Among People with Disabilities: Evidence for Europe. *Disability and Society*, 24(2), 217-229.
- Şen, M. (2017). Çalışma Yaşamında Engelliler. İçinde S. Dursun ve S. Aytaç, *Çalışma Yaşamında Özel Gruplar*, 211-276. Bursa: Ekin Basın Yayın.
- Şenturan Ş.(2018). "Girişimcilik örnek olaylarla", Beta Yayınları, 1. Baskı, Aralık.
- Sarıç, A., & Özutku, H. (2024). Endüstri 4.0 Sürecinde İnsan Kaynakları Yetkinlikleri Üzerine Nitel Bir Araştırma. *Beykoz Akademi Dergisi*, 12(1), 141-171.
- Türkyılmaz, S. (2024). Endüstri 4.0 ve Endüstriyel Nesnelerin İnterneti: Uygulama, Fırsat ve Zorluklar-Literatür Taraması. *Doğuş Üniversitesi Dergisi*, 25(2), 153-172.
- TÜİK (2023). Alıntı yeri: Aile ve Sosyal Hizmetler Bakanlığı. Engelli ve Yaşlı İstatistik Bülteni. Nisan, 2023. Aralık 2024 tarihinde https://www.aile.gov.tr/media/135432/eyhgm_istatistik_bulteni_nisan_23.pdf , [Erişim tarihi: Aralık 2024].
- TÜİK (2021). Türkiye İş Kurumu Küçük ve Orta Büyüklükteki Girişim İstatistikleri. <https://data.tuik.gov.tr/Bulten/Index?p=Kucuk-ve-Orta-Buyuklukteki-Girisim-Istatistikleri-2021-45685>, [Erişim tarihi: Ekim 2024].
- TÜSİAD (2016). Türkiye'nin Küresel Rekabetçiliği İçin Bir Gereklilik Olarak Sanayi 4.0: Gelişmekte Olan Ekonomi Perspektifi, N.Numanoğlu, M.E. Eynehan, G. Morkoç Nikelay ve E. Aksoy, (Ed.) Boston Consulting Group, İstanbul.
- UN (2019), United Nations General Assembly 3447 (XXX). Declaration on the Rights of Disabled Persons 9 December 1975, [Online] Available at: <<https://documents-dds-ny.un.org/doc/RESOLUTION/GEN/NR0/001/60/IMG/NR000160.pdf?OpenElement>>, [Erişim tarihi: Kasım 2024].
- UN (1975). Declaration on the Rights of Disabled Persons. <https://www.ohchr.org/en/instruments-mechanisms/instruments/declaration-rights-disabled-persons> , [Erişim tarihi: Kasım 2024].
- WHO (2011), Dünya Engellilik Raporu Yönetici Özeti Dünya Sağlık Örgütü, [Online] Mevcut: <<http://siteresources.worldbank.org/TURKEYINTURKISHEXTN/Resources/4556871328710754698/YoneticiOzeti.pdf>>, [Erişim tarihi: Kasım 2024].
- 4857 Sayılı İş Kanunu (2003). Resmî Gazete, 22 Mayıs 2003.



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Political Power of Azerbaijanians in Georgia

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ABSTRACT

This paper examines the political dynamics of the Azerbaijanian community in the Republic of Georgia, arguing that the political empowerment of marginalized groups hinges on a clear understanding of political engagement and participation mechanisms. Focusing on the border regions where the Azerbaijanian population has gained influence, it highlights a general disinterest among Georgians in Azerbaijanian political life and a prevailing mistrust regarding their role in state-building. The complexities of dual identity—ethnic and national—pose challenges for community members in navigating the political instruments of the Georgian state. This blurring of cultural identities significantly shapes the country's political landscape. The analysis reveals that the Azerbaijanians, as a significant ethnic group primarily residing in Samtskhe-Javakheti and Kvemo Kartli, experience an inverse relationship with the Georgian state, often feeling marginalized in factional politics. The lack of representation in legislative and local government bodies further complicates their political engagement, despite some local advocacy successes in securing appointments to public office in Tbilisi. In Samtskhe-Javakheti, however, the opportunities for Azerbaijanians to play a meaningful role in shaping local policies remain limited. Those who do participate predominantly hold positions within district municipalities, often as educators or former military personnel. This paper underscores the necessity of addressing these political barriers to foster a more inclusive environment for the Azerbaijanian community within Georgia's political framework.

Keywords: International Relations, Georgia, Azerbaijan

The presentation paper sheds light on the political power of the Azerbaijanians in Georgia, which is a multi-ethnic country with high inequality indices. The study argues that the prospects and opportunities created in the socio-political arena of the Azerbaijanians, who live in historical and cultural contact with a variety of peoples, allow the Azerbaijanians to defend their political rights to a high degree. In any case, the outcome is limited, and there is still a need to work to further strengthen Azerbaijanian political will in Georgia. The legal analysis of the material used is based on constitutional law and social and political sciences. Generally, the development of a mix of local and international research methods aimed at describing, clarifying, and comparing the contents of domestic legislation and defining the determinants of political will. Georgia is a multi-ethnic democratic state with a multi-ethnic political and electoral system in which the Azerbaijanians live. By participating in the country's political and electoral process, they have political power. The Azerbaijanians play a significant role in domestic and foreign policy. This is one of the reasons why the state is interested in their activities in the country. The development of the political power of the Azerbaijanians, who live with various peoples, is limited by numerous factors (Bashirova2024).

Furthermore, this paper analyzes the political power of the Azerbaijanian community in Georgia, tracing its historical evolution since the region's annexation in the early 19th century. It highlights the community's emphasis on political representation as a crucial factor for its development and identity, while also addressing their marginalization in economic integration within the country. The analysis includes empirical data regarding current local political representation, assessing both the challenges and opportunities faced by the Azerbaijanians. The findings reveal that while the Azerbaijanian minority lacks representation at the national level, they have managed to secure some influence in local governance.

1. HISTORICAL BACKGROUND OF AZERBAIJANI S IN GEORGIA

In order to understand the political power of Azerbaijanians in Georgia from the interviews, one must take into consideration the historical context of Azerbaijanians living in Georgia. The gradual and historical connection of Azerbaijanians with Georgia meant that historical events influenced the formation of the Azerbaijanian identity in Georgia. In terms of geographical distribution, within Georgia, Azerbaijanians live compactly in the southeast, particularly in Akhalkalaki and Ninotsminda, while a small part lives in Marneuli and Bolnisi, as well as in the east of Kvemo Kartli and in the territory of Tbilisi. From time to time, in the 20th century, there were migrations from these mentioned areas, and the Azerbaijanians of Dmanisi, Tetrtskaro, and Marneuli deepened their ties with the capital, Tbilisi. After the migration, villages were formed in the existing inhabited areas of Azerbaijanians. Each of these villages is a unique ethnic unit in terms of social, demographic, economic, and cultural characteristics. These features are the source of the relationships of Azerbaijanians with other parts of society on the one hand and social relationships within the Azerbaijanian community on the other. (Kukhianidze2022)

In addition to the demographic aspect, some specific features of the place of settlement influenced the socio-political views of the Azerbaijanians. Primarily, Azerbaijanians have been assimilated and mingled since their arrival in Georgia, thus integrating into the country over time. Azerbaijanians view their Georgian neighbors as "Stanulis" and call them the hosts of this land with respect in their oral stories. Geographic spread has led to the development of ties with the Azerbaijanian state outside the country, which further strengthened the links between the Azerbaijanians and the Azerbaijanian state. This influence plays a role in

10th International CEO Communication, Economics, Organization & Social Sciences Congress determining the interest of local Azerbaijanians in the state in which they lived during the analyzed historical period and the new state of great power. The Azerbaijani language, often the mother tongue of the Azerbaijani population, led to the expansion of the ties of this community with the neighboring Azerbaijani population, and sometimes with the population of Azerbaijan. The Azerbaijani language is the main criterion for links among people in the studied historical period. The Sovietization of the country has amplified the connections and proximity with the population in Azerbaijan. The historical reality of living in a small community has led to the pursuit of Azerbaijani courtship and charity to ensure the integrity and expansion of the country. The Russian language linked the country's internal and external small communities to other small communities. Created and reportedly shared historical memory is the source of political aspirations. Although subjective, the general historical features of Azerbaijanians will, however, help to adequately discuss the contemporary ethnic and political advantages and disadvantages in interviews, as well as the power of Azerbaijanians within the Georgian political system. (Kundakci, 2022)

3. POLITICAL REPRESENTATION AND PARTICIPATION OF AZERBAIJANI S

Azerbaijanians are a numerically significant ethno-national minority in Georgia with some representation in the national quota-based political normative human rights council. There are no established minimum representation rates for national minorities in Georgia. However, available representative figures reflect varying percentages of Azerbaijani individuals serving at all levels of government. Azerbaijani electoral participation rates tend to be higher than national averages, with non-voter ratios of around 12-15% in presidential, 5% in local, and 4.2% in parliamentary elections. Azerbaijani leaders have previously worked in positions in varying political institutions, including Parliament, Government, and the President's office, earning recognition as experts in the field. (Yemelianova & Broers, 2020)

The Azerbaijani community faces a range of barriers affecting their ability to be visible and to be recognized as participants in the political life of Georgian society. Around 80 percent of the Georgian population still do not see Azerbaijanians as full members of the country's society, even though more than half of the Georgian citizens have no legal, political, or psychological barriers to assimilation. The study found that over 67 percent of respondents did not believe a Georgian-Azerbaijani marriage to have any particular value. Additionally, as much as 71 percent of Azerbaijanians believe that inter-ethnic dialogue is negative rather than positive. The study also revealed some strong feelings of alienation from Georgian political life and some disillusionment with the Georgian electoral process. Local as well as national political parties have sought to increase the participation of this ethno-national minority in their party structures but are meeting with limited success. (Weber, 2023)

4. CHALLENGES AND OPPORTUNITIES

Despite making up 6.5 percent of Georgia's population, the conditions facilitating the participation of Azerbaijanians in Georgian politics are limited. Socio-economic factors related to unemployment, lack of education, and other hardships contribute to the marginalization of the Azerbaijani community, particularly in rural areas. Here, the agency and well-being of Azerbaijanians are frequently endangered by pro-Georgian strongmen. Language is another obstacle to effective representation. Azerbaijanians' alienation is manifested by a political system not designed to promote multi-party democracy. As a result, representation in national and local governments is minimal. (Kahraman, 2021).

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Azerbaijani political figures believe that xenophobia is the principal obstacle to Azerbaijani civic and political engagement. Discrimination against Azerbaijanis in Georgia is widespread, and the media contributes to their negative image. Almost all the interlocutors referred to the systemic discrimination that limits Azerbaijanis' empowerment. The majority of respondents cited their low socio-economic status as the principal obstacle they face in Georgian society. Many Azerbaijanis, particularly those living in rural areas, are not politically affiliated and are poorly informed about political processes. However, high levels of illiteracy and lack of access to information leave rural residents isolated and even more vulnerable to manipulation. Georgians' hostility towards Islam is downplayed by Azerbaijani respondents. (Jenderedjian & Bellows, 2021).

Georgian NGOs are increasingly trying to encourage Azerbaijanis to become politically active and to familiarize them with their rights. This strategy includes training days, information sharing, and role-playing. Some Azerbaijani community leaders have also received training in civic leadership and human rights. The activities of the Azerbaijani community in the Kvemo Kartli region, for example, indicate a growing political consciousness. Interviews, however, suggest that this awakening is partial and is largely a result of a lack of higher education. This is the case with the Azerbaijani media in Georgia, which is designed largely for the less educated, rural, and peasant population. Those who have received a higher education, whether within the country or abroad, are more aware of political events and potential for Azerbaijani development. The majority of these young people, however, are not currently engaged in Azerbaijani civic initiatives. The contrast between the student elite and the rural poor, who are more prone to getting involved in Azerbaijani civic activism, is worrying. The young generation of Azerbaijanis holds much potential but is also vulnerable. They are evidently characterized by inertia and a lack of political strength and are at risk of becoming increasingly disenfranchised from Georgian society. In particular, many research participants maintained that university graduates are prone to political apathy because they are unable to secure a relevant job based on their education and are forced to work in manual labor. This is not often, however, discussed openly in Georgian society, as it could antagonize the authorities. (Shanidze, 2012)

CONCLUSION

In conclusion, while the Azerbaijani community in Georgia possesses significant potential to influence policy through their political engagement, several interrelated factors impede their collective influence and representation. A historical tendency towards local identification has fostered a fragmented sense of community, leading to a relatively weak and nominal status of Azerbaijani identity in many areas. This weakness limits the capacity of Azerbaijanis to act as a unified political force that can galvanize support at the national level, thereby hindering their ability to advocate effectively for their rights and interests.

Moreover, the broader Georgian political landscape presents additional obstacles to the inclusion and empowerment of Azerbaijanis. Structural barriers within the political system, including a lack of access to decision-making processes and insufficient representation in key legislative bodies, undermine the community's efforts to assert their presence and influence. This situation is exacerbated by historical grievances and mistrust between ethnic groups, which can complicate efforts to build coalitions that transcend ethnic lines and promote a more inclusive political discourse.

Furthermore, the stagnation of Azerbaijani political power at the local level reflects a troubling trend that suggests a diminishing pathway for advancement in representation and political participation. As the paper indicates, despite some local successes, there has been little meaningful change in the political landscape for Azerbaijanis in recent years. This stagnation



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Ultimately, understanding these dynamics is crucial for grasping the complexities of minority representation in Georgia. It highlights the need for targeted research and policy interventions aimed at enhancing the political voice and representation of the Azerbaijani community. By addressing the structural barriers and promoting greater inclusivity, there is potential for fostering a more equitable political environment that not only empowers the Azerbaijani s but also enriches the overall social fabric of Georgia. Such efforts would benefit not only the Azerbaijani community but also the nation as a whole, as a more inclusive political framework can lead to greater stability and cohesion in a diverse society. Exploring these issues further is essential for comprehending the nuanced interplay of identity, politics, and power within the context of minority groups in Georgia and beyond.

REFERENCES

- Bashirova, A. (2024). Evolution of strategic relations between Azerbaijan and Israel during the Heydar Aliyev period. In *Heydar Aliyev and the foundations of modern Azerbaijan* (pp. 253-278). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-58265-3_10
- Jenderedjian, A., & Bellows, A. C. (2021). Rural poverty, violence, and power: Rejecting and endorsing gender mainstreaming by food security NGOs in Armenia and Georgia. *World Development*, 138, 105167. <https://doi.org/10.1016/j.worlddev.2020.105167>
- Kahraman, A. (2021). Azerbaijani s and Muslim Ajarians in Georgia: The swing between tolerance and alienation. *Nationalities Papers*, 49(4), 596-614. <https://doi.org/10.1017/nps.2021.5>
- Kukhianidze, A. (2022). The Armenian and Azerbaijani communities in Georgia: On Georgia's nationalities and foreign policies. In *Commonwealth and independence in post-Soviet Eurasia* (pp. 111-124). Routledge. <https://doi.org/10.4324/9781003340379-6>
- Kundakci, G. A. (2022). Eventful things of a “frozen conflict”: Contingency, materiality, and movement in the contested periphery of Georgia. https://doi.org/10.1007/978-3-030-57664-8_9
- Shanidze, D. (2012). Russia's soft power in Georgia since 2012: The role of Georgian Dream Party in increasing country's vulnerability towards Russia's soft power. https://www.researchgate.net/profile/Dachi-Shanidze/publication/350604124_Master's_Thesis_Russia's_Soft_Power_in_Georgia_since_2012_The_Role_of_Georgian_Dream_Party_in_Increasing_Country's_Vulnerability_towards_Russia's_Soft_Power/links/60682ad2458515614d2ee7c0/Masters-Thesis-Russias-Soft-Power-in-Georgia-since-2012-The-Role-of-Georgian-Dream-Party-in-Increasing-Countrys-Vulnerability-towards-Russias-Soft-Power.pdf
- Weber, A. (2023). Why Georgians consider the European Union more favorably than Armenians. <https://doi.org/10.17615/sf268g06n>
- Yemelianova, G. M., & Broers, L. (2020). *Routledge handbook of the Caucasus*. <https://doi.org/10.4324/9781351055628>



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Türkiye'de Zorunlu Deprem Sigortasının Yıllar İçindeki Gelişimi

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ÖZET

Son yıllarda, dünyada ve Türkiye'de doğal afetlerin sayısı giderek artmakta ve bu afetler gerçekleştiğinde ağır hasarlara neden olmaktadır. Sigortacılık sektörü, bireyler ve kurumlar için olası doğal afetlere karşı mali açıdan koruma sağlamada önemli bir rol oynamaktadır. Özellikle zorunlu deprem sigortası (DASK), deprem riskine karşı bireyler ve kurumlar için mali koruma sağlamanın yanı sıra ekonomik kayıpların telafi edilmesini de kolaylaştırabilmektedir. Bu araştırmanın amacı, Türkiye'de zorunlu deprem sigortasının yıllar içerisindeki gelişimini incelemek ve sigortanın toplumsal ve ekonomik etkilerini değerlendirmektir. Bu bağlamda kullanılan ikincil veriler, nitel araştırma yöntemiyle içerik analizi kullanılarak incelenmiştir. Araştırma sonucunda, yıllar bazında zorunlu deprem sigortası poliçe adetlerinde sürekli bir artış olduğu görülmüştür. Ancak son yıllarda, deprem yaşayan illerde sigortalılık oranlarının yeterli düzeyde olmadığı tespit edilmiştir. Sigortasız hasarlar, devlet kaynaklarına ve uluslararası yardımlara yük olup toplumsal dayanıklılığı ve ekonomik istikrarı olumsuz etkileyebilmektedir. Bu sorunun çözümü için sigortalılık oranlarının artırılması gerekmektedir. Toplumsal etki için bireylerde sigorta bilincinin artırılması ve bireylerin afetlere yönelik farkındalık seviyesinin yükseltilmesi önem arz etmektedir. Sigortacılık sektörü ile doğal afet yönetimi konusunda yapılan çalışmaların sınırlı olduğu ve bu çalışmanın literatüre katkı sağlaması beklenmektedir.

Anahtar Kelimeler: Finans, Sigorta, Zorunlu Deprem Sigortası

Development of Compulsory Earthquake Insurance in Turkey Over the Years

ABSTRACT

In recent years, the number of natural disasters has been increasing around the world, including Türkiye, and when these disasters occur, they cause severe damages. The insurance sector is important in providing financial protection for individuals and companies against possible natural disasters. In particular, the compulsory earthquake insurance policy (DASK) can provide financial protection for individuals and institutions against earthquake risk and facilitate the compensation of economic losses. This research aims to examine the development of compulsory earthquake insurance in Turkey over the years and evaluate insurance's social and economic effects. The secondary data used in this context were examined using content analysis with the qualitative research method. As a result of the research, it was observed that there was a steady increase in the number of compulsory earthquake insurance policies every year. However, it has been determined that the insurance rates in the provinces experiencing earthquakes have been insufficient in recent years. Uninsured losses can be a burden on state resources and international aid, and can negatively affect social resilience and economic stability. Insurance rates need to be increased to solve this problem. For social impact, it is important to increase insurance awareness among individuals and raise individuals' awareness regarding disasters. The aim is that the studies conducted on the insurance sector and natural disaster management are limited, and this study is expected to contribute to the literature.

Keywords: Finance, Insurance, Compulsory Earthquake Insurance

İklim değişikliği, atmosferdeki sera gazı emisyonlarının artışıyla tetiklenen ve toplumun birçok alanında etkisini gösteren önemli bir küresel sorundur. Sera gazlarının olması gereken seviyelerin üzerinde seyrediyor olması, iklim değişikliğinin etkilerini giderek artırmakta (Alper ve Anbar, 2008: 223) ve sel, orman yangınları, depremler gibi doğal afetlerin sıklığını ve şiddetini artırarak büyük mali kayıplara yol açmaktadır (Torusdağ vd., 2024: 409). İklim değişikliği, birçok sektörü etkilerken, finans sektörü de bu etkilerden payını almaktadır (Alper ve Anbar, 2008: 223). Özellikle finans sektörünün önemli bir parçası olan sigorta sektörü, iklim değişikliğinin sonuçlarından en fazla etkilenen sektörlerin başında gelmektedir (Torusdağ vd., 2024: 409).

Sigorta şirketleri tarafından afet risklerine karşı sunulan poliçeler, afetlerin olumsuz ekonomik etkilerini azaltmada önemli bir rol oynamaktadır (Wolfrom ve Yokoi-Arai, 2015: 28). Günümüzde, iklim değişikliğinin etkilerini en aza indirmek ve bu konuda farkındalık oluşturmak bir zorunluluk haline gelmiştir (Torusdağ vd., 2024: 409). Türkiye'de, 17 Ağustos 1999 Marmara Depremi'nin ardından kurulan Doğal Afet Sigortaları Kurumu (DASK), deprem zararlarını azaltmayı hedefleyen, kâr amacı gütmeyen bir sigorta havuzu olarak faaliyet göstermektedir. 2000 yılında Zorunlu Deprem Sigortası sunmaya başlayan DASK, bireylerin deprem sonrası yaşanacak sıkıntıları hafifletme ve daha az sıkıntılı günler geçirmelerine yardımcı olmayı hedeflemektedir. Bu sigorta, yalnızca depreme karşı değil, aynı zamanda depremden kaynaklanan yangın, infilak, yer kayması ve tsunami gibi risklere karşı da mülk sahiplerine maddi güvence sağlayabilmektedir. Kamu ve özel sektör iş birliğiyle faaliyet gösteren DASK, bireylere yönelik deprem sonrası maddi destek sunarak yaşamın normale dönmesine katkıda bulunmayı amaçlamaktadır. Ayrıca kurum, %100 sigortalılık oranına ulaşmayı hedeflemektedir (DASK, 2023). Bu hedefe ulaşabilmek için sigorta bilincinin artırılması ve sigortalılık oranlarının yükseltilmesi gerekmektedir. Bu çalışma, Türkiye'de zorunlu deprem sigortasının yıllar içindeki gelişimini incelemeyi ve sigortanın toplumsal ve ekonomik etkilerini değerlendirmeyi amaçlamaktadır. Araştırmada, zorunlu deprem sigortasının yıllar içerisindeki gelişimi, sigortalılık oranlarındaki değişimler ve mevcut eksiklikler ele alınmaktadır.

1. LİTERATÜR TARAMASI

Günümüzde risklerin zamanla değişebileceği öngörülmekte, özellikle iklim değişikliğinin doğal afet risklerini önemli ölçüde artıracığı vurgulanmaktadır (Birghila vd., 2022: 2639). Afet; *“Toplumun tamamı veya belli kesimleri için fiziksel, ekonomik ve sosyal kayıplar doğuran, normal hayatı ve insan faaliyetlerini durduran veya kesintiye uğratan, etkilenen toplumun baş etme kapasitesinin yeterli olmadığı doğa, teknoloji veya insan kaynaklı olay”* şeklinde tanımlanmaktadır (AFAD, 2024). Son yıllarda meydana gelen afetler, büyük ölçekli ekonomik kayıplara yol açmaktadır (Nell ve Richter, 2002: 1). Bu durum, mevcut risk yönetimi stratejilerinin yetersiz kalabileceğine işaret etmektedir. Gelecekteki iklim değişikliği etkilerini dikkate alarak riskleri yönetmek, büyük belirsizlikleri beraberinde getirirse de sigorta sistemi, bu belirsizliklerle başa çıkmada önemli bir rolü üstlenmektedir. Sigorta, toplumları risklere karşı koruyan temel bir araç olarak öne çıkmaktadır (Birghila vd., 2022: 2639).

2023 yılında meydana gelen büyük depremler, şiddetli fırtınalar gibi küresel doğal afetlerin, dünya genelinde yaklaşık 380 milyar dolarlık ekonomik kayba yol açtığı görülmüştür. Bu kayıpların sadece %31'inin sigorta kapsamında olduğu tespit edilmiştir. En büyük zararlar arasında Türkiye ve Suriye'deki depremler ile Çin'deki seller ve Otis Kasırgası yer almaktadır. Afet sigortası olmayanların oluştuğu büyük hasarlar, afet hazırlığı ve dayanıklılığını artırma

10th International CEO Communication, Economics, Organization & Social Sciences Congress ihtiyacını vurgulamaktadır (AON, 2024). Tablo 1’de 2023 yılında meydana gelen en önemli 10 doğal afet ile oluşan küresel ekonomik kayıplar gösterilmektedir.

Tablo 1: 2023 yılında En Önemli 10 Küresel Ekonomik Kayıp Olayı

Tarih	Olay	Yer	Ölü Sayısı	Ekonomik Kayıp (Milyar \$)	Sigortalı Kayıp (Milyar \$)
06/02 - 20/02	Türkiye ve Suriye Depremleri	Türkiye ve Suriye	59,272	92,4	5,7
22/05 - 30/09	Çin Sel Felaketleri	Çin	370	32,2	1,4
25/10 - 26/10	Otis Kasırgası	Meksika	52	15,3	2,1
01/01 - 30/06	La Plata Havzası Kuraklığı	Brezilya, Arjantin, Uruguay	N/A	15,3	1,0
01/01 - 31/12	ABD Kuraklığı	ABD	N/A	14,0	6,5
13/05 - 17/05	Emilia-Romagna Sel Felaketleri	İtalya	15	9,8	0,6
01/03 - 03/03	Şiddetli Konvektif Fırtına	ABD	13	6,2	5,0
21/07 - 26/07	Şiddetli Konvektif Fırtına	Avrupa	11	5,8	3,0
08/08 - 17/08	Hawaii Orman Yangınları	ABD	100	5,5	3,5
31/03 - 01/04	Şiddetli Konvektif Fırtına	ABD	37	5,5	4,4
Diğer tüm olaylar			~35,100	178,0	84,8
Toplam			~95,000	380	118

Kaynak: AON, (2024)

Tablo 1’de, 2023’teki en büyük ekonomik kayıplar arasında Türkiye ve Suriye’deki depremler yer almaktadır. 2023 yılının en yıkıcı olayı olarak değerlendirilen depremler, 92,4 milyar dolarlık ekonomik kayıp ve 59.272 can kaybına neden olmuştur. Sigortalı olanların kayıplarının ise 5,7 milyar dolar olduğu belirtilmiş, bu durum da zararların büyük bir kısmının sigortasız kaldığını ortaya koymuştur. Çin’deki sel felaketleri (32,2 milyar dolar) ve Meksika’daki Otis Kasırgası (15,3 milyar dolar), ABD’deki kuraklık (14 milyar dolar), Hawaii yangınları (5,5 milyar dolar), da büyük kayıplara yol açtığı görülürken, sigorta kapsamının yine düşük seviyelerde olduğu görülmektedir. Sigortalı olanların kayıplarının ise 5,7 milyar dolar olduğu belirtilmiş, bu da zararların büyük bir kısmının sigortasız kaldığını ortaya koymaktadır. Elde edilen rakamlar sonucu sigorta penetrasyonunun düşük seviyede olduğu tespit edilmiştir. Bu durum, özellikle gelişmekte olan ülkelerde, sigortasız hasarların devlet kaynakları ve uluslararası yardımlarla karşılanmasına neden olarak hem toplumsal hem de mali açıdan olumsuz etkiler yaratabilmektedir. Bu soruna çözüm olarak, alternatif finansal araçların geliştirilmesi ile kamu-özel sektör iş birliği sağlanarak sigortalılık oranının artırılması önem arz etmektedir.

Sigorta şirketleri, bireylerin ve işletmelerin olası risklere karşı mali yüklerini azaltmak için sigorta poliçeleri sunmakta ve bu hizmet karşılığında sigorta primi tahsil etmektedir. Bu primler, müşterilerin taleplerini karşılamak için fon havuzlarında toplanmaktadır (Madura, 2014: 15). Sigorta sözleşmesinde, sigortalılar, büyük bir zararın riskini ve belirsizliğini nispeten daha küçük bir sigorta primi ile riskleri sigorta şirketlerine transfer etmektedirler. Sigorta şirketleri, konut, yangın ve araç sigortaları gibi riskleri adil ve etkili bir şekilde paylaşmak için düzenlemeler yapmaktadır. Bu sayede riskler, sigortalılar arasında eşit bir şekilde dağıtılmaktadır (Torre-Enciso ve Laye, 2001: 64).

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Afet sigortası, sel, deprem ve fırtına gibi doğal afetlerden kaynaklanan risk ve kayıpların paylaşılmasını ve transferini amaçlayan, küresel çapta bilinen ancak yaygın olarak kullanılmayan bir risk finansmanı yöntemidir. Aşırı risklerin güvence altına alınmasının zorlukları nedeniyle, sigorta şirketlerinin ve hükümetlerin afet sigorta sistemlerinde iş birliği yaptıkları görülmektedir (Paudel, 2012). Türkiye’de, 17 Ağustos 1999 Marmara Depremi’nin ardından, deprem zararlarını en aza indirmek amacıyla kurulan Doğal Afet Sigortaları Kurumu (DASK), 27 Eylül 2000 tarihinde Zorunlu Deprem Sigortası (ZDS) teminatı sunmaya başlamıştır. DASK, Zorunlu Deprem Sigortası sisteminin yürütülmesinde sigorta şirketleri, acenteler ve bankalarla iş birliği yapmaktadır. Kamu ve özel sektör iş birliğiyle oluşturulan, kâr amacı gütmeyen bir sigorta havuzu olan DASK, deprem sonrası bireylerin hayatlarını güvenle sürdürebilmelerini sağlamayı hedeflemektedir. Ayrıca, DASK’ın temel hedefi %100 sigortalılık oranına ulaşmak olup, bu hedefin, kurumlar arası iş birliği ve vatandaşların sigorta bilincinin artırılmasıyla gerçekleştirilebileceği öngörülmektedir (DASK, 2023). Tablo 2’de DASK’ın yıllar içerisindeki gelişim süreci yer almaktadır.

Tablo 1. DASK'ın Gelişim Süreci

Yıl	Gelişmeler
2000	DASK kuruldu. İlk Zorunlu Deprem Sigorta poliçesi üretildi.
2010	Reasürans korumasıyla ödeme gücü 5 milyar TL’ye ulaştı.
2011	Van Depremleri yaşandı. Sigortalılık oranı %12,5 arttı. Yenileme hatırlatma aramaları başlatıldı.
2012	6305 sayılı Afet Sigortaları Kanunu yürürlüğe girdi. Elektrik ve su aboneliklerinde ZDS kontrolü başladı. Yeni tarifeye geçildi.
2013	Ulusal Adres Veri Tabanı (UAVT) entegrasyonu sağlandı. CAT-Bond yani Afet Tahvilleri ve alternatif risk transfer araçları kullanılmaya başlandı.
2014	Ortofoto Projesine destek verildi. Merkezi raporlama altyapısı oluşturuldu.
2015	Afet Yönetim Projesi başlatıldı. ARYS harita tabanlı afet destek yapısı oluşturuldu. Online ekspertiz süreci mobil cihazlarla başlatıldı.
2016	DASK Mobil Projesi ile şeffaf hasar takip sistemi kuruldu. Mobil anlık bilgi akışı sağlandı.
2017	Ödeme gücü 17 milyar TL’ye ulaştı. Kademeli yenileme indirimi ve bina indirimi uygulanmaya başlandı. Elektronik Arşiv Projesi başladı.
2018	Alo DASK 125 IVR üzerinden poliçe ve hasar sorgulama başladı. Değişen Deprem Tehlike Haritasına göre tarife yenileme çalışmaları başladı. Millî Eğitim Bakanlığı ile “ <i>Önceliğimiz Güven, Sorumluluğumuz Güvence</i> ” Projesi kapsamında iş birliğine başlandı.
2019	ZDS tarifesi yenilendi. Ödeme gücü 22 milyar TL’ye ulaştı.
2020	Eureka Sigorta A.Ş.’nin Teknik İşleticilik görevinin sona ermesi ile görev Türk Reasürans A.Ş.’ye devredildi. Risk bazlı yeni fiyatlandırma metodolojisine geçildi. Ödeme gücü 46 milyar TL’ye ulaştı.
2021	Poliçelerde %10 prim indirimi yapıldı. Ankara Olağanüstü Durum Yönetim Merkezi çalışmaları başladı. DASK Mobil Deprem Tır’ı faaliyete geçti.
2022	Zorunlu Afet Sigortası çalışmaları başladı. Katılım sigortacılığı devreye girdi. Ödeme gücü 100 milyar TL’ye ulaştı.
2023	Poliçelere enflasyon koruması getirildi. Kahramanmaraş Depremleri sonrası otomatik yenileme yapıldı. Ödeme gücü 280 milyar TL’ye ulaştı.

Kaynak: (DASK, 2023) internet sayfasında yer alan veriler doğrultusunda yazarlar tarafından derlenmiştir.

Zorunlu Deprem Sigortası (ZDS), tapu işlemleri, abonelikler ve konut kredilerinde zorunlu olup, entegrasyon ve elektronik bilgi akışıyla işlemleri kolaylaştırmaktadır. 40 sigorta şirketi ve 17 bin acente ile ZDS yaygınlaşarak deprem risklerine karşı güvence sağlamaktadır. 2023 yılında Türkiye’de 11 şehri etkisi altına alan depremler sonrası DASK’ın, avans ödeme uygulamasıyla yıkık binalara sigorta bedelinin %20’sini, orta hasarlı binalara %10’unu hızla ödediği, OHAL bölgelerinde poliçeleri otomatik yenileyip prim tahsilatlarını da ertelediği görülmüştür. Ayrıca, kurum tarafından entegre veri sistemleriyle hasar tespitleri yapılmış, tazminatlar harita üzerinden başvuru beklenmeden ödenmiştir. 31 Aralık 2023 itibarıyla 614.512 adet ihbar alınmış ve 34,5 milyar TL tazminat ödenmiştir (DASK, 2023).

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Afet sigortaları konusunda literatürde yapılan çalışmalar incelendiğinde, Melecky ve Raddatz (2011) tarafından yapılan çalışmada, 1975-2008 yılları arasında yüksek ve orta gelirli ülkelerin jeolojik, iklimsel ve diğer doğal afet türlerinin devlet harcamaları ve gelirleri üzerindeki etkisi incelenmiştir. Çalışma sonucunda, daha gelişmiş finansal veya sigorta piyasalarına sahip ülkeler, afetlerden daha az zarar görürken, düşük sigorta penetrasyon seviyelerine sahip ülkelerin daha büyük kayıplar yaşadıkları tespit edilmiştir. Bu bulgular, afet kayıplarını azaltmak için afet sigortası poliçelerinin artırılması, geliştirilmesi ve yaygınlaştırılmasının önemini vurgulamaktadır. Paudel (2012) çalışmasında, doğal afet sigortası sistemlerinin etkinliğini artırmak için yüksek pazar penetrasyonu için zorunlu katılım ve uyum mekanizmalarını önermektedir. Ayrıca, risk transfer mekanizmalarının entegrasyonu, sigorta şirketlerine vergi teşvikleri sağlanması ve risk azaltma politikalarının dikkatlice uygulanması gerektiği de vurgulanmaktadır.

Torusdağ vd. (2024) çalışmalarında, iklim değişikliğinin sağlık, tarım, yangın ve doğal afet sigortası branşlarında ödenen tazminatlara etkilerini incelemiştir. 1990-2021 yılları arasında beş branşta ödenen hasar tazminatları ile meteorolojik veriler, standart birim kök testleri, yapısal kırılma analizleri ve ARDL eşbütünleşme testi kullanılarak analiz edilmiştir. Bu analizlerle iklim değişikliği ile tazminatlar arasındaki ilişki tespit edilmiştir. Çınar ve Yıldız (2024) çalışmalarında, afet risklerinin farkında olunmasına rağmen sigorta yaptırma eğiliminin düşük olduğu belirlenmiştir. Bunun temel nedenleri arasında, afet sigortasının faydalarının yeterince bilinmemesi, afet sonrası devlet ve yardım kuruluşlarından destek alınabileceği düşüncesi ve bireylerin afet risklerini uzak görmesi gibi yanlış algılar yer almaktadır. Ayrıca, DASK sigortasının tazminat üst limitinin düşük olması, ek sigorta maliyetlerinin yüksekliği ve esnafın bu maliyetleri karşılamada zorlanması da sigorta yaptırma isteksizliğine yol açmaktadır. Afet sigortasına ilgiyi artırmak için DASK sigortasının üst limitlerinin yükseltilmesi ve ek teminatların daha uygun maliyetlerle sunulması önerilmektedir.

2. ARAŞTIRMA YÖNTEMİ

Bu araştırmanın amacı, Türkiye'de zorunlu deprem sigortasının yıllar içerisindeki gelişimini incelemek ve sigortanın toplumsal ve ekonomik etkilerini değerlendirmektir. Bu bağlamda kullanılan ikincil veriler, nitel araştırma yöntemiyle içerik analizi kullanılarak incelenmiştir. Elde edilen veriler, sigorta şirketlerinin raporları, DASK ve Türkiye Sigorta Birliği gibi kurumların verileri ile istatistiksel raporlardan elde edilmiştir.

3. BULGULAR

2023 yılında yangın ve doğal afetler sektörünün toplam prim üretimi 65.477.470.691 TL olarak gerçekleşmiştir. Aynı dönemde toplam sigorta sektörünün prim üretimi ise 486.024.033.340 TL olarak kaydedilmiş ve bu sektörün toplam içerisindeki payı yaklaşık %13,47 olarak hesaplanmıştır. 2022 yılında ise toplam sigorta sektörünün prim üretimi 234.998.627.313 TL, yangın ve doğal afetler sektörünün prim üretimi ise 27.337.045.896 TL olarak gerçekleşmiştir. Bu veriler ışığında 2023 yılında toplam sigorta sektöründe %106,8 oranında, yangın ve doğal afetler sektöründe ise %139,5 oranında bir prim artışı görülmüştür. Bu artış, sektörün büyüme eğilimini ve yangın ile doğal afet sigortalarına olan talebin önemli ölçüde arttığını göstermektedir (TSB, 2023).

Tablo 3: Coğrafi Bölgeler Bazında Sigortalılık Oranları

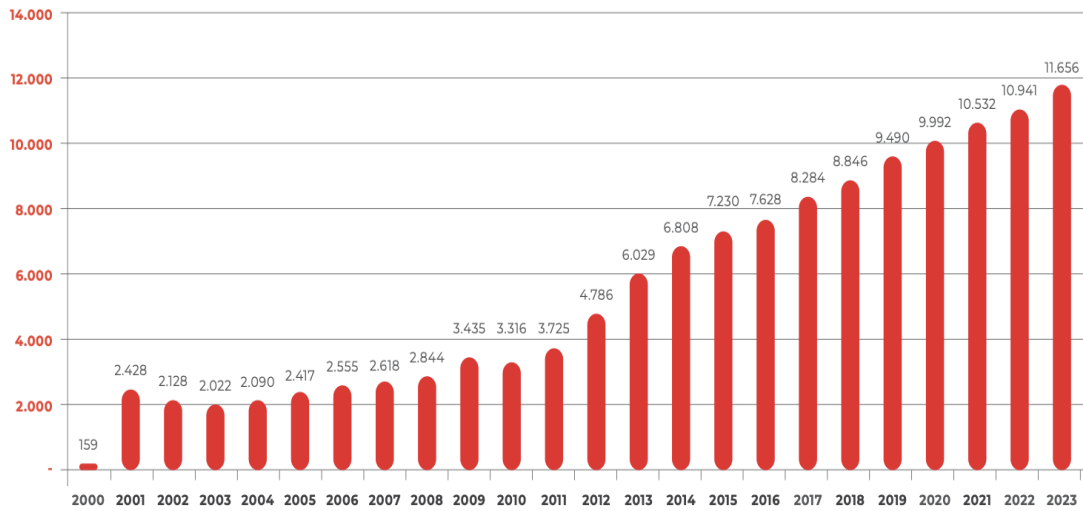
Coğrafi Bölge	Sigortalılık Oranı (%)	Ortalama Prim (TL)	Konut Adedi
Marmara	%66	501	6.840.000
Ege	%59	509	2.970.000
İç Anadolu	%53	214	3.780.000
Akdeniz	%54	288	2.517.000
Karadeniz	%47	364	1.993.000
Doğu Anadolu	%59	573	868.000
Güneydoğu Anadolu	%51	236	1.124.000

Kaynak: (DASK, 2023)

Tablo 3'te, Marmara Bölgesi, %66 sigortalılık oranı ile en yüksek seviyeye ulaşmış olup, Türkiye'deki en fazla konutun bulunduğu bölge olmasına rağmen, %34'lük bir sigortalılık açığına sahiptir. Ege Bölgesi, %59 sigortalılık oranı ile Marmara'dan sonra ikinci sırada yer almaktadır. Ancak, bölgedeki ortalama primlerin diğer bölgelere kıyasla daha yüksek olması, sigortalılık oranını olumsuz etkileyebilecek bir faktör olarak değerlendirilmektedir. İç Anadolu Bölgesi, en düşük prim ortalamasına sahip olmasına rağmen, sigortalılık oranının %53 seviyelerinde kaldığı gözlemlenmiştir. Akdeniz Bölgesi'nde ise sigortalılık oranı %54 olarak belirlenmiş, prim seviyesi İç Anadolu Bölgesi'ne göre daha yüksek bulunmuştur. Karadeniz Bölgesi, %47 ile sigortalılık oranının en düşük olduğu bölge olarak dikkat çekmektedir. Doğu Anadolu Bölgesi'nin sigortalılık oranı %59 ile nispeten yüksek bir seviyede olsa da Türkiye genelindeki en yüksek prim seviyelerine sahip olduğu görülmektedir. Güneydoğu Anadolu Bölgesi'nin ise %51 sigortalılık oranı ile orta düzeyde bir performans sergilediği görülmektedir.

Grafik 1'de yıllara göre zorunlu deprem sigortası poliçe adetleri gösterilmektedir.

Grafik 1: Yıllara Göre Zorunlu Deprem Sigortası Poliçe Adetleri

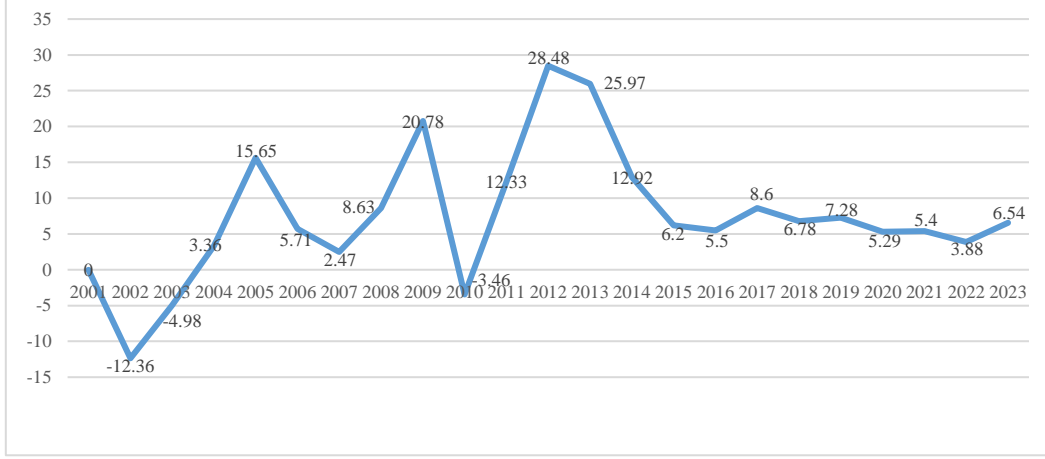


Kaynak: (DASK, 2023)

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Grafik 1’de, 2001’den 2023’e kadar olan dönemde poliçe adetlerinde belirgin bir artış gözlemlenmektedir. 2001’de 2.428 adet poliçe bulunurken, 2023 yılı itibariyle bu sayının 11.656’ya ulaştığı görülmektedir.

Grafik 2’de yıllara göre poliçe adedi büyüme oranı (%) yer almaktadır.

Grafik 2: Yıllara Göre Poliçe Adedi Büyüme Oranı (%)

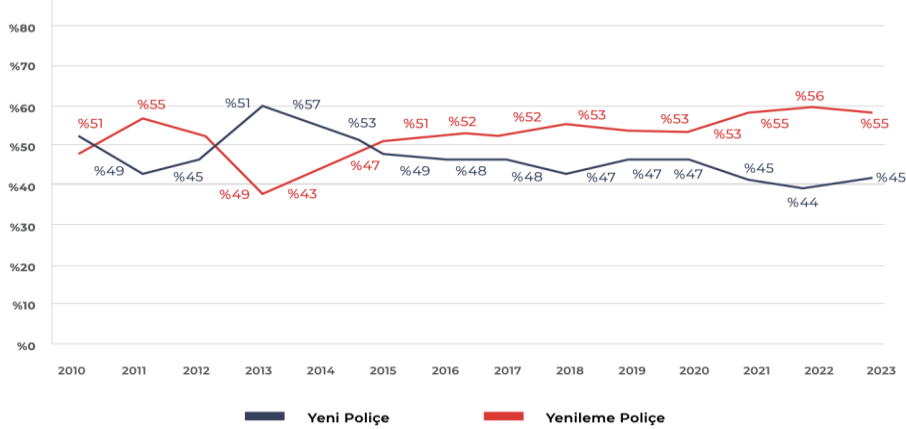


Kaynak: (DASK, 2023)

Grafik 2’de büyüme artış oranları incelendiğinde, özellikle 2012 ve 2013 yıllarında, artış oranının oldukça yüksek olduğu görülmektedir. 2015 yılından itibaren büyüme oranları düşüş göstermektedir.

Grafik 3’te yeni poliçe ve yenileme poliçe oranları gösterilmektedir.

Grafik 3: Yeni Poliçe ve Yenileme Poliçe Oranları (%)



Kaynak: (DASK, 2023)

Grafik 3’te, yeni poliçe ve yenileme poliçe oranları arasındaki değişim gösterilmektedir. 2010’dan 2023’e kadar olan yıllarda her iki oran da dalgalanmalar gözlemlenmektedir. 2010 yılında %49 olan yeni poliçe oranı, 2022 ve 2023 yıllarında %45 seviyelerinde olduğu görülmektedir. Yenileme poliçe oranı ise genellikle daha yüksek oranlarda görülmüştür. 2010 yılında %51 olduğu, 2022 ve 2023 yıllarında ise %55 oranına kadar yükseldiği görülmektedir.

Tablo 4’te 2014-2023 yılları arasında, deprem sayısı, dosya sayısı ve hasar ödemeleri yer almaktadır.

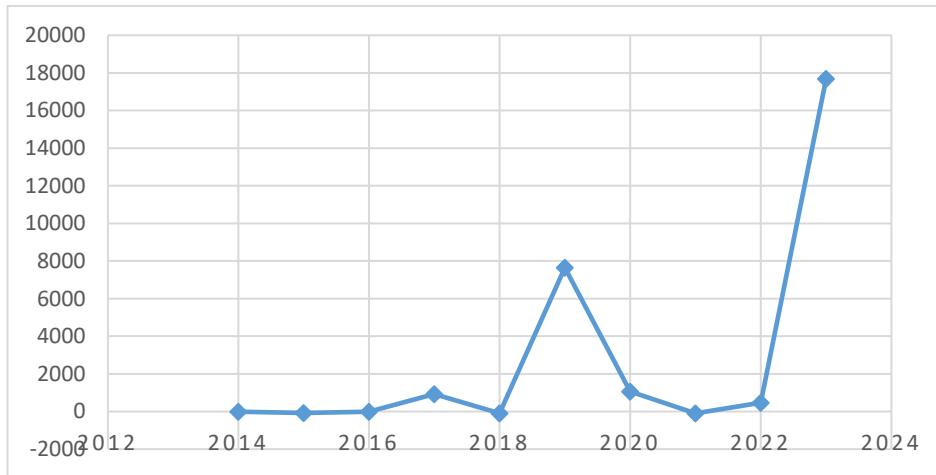
Yıl	Deprem Sayısı	Dosya Sayısı	Ödeme (TL)
2014	37	831	4.802.426
2015	33	299	991.201
2016	27	204	895.661
2017	45	2.051	9.198.891
2018	54	245	1.093.155
2019	93	9.440	84.595.771
2020	164	59.600	989.417.898
2021	108	2.703	35.071.197
2022	106	18.448	198.899.388
2023	14	485.362	35.416.024.818

Kaynak: (DASK, 2023)

Tablo 4’te, 2014-2023 yılları arasında deprem sayıları, dosya sayıları ve hasar ödemeleri incelendiğinde, 2020 yılında deprem sayısının önemli ölçüde arttığı görülmektedir. Deprem sayısındaki artış, dosya sayılarında da önemli bir artışa neden olmuştur. 2020 yılında dosya sayısı 59.600’e yükselmiştir. 2023’te ise bu sayı 485.362’ye çıkmıştır. Büyük depremlerden kaynaklı 2020 ve 2023 yıllarında ödemelerde de önemli bir artışın olduğu görülmektedir. 2020’de ödeme miktarı 989 milyon TL’ye, 2023’te ise 35.4 milyar TL’ye ulaşmıştır. Deprem sayısındaki artış, dosya sayılarının ve ödemelerin de artmasına neden olmuştur.

Grafik 4’te hasar ödemelerinin bir önceki yıla göre artış oranları gösterilmektedir.

Grafik 4: Bir Önceki Yıla Göre Ödeme Artış Oranı (%)



Kaynak: (DASK, 2023) internet sayfasında yer alan veriler doğrultusunda yazarlar tarafından derlenmiştir.

Grafik 4’te görüldüğü üzere, her yıl için hasar ödemelerinin bir önceki yıla göre yüzde değişiminde, bazı yıllarda büyüme oranı oldukça yüksekken, diğer yıllarda düşüş olduğu görülmektedir. Bu duruma neden olarak, büyük depremlerin olduğu dönemlerde ödeme miktarlarında artışlar yaşandığını gösterebilir. Özellikle 2020 yılında büyüme oranının oldukça yüksek olması dikkat çekicidir. 2020-2023 yılları arasında, toplam hasar ödeme miktarlarının

10th International CEO Communication, Economics, Organization & Social Sciences Congress yüksek olduğu dönemlerdir. 2023 yılında, ödeme büyüme oranının tekrar pozitif bir eğilim göstermesi ve daha fazla dosyanın işleme alınmasında Kahramanmaraş depremlerinin sebep olduğu değerlendirilebilir. Ödeme artışlarının, büyük doğal afetlerin olduğu yıllarda zirve yaptığı, sonraki yıllarda ise normal seviyelere döndüğü gözlenmektedir. Özellikle Elazığ, İzmir ve Kahramanmaraş gibi büyük depremlerin sigorta sektörü üzerindeki etkisi sadece fiziksel yıkım değil, aynı zamanda sigorta sistemine olan güvenini de yansıtmaktadır.

SONUÇ

Türkiye'nin aktif fay hatları üzerinde bulunması, zorunlu deprem sigortasının (DASK) önemini artırmaktadır. 1999 Marmara Depremi sonrasında faaliyetlerine başlayan DASK, sigorta bilincini artırmak ve sigortalılık oranlarını hedeflenen düzeye çıkarmak amacıyla çeşitli projelerle desteklenmektedir. Bu çalışmada, DASK'ın yıllar içindeki gelişimi ve toplumsal ve ekonomik etkileri incelenmiş, coğrafi bölgeler arasında sigortalılık oranları ve primlerde farklılıklar olduğu gözlemlenmiştir.

2023 yılında sigorta sektöründe toplamda %106,8 oranında, yangın ve doğal afetler sektöründe ise %139,5 oranında bir prim artışı kaydedilmiştir. Bu artış, sektörün büyüme eğiliminde olduğunu ve yangın ile doğal afet sigortalarına olan talebin önemli ölçüde arttığını göstermektedir. Ayrıca araştırma sonuçları, zorunlu deprem sigortası poliçe adetlerinin yıllar içinde arttığını ancak son yıllarda deprem yaşayan illerde sigortalılık oranlarının istenilen seviyeye ulaşmadığını ortaya koymuştur. Yenileme oranlarının genellikle yeni poliçe oranına göre daha yüksek olması, mevcut poliçelerin süresinin dolduğunda yenilenmesi ve sigortalıların daha istikrarlı bir şekilde sigorta sisteminde kalma eğiliminde olduklarını göstermektedir.

2023 yılında en büyük afetler arasında Türkiye depremleri belirtilmiş zararların büyük bir kısmın sigortasız olduğu görülmüştür. Bu durum, özellikle gelişmekte olan ülkelerde sigortasız hasarların devlet kaynakları ve uluslararası yardımlarla karşılanmasına yol açarak toplumsal ve mali açıdan olumsuz etkiler yaratabilmektedir. Bu soruna çözüm olarak, alternatif finansal araçların geliştirilmesi ve kamu-özel sektör iş birliğiyle sigortalılık oranının artırılmasına yönelik çalışmalara ağırlık verilmesi gerekmektedir.

Afet hazırlığı, dayanıklılık planlaması ve sigorta penetrasyonunu artırmak için ekonomik sigorta paketleri, uygun prim politikaları ve bölgelere özel çözümler geliştirilmesi önem arz etmektedir. Bilinçlendirme kampanyaları, eğitimler ve dijital platformlar aracılığıyla sigortanın önemi vurgulanarak poliçe sayıları artırılabilir. Kamu ve özel sektör iş birliğiyle sigorta kapsama alanı genişletilmeli ve toplumda sigortalılık bilinci güçlendirilmelidir. Bu çalışmalar, toplumda bireylerde sigorta bilincini artıracak faaliyetlerin teşvik edilmesi ve afetlerle ilgili kurumların daha etkin stratejiler geliştirmesi gerektiğini göstermektedir. Sigortacılık sektörü ile doğal afet yönetimi konusunda yapılan çalışmaların sınırlı olduğu ve bu çalışmanın literatüre katkı sağlaması hedeflenmektedir.

KAYNAKÇA

- AFAD, (2024). Afet Yönetimi Terimler Sözlüğü ve Afet Türleri. <https://www.afad.gov.tr/aciklamali-afet-yonetimi-terimleri-sozlugu> ve <https://www.afad.gov.tr/afet-turleri> (01.12.2024).
- Alper, D., & Anbar, A. (2008). İklim Değişikliğinin Finansal Hizmet Sektörüne Etkileri. *Elektronik Sosyal Bilimler Dergisi*, 7(23), 223–253.
- AON, (2024). Climate and Catastrophe Insight, <https://assets.aon.com/-/media/files/aon/reports/2024/climate-and-catastrophe-insights-report.pdf> (01.12.2024).

10th International CEO Communication, Economics, Organization & Social Sciences Congress

- Birghila, C., Pflug, G. C., & Hochrainer-Stigler, S. (2022). Risk-layering and optimal insurance uptake under ambiguity: With an application to farmers exposed to drought risk in Austria. *Risk Analysis*, 42(12), 2639–2655. <https://doi.org/10.1111/risa.13884>
- Çınar, Ö., & Yıldız, E. (2024). Ulusal Deprem Tatbikatı Sonrası Korku Pazarlaması Kapsamında, Küçük İşletmelerin Afet Sigortası Satın Alma Eğilimleri. *Gümüşhane Üniversitesi Sosyal Bilimler Dergisi*, 15(2), 531–543.
- DASK, (2023). https://dask.gov.tr/upload/DASK_2023_Faaliyet%20Raporu.pdf (01.12.2024).
- Madura, J. (2014). *Financial markets and institutions* (11 th Edit). Cengage learning.
- Melecky, M., & Raddatz, C. (2011). How Do Governments Respond after Catastrophes? Natural-Disaster Shocks and the Fiscal Stance. In *Policy Research Working Paper* (Issue 5564). http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1759155%5Cnhttp://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2011/02/07/000158349_20110207134355/Rendered/PDF/WPS5564.pdf
- Nell, M., & Richter, A. (2002). *Improving Risk Allocation Through Cat Bonds* (Issue 10). <http://hdl.handle.net/10419/54220>
- Paudel, Y. (2012). A Comparative Study of Public—Private Catastrophe Insurance Systems: Lessons from Current Practices. *Geneva Papers on Risk and Insurance: Issues and Practice*, 37(2), 257–285. <https://doi.org/10.1057/gpp.2012.16>
- Torre-Enciso, I. M., & Laye, J. E. (2001). Financing catastrophe risk in the capital markets. *International Journal of Emergency Management*, 1(1), 61–69. <https://doi.org/10.1504/IJEM.2001.000510>
- Torusdağ, T., Tepeci, M., & Metin, İ. (2024). İklim Değişikliğinin Sigorta Sektörü Üzerindeki Etkileri: Türkiye Örneği. *Doğal Afetler ve Çevre Dergisi*, 10(2), 409–423. <https://doi.org/10.21324/dacd.1408028>
- TSB, (2023). Prim Üretimleri Sıralama 2023-12. <https://www.tsb.org.tr/istatistik/genel-sigorta-verileri/prim-adet> (05.12.2024).
- Wolfrom, L., & Yokoi-Arai, M. (2015). Financial instruments for managing disaster risks related to climate change. *OECD Journal: Financial Market Trends*, 1, 25–47. <https://doi.org/10.1787/fmt-2015-5jrkdpxk5d5>



10th International CEO Communication, Economics, Organization & Social Sciences Congress
A Research on the Effect of Information Sharing on Organizational Power
Distance

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ABSTRACT

Today, the importance of information sharing and the organizational power distance perceived by the staff for businesses is an indisputable fact. For this reason, studies on information sharing and organizational power distance are at the forefront both in academia and in the business world. It is possible to state that organizational power distance is high in traditional societies like ours. Important studies have been conducted on the factors that push businesses as organizations and employees as individuals to share information, and the idea that one of the reasons for information sharing may be organizational power distance has emerged. However, the relationship between knowledge sharing and organizational power distance cannot be a simple cause-effect relationship. In this context, the relationship between information sharing and organizational power distance among all organizational elements can be considered as a potential research subject. In this study, it was examined whether information sharing has an effect on organizational power distance. The review was conducted quantitatively with surveys answered by 448 participants from various sectors, and the obtained data was evaluated with the SPSS program. As a result, findings were obtained that information sharing affects organizational power distance.

Keywords: Information sharing, power distance, Survey.

1. Introduction

There is no need to cite a reference to emphasize how today's business world is filled with information. We are experiencing the zenith of business life, which Drucker defined as "information capitalism" (1993: 254), just days before the internet became widely established in the world. Of course, this didn't start today. Information has existed for a long time, but its feature and importance was related to its ability to "exist"; When the nature and importance of knowledge began to be related to its "application", it also became the engine of the economy (Drucker, 1993: 254). Thus, knowledge has become not only the engine of the economy but also one of the basic elements of competitive advantage (Barutçugil, 2002: 28-30, 55; Bock et al., 2005: 88).

The reason why information is important is because it "uses". Of course, today, those who will use knowledge to make it "use" are "knowledge workers" (Drucker, 1993; 2000; 2002), in other words, employees who "make their living by using their knowledge". Making information useful is mostly about making an innovation that will give you an advantage in competition (Öncü et al., 2015: 152). This innovation may be related to the product, production process or market (Nonaka, 1994: 14). In any case, in order to gain a competitive advantage for the business, employees must constantly strive to innovate (Kaplan and Norton, 2006: 135).

This study claims that increasing the level of knowledge sharing among employees increases innovative behavior and basically aims to confirm this claim. However, beyond this, it is expected that "organizational power distance" will also play a role in this relationship and aims to examine the direction and impact of this role, if any. Accordingly, information sharing, organizational power distance and innovative work behavior will be conceptually presented, then the research will be explained with its details, methodology and findings, and finally the study will be concluded by evaluating the results, reminding the limitations and sharing experiences for future research.

2. Literatür Review

2.1. Information Sharing

"Information is personalized information that enables the individual to accurately and completely comprehend what is happening around him"; Knowledge sharing, which can be considered the most important stage of the knowledge management process (Töre, 2019: 279), can be considered as the ability of all employees in an organization to benefit from the existing knowledge (Erat, 2020: 126). The purpose of information sharing is to internalize the information available throughout the organization in the fastest and most effective way (Töre, 2019: 279). This situation can also be considered as the organizationalization of knowledge (Nonaka, 1994; Van den Hoof and de Ridder, 2004).

For this purpose, information should be distributed and shared in the most widespread way within the organization (Barutçugil, 2002: 40; O'Dell et al. 2003: 25). This sharing can be between individuals or units; It can take place through formal or informal means. It can be sustained by adhering to a certain procedure or independently, or it can be under control or out of control (Demirel, 2007: 101-102). Formal pathways inherently support spontaneous information sharing; Informal ways, on the other hand, are up to the initiative of individuals and depend on the socialization of employees in one way or another (Nonaka, 1994: 16). Because the knowledgeable person may not even be aware of the knowledge he has (Turgut and Beğenirbaş, 2014: 149). Because we actually know more than we can say; Polanyi (1966: 4-5), perhaps the first representative of this subject, demonstrated this with the example of "face

10th International CEO Communication, Economics, Organization & Social Sciences Congress recognition" (saying that we choose and find a face we know among thousands of people, but we cannot express how we found it). What is at stake here is tacit knowledge; that is, information that the individual is not aware of; Thus, knowledge can be considered in two different ways, implicit and explicit (Nonaka, 1994: 15; Polanyi, 1966: 4). Naturally, another element of knowledge sharing is the volunteering of the recipient (Yeniçeri and Demirel, 2007: 10).

As a result, information sharing is indirectly one of the most important elements for gaining competitive advantage (Taş, 2011: 120) and thus achieving organizational success (Öneren et al., 2016: 131). Naturally, benefiting from the existing knowledge "strategically" is possible by the organization using this knowledge, mapping the knowledge it has, identifying the strategic knowledge and managing it in a way that can adapt to the changing environment with this knowledge (Aktan and Vural, 2005). As a matter of fact, information sharing has a positive effect on business performance (Keskin, et al., 2018: 94). This effect will follow an indirect path. The highest expectation in this indirect way is the contribution of knowledge sharing to the innovation capacity of the enterprise (Lin, 2007).

2.2. Organizational Power Distance

First of all, it should be stated that since the concept of "power" has a very broad meaning, it can be seen that it is included in many different disciplines even when examined only in the field of social sciences; Naturally, different definitions are used according to these different disciplines (Kızanlıklı, et al., 2016: 491-495). But in general, we can accept the concept of power as "a person's ability to lead others to behave in the direction he wishes" (Koçel, 2003: 565).

The current meaning of the term organizational power distance is rooted in Hofstede's work (Hofstede, 1983; Hofstede vd., 1990). In these studies, Hofstede talked about power distance between social or organizational culture dimensions. When these studies are examined, in general, what Hofstede means by power distance is actually people's acceptance or degree of acceptance of the hierarchy between each other (Mooij and Hofstede, 2010: 88). What is politely described here as hierarchical difference is actually the inequality between individuals, and more precisely, the acceptance by everyone that some are superior to others. It can be said that the length of the power distance is the size of this inequality (Şekerli and Gere de, 2011: 20).

The expected effect of organizational power distance on organizational issues is mostly communication-based (Barutçugil, 2002: 204-211). Among these are the expectation that a low power distance will facilitate communication (Hofstede, 1983) and, conversely, the expectation that a large power distance will lead to an extremely hierarchical and control-oriented form of organization and thus become an obstacle to communication (Barutçugil, 2002: 116). In addition, there is a direct proportion between power distance and the level of hierarchy and centralization in an organization; Centralized and hierarchical structures increase power distance (Tüz, 2004; cited in Temel-Eğimli and Yeygel-Çakır, 2011: 41). To all these, the potential for participation in decisions can also be added. In organizations with low power distance, the tendency to participate in decisions is expected to be high (Solmaz and Serinkan; 2020:4). However, knowledge and sharing naturally require communication the most (Barutçugil, 2002: 40, 47; Ünal, 2012: 298-299).

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3. The Effect Of Information Sharing On Organizational Power Distance

Are people inclined to share information? This question can be answered positively (O'Dell, et al., 2003: 35), negatively (Atilla and Parmaksız, 2024: 81) or 'depending on the situation (according to the exchange of information and experience between those who will share information or their level of ownership of their organizations)'. There are researchers who answer (Bock, et al., 2005: 99; Constant, et al., 1994: 415-417). However, since it is known that information sharing contributes to business performance through factors such as innovation, it is very important to make progress in this regard. Therefore, whether people are spontaneously inclined to share knowledge or not, it is very important to identify the factors that contribute (or reduce) the effect of knowledge sharing, especially on innovation, and to encourage employees in one way or another. In this context, although many different factors have been previously questioned as to whether they change the effect of knowledge sharing on innovative behavior, there has not been much research on what role organizational power distance will play on the effects of knowledge sharing (Düger, 2021).

However, organizational power distance seems to have the potential to affect the IS-OPD relationship at least as much as the previously examined factors, and therefore it will be another hypothesis of this study. Thus, the second hypothesis of our study

It can be expressed as "H1: Information sharing affects organizational power distance".

4. Research Methodology

In this section, information about the research methodology will be given.

4.1. Research Model and Hypotheses

The aim of the research is to understand whether information sharing has an effect on organizational power distance. The model in Figure 1 has been developed and hypotheses regarding it have been put forward. In the research, "information sharing" was determined as the independent variable and "organizational power distance" as the dependent variable.

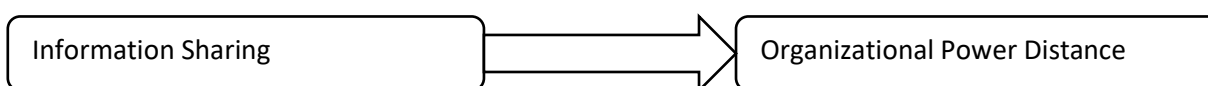


Figure 1. Research Model

4.2. Method

4.2.1. Population and Sample

The population of this study consists of all employees. According to TÜİK data, slightly more than 32 million people are employed in Turkey in April 2024. In this context, no special group was chosen as a sample in the research. An effort was made to reach everyone that could be reached using the snowball method. Here, the ease of the "Google forms" application, due to its system, was mainly used in distributing the surveys, as its comfort was an important factor for those filling out the surveys. However, for this reason, it is not clear exactly how many people were sent the survey. However, there were a total of 452 responses in print and digital media, 4 of which were not taken into account because the subjects were not suitable for the subject, and as a result, the research process was carried out through 448 surveys. Data was collected during April-June 2024.

4.2.2. Scales Used

In this section, information about the variables used in the research and the statistical methods to be used in the analysis will be given.

4.2.2.1. Information Sharing Scale

To measure knowledge sharing, which is the dependent variable of the study, the scale developed by Wang and Wang (2006) and used by Çelebi in his doctoral thesis (Çelebi, 2022: 72) was used. The scale is a 5-point Likert type and consists of a total of 13 statements.

4.2.2.1. Organizational Power Distance Scale

To measure organizational power distance, which is the moderating variable of the study, the 20-item scale used by Güler in his doctoral study, whose validity and reliability was determined by Yorulmaz et al. (2018), was used. The scale is a 5-point Likert type and consists of 4 sub-dimensions (accepting power, using power instrumentally, legitimizing power, accepting power) (Güler, 2024: 43).

4.3. Findings

In this section, factor analysis and reliability analysis of the data obtained from the research with the help of SPSS 23.0 software and correlation and regression analysis results of the research hypotheses will be examined.

4.3.1. Factor and Reliability Analyzes

4.3.1.1. KMO and Bartlett's Test Analyzes of Variables

In the research, factor analyzes of the scales used to determine the sub-dimensions of the concepts of information sharing and organizational power distance were conducted. The KMO value for knowledge sharing was found to be 0.964 and the KMO value for organizational power distance was 0.878. Table 1 shows KMO and Bartlett's Test Results.

Since the KMO value of all scales used in the research is between 0.90 and 1, we can say that there is a perfect, meaningful and valid relationship between the items of the scales. Also, all my scales are sig Bartlett test. Since the value is 0.000, that is, below 0.05, we can say that the data of the scales are suitable for factor analysis.

Table 1. KMO ve Bartlett's Results

KMO ve Bartlett's Test		Information sharing	Organizational Power Distance
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.915	.855
Approx. Chi-Square		2887.353	2894.735
Bartlett's Test of Sphericity	Df	66	171
	Sig.	.000	.000

4.3.1.1. Information Sharing Factor Analysis Results

As a result of the first factor analysis conducted for information sharing, our independent variable was removed from the analysis because it was not clear which factor the first question of the scale was under, and the factor analysis was repeated. As a result of the second analysis, it was seen that the scale was collected under two factors. As a result of the information sharing reliability analysis, the Cronbach's Alpha value of the entire scale was determined as 0.909.

4.3.1.1. Organizational Power Distance Factor Analysis Results

As a result of the first factor analysis conducted for our regulatory variable, organizational power distance, the twentieth question of the scale was removed from the analysis because it was not clear which factor it was under, and the factor analysis was repeated. As a result of the second analysis, it was seen that the scale was collected under five factors. As a result of the information sharing reliability analysis, the Cronbach's Alpha value of the entire scale was determined as 0.909.

4.3.1.2. Reliability Analyzes

The reliability of the scales used in the research and the study were tested with Cronbach's Alpha coefficient. Table 2 shows Cronbach's Alpha and factor explanatory values for the Scales Used in the Research. Accordingly, Cronbach values were measured as 0.909 for the knowledge sharing scale and 0.851 for organizational power distance. The factor explanatory ratio of the whole scales was measured as 61.816% for information sharing and 62.697% for organizational power distance.

Tablo 2. Araştırmada Kullanılan Ölçeklere Ait Chronbach's Alpha Değerleri

Survey		Explanatory Rate %	Reliability %
Information sharing	Open Information	36.851	0.890
	Tacit Information	24.966	0.854
Organizational Power Distance	Objection to decision	16.085	0.819
	Respect for Manager	14.260	0.761
	Not Contradicting the Manager	12.007	0.766
	Privilege to manager	10.855	0.721
	Opposing the manager	9.489	0.623

4.3. Information Sharing Organizational Power Distance

In this analysis, simple linear regression analysis will be used to understand whether the independent variable, information sharing, has an effect on the dependent variable, organizational power distance. The findings obtained as a result of the analysis are presented in the table below, along with the sub-dimensions of the variables.

Tablo 3. Regression Analysis Results

Independent Variable	Dependent Variable	Red/Accept	Explanatory Rate %	Reliability %
Information sharing	Organizational Power Distance	Rejection	-	95
Open Information	Objection to decision	Accept	1.8	0.003
	Respect for Manager	Accept	1.5	0.01
	Not Contradicting the Manager	Rejection		
	Privilege to manager	Rejection		
	Opposing the manager	Accept	1	0.019
Tacit Information	Objection to decision	Rejection		
	Respect for Manager	Accept	2.8	0.00
	Not Contradicting the Manager	Accept	0.7	0.041
	Privilege to manager	Accept	3.3	0.00
	Opposing the manager	Accept	1.3	0.01

Accordingly, when we consider information sharing as a single variable, it is understood that it has no effect on organizational power distance. On the other hand, it is understood that "explicit information", one of the sub-dimensions of information sharing, has an effect on "objection to the decision", "respect for the manager" and "respect for the manager", which are the sub-dimensions of organizational power distance. It is possible to state that the effect of "tacit knowledge", one of the sub-dimensions of knowledge sharing, on the sub-dimensions of "respect for the manager", "not contradicting the manager", "privilege to the manager" and "opposition to the manager", which are the sub-dimensions of organizational power distance, is statistically significant (Table 3).

5. Conclusion And Recommendations

Today, businesses must have a competitive advantage in order to survive. There are various ways to gain a competitive advantage, and one of the most important of these is undoubtedly the sharing of information among stakeholders. It is the people of the business who will bring a strong information sharing capacity to the business; in other words, employees at all levels. Thus, the knowledge sharing capacity of the business depends on the organizational culture and the power distance between leaders and employees.

Many elements can be used to increase or encourage employees' knowledge sharing behavior. Among these, organizational culture is at the forefront. As a matter of fact, as stated in the previous sections, the relationship between information sharing and organizational culture has been demonstrated many times. In this study, we supported the relationship between knowledge sharing and organizational culture with our correlation and regression analyzes to achieve our main goal. Our main purpose was to evaluate the power distance from cultural elements in this relationship. In this context, as a result of the regression we conducted by considering the information sharing and organizational power distance, we saw that certain dimensions of the relationship between these two variables were statistically significant.

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To summarize this result, the effect of information sharing on organizational power distance was not statistically significant. However, while three of the organizational power distance dimensions of open knowledge, among the knowledge sharing dimensions, were not statistically significant, two of them were found to be statistically significant. On the other hand, while the effect of tacit knowledge, one of the knowledge sharing sub-dimensions, on one of the organizational power distance dimensions was not statistically significant, the other four were found to be statistically significant.

Accordingly, it was observed that the effect of open knowledge, one of the dimensions of information sharing, on objection to the decision and respect for the manager, one of the dimensions of organizational power distance, was statistically significant. In other words, it is understood that in cases where there is open information sharing, there may be objections to the decisions made and the perception of respect for the manager may increase. It has been evaluated that if open information is shared, decisions can be made in a more controversial situation, and respect for the manager can increase in this discussion environment. On the other hand, the effect of open information sharing on the dimensions of not contradicting the manager, privilege to the manager and opposition to the manager was not statistically significant. When we look at this dimension in general, it is evaluated that open information sharing is a positive phenomenon for the manager.

The effect of tacit knowledge, one of the dimensions of knowledge sharing, on objection to the decision, one of the dimensions of organizational power distance, is not statistically significant. On the other hand, its effect on not contradicting the manager, privilege to the manager, respect for the manager and respect for the manager was found to be statistically significant. From here, it has been evaluated that in conditions where information sharing is implicit, employees' conflict with the manager, privilege to the manager, opposition to the manager and respect for the manager are positively affected. From this, it was concluded that it would be better for managers to share information openly.

However, this step has its limitations: The first thing that can be said is that within the framework of this study, knowledge sharing was considered as a whole and the effects of using it as an independent variable (explicit and tacit knowledge) were examined, starting from the alternatives of only explicit and tacit knowledge. However, the effects of information sharing could be considered as a process and each stage of the process could be used as sub-dimensions of the independent variable. In this case, sub-variables of information sharing are, for example; It could be considered as collecting information and donating information (Van den Hoof and de Ridder, 2004: 118). There are studies conducted in this way; The scale used in those studies is also different and the results were slightly different (Işık, 2018). Another limitation of the study is the perceptions of the participants who responded to the survey.

REFERANS:

- Aktan, C. C. ve Vural, İ. Y. (2005). Bilgi çağında bilgi yönetimi. Çizgi Yayın.
- Atilla, G. ve Parmaksız Ö. (2024). Örgütlerde bilgi paylaşımı üzerine kavramsal bir inceleme. *Artuklu Kaime Uluslararası İktisadi ve İdari Araştırmalar Dergisi*, 7(1). 75-94.
- Barutçugil, İ. (2002) Bilgi Yönetimi. Kariyer Yayınları.
- Bock, G., W., Zmud, R., W., Kim, Y., G. ve Lee, J., N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological factors, and organizational climate. *MIS Quarterly*, 29(1). 87-111.
- Constant, D., Keisler, S. ve Sproull, L. (1994). What's mine is ours, or is it? A study of attitudes about information sharing. *Information Systems Research*, 5(4). 400-421.
- Demirel, Y. (2007). Bilgi ve bilgi paylaşımının işletme performansı etkisi üzerine bir araştırma. *Yönetim Bilimleri Dergisi*, 5(2). 100-116.

- Düger, Y. S. (2021). Etik liderlik ile bilgi paylaşımı arasındaki ilişki: Sistematik bir inceleme. *Alanya Akademik Bakış Dergisi*, 5(2). 619-645.
- Drucker, P., F. (1993). Kapitalist ötesi toplum (Post-capitalistsociety), Çev.: Belkıs Çorakçı. *İnkılap Kitabevi*.
- Drucker, P., F. (2000). 21.yüzyıl için yönetim tartışmaları (Management challengesforthe 21stcentury, 1999), çev.: İrfan Bahçivangil, Gülenay Gorbon. Epsilon Yayın.
- Erat, S. (2020). Bilgi paylaşımı ve örgütsel güvenin, yenilikçilik davranışı ve bireysel performansa etkisi: Meslek lisesi öğretmenleri üzerine bir araştırma. *International Review of Economics and Management*, 8(1), 124-145.
- Güler M.(2024), Örgütsel güç mesafesi ve mantar yönetim algısının akış deneyimi üzerindeki yordayıcı etkisi, Fırat Üniversitesi Sağlık Bilimleri Enstitüsü, Yayınlanmamış Doktora Tezi.
- Hofstede, G. (1983) The Cultural Relativity of Organizational Practices and Theories. *Journal of International Business Studies*, 14, 75-89.
- Hofstede, G., Neuijen, Bram., Ohayv, D., D. ve Sanders, G. (1990). Measuringorganizationalcultures: A qualitativeandquantitativestudyacrosstwentycases. *AdministrativeScienceQuarterly*, 35. 286-316.
- Işık, M. (2018). Bilgi paylaşımını etkileyen faktörler ve bilgi paylaşım sürecinin yenilikçi is davranışına etkisi. *Uluslararası İktisadi ve İdari İncelemeler Dergisi*, 17.UİK Özel Sayısı. 641-656.
- Kaplan, R. S. ve Norton, D. P. (2006). Strateji haritaları: Gayri maddi varlıkları maddi sonuçlara dönüştürmek (Strategymaps: Convertingintangibleassetsintotangibleoutcomes, 2004). Çev.: Şeyda Öztürk, Alfa Yayın.
- Keskin, H., Ayar-Şentürk, H. ve Beydoğan, A. (2018). Yenilikçilik kalitesi perspektifinden bilgi paylaşımı, entelektüel sermaye ve performans ilişkisi. *BMIJ*, 6(3). 71-94.
- Kızanlıklılı, M., M., Koç, H. ve Kılıçlar, A. (2016). Örgütsel güç ve gücün kaynakları üzerine kavramsal bir inceleme. *İşletme Araştırmaları Dergisi*, 8(4). 499-504.
- Koçel, T. (2003). İşletme yöneticiliği. Beta Y.
- Lin, H., F. (2007). Knowledge sharingandfirminnovationcapability: An empiricalstudy. *International Journal of Manpower*, 28(3/4). 315-332.
- De Mooij, M. ve Hofstede, G. (2010). TheHofstede Model: Applications to global brandingandadvertisingstrategyandresearch. *International Journal of Advertising*, 29(1). 85-110.
- Nnakando, M. ve Levitt, K. (2021). Perceivedeffects of powerdistance on organizationalchange in a multiculturalorganization. *International LeadershipJournal*, 13(2). 54-82.
- Nonaka, I. (1994). A dynamictheory of organizationalknowledgecreation. *OrganizationScience*, 5(1). 14-37.
- O'Dell, C., Grayson, C. J. ve Essaides, N. (2003). Ne bildiğimizi bir bilseydik (Ifonlyweknewwhatweknow, 1998). Çev.: Günhan Günay. Dışbank Kitap.
- Öncü, M. A., Bayat, M., Kethüda, Ö. ve Zengin, E. (2015). Yenilik ve müşteri performansının finansal performans üzerindeki etkisi: Orta ölçekli sanayi işletmelerinde bir araştırma. *Marmara Üniv. İİBF. Dergisi XXXVII(1)*, s: 149-164.
- Öneren, M., Çiftçi, G. E. ve Harman, A. (2016). Bilgi paylaşımının yenilikçi davranışa ve örgütsel güvene etkisi üzerine bir araştırma. *Akademik Bakış Dergisi*, 58. 127-157.
- Polanyi, M. (1966). Thetacidimension, AnchorDay.
- Samet Çelebi, 2022, Güçlendirici Liderlik, Bilgi Paylaşımı, Proaktif İş Davranışı İlişkisinde Katılımcı İş Uygulamalarının Düzenleyici Rolü; Savunma Sanayii İşletmeleri'nde Bir Uygulama, Doktora Tezi, Yıldız Teknik Üniversitesi Sosyal Bilimler Enstitüsü.
- Solmaz, G. ve Serinkan, C. (2020). Örgütlerde güç mesafesinin örgütsel sessizlik ile ilişkisi: Bir alan araştırması. *Yeni Bir Fikir Dergisi*, 12(25). 2-19.
- Şekerli E., B. ve Gerede E. (2011). Kültürün EKY'ye etkileri ve Türk pilotların Hostede kültür boyutları açısından durumları. "İŞ, GÜÇ" *Endüstri İlişkileri ve İnsan Kaynakları Dergisi*, 13(1). 17-38.
- Taş, Y. (2011). İş tatmini ve bilgi paylaşım düzeyinin duygusal bağlılığa etkisi: Kocaeli Üniversitesi Araştırma ve Uygulama Hastanesinde bir araştırma. *Kocaeli Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 21(1). 117-131.
- Temel-Eğimli, A. ve Yeygel-Çakır S. (2011). Toplum kültürünün kurum kültürüne yansımaları. *Sosyal ve Beşeri Bilimler Dergisi*, 3(2). 37-50.
- Turgut, E. ve Beğenirbaş, M. (2014). İlişkisel sosyal sermayenin yenilikçi davranışa etkisinde örtülü bilgi paylaşımı davranışının aracılık rolü. *Niğde Üniversitesi İİBF Dergisi*, 7(1). 146-160.
- Ünal, M. (2012). Bilgi çağında değişim ve liderlik. *Marmara Üniv. İİBF. Dergisi XXXII(1)*, 297-310.
- Van den Hoof, B. ve de Ridder, J., A. (2004). Knowledge sharing in context: Theinfluence of organizationalcommitment, communicationclimate, and CMC use on knowledgesharing. *Journal of Knowledge Management*, 8(6). 117-130.
- Yeniçeri, Ö. ve Demirel, Y. (2007). İşletme koşullarının örgüt içi bilgi paylaşım iklimine etkisi. *Öneri*, 7(27). 9-21.



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Yorulmaz, Y. İ., Çolak, İ., Altınkurt, Y., Yılmaz, K. (2018). Örgütsel Güç Mesafesi Ölçeği Geçerlik ve Güvenirlilik Çalışması. *Trakya Üniversitesi Eğitim Fakültesi Dergisi*, 8(4), 671-686.
Töre E.(2019), Entelektüel sermayenin yenilikçi iş davranışına etkisinde bilgi paylaşımının aracı rolü, *Yönetim Bilimleri Dergisi*, 17(34), 275-299.



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Examining Turkey's Insurance System within the Framework of Silver Economy

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ABSTRACT

The terms "Greying Economy," "Aging Economy," or "Silver Economy" refer to the economy's reshaping due to the increase in the elderly population and the processes of developing solutions for the needs of elderly individuals. The rapid increase in the population aged 65 and over requires the adoption of new strategies in many areas, such as health, finance, and retirement. The significant increase in Turkey's elderly population over the years indicates that the economic approach called the Silver Economy should be given more importance. This study examines the insurance system in Turkey within the framework of the Silver Economy and evaluates the sector's capacity to respond to the needs of the ageing population. In this context this study, content analysis was conducted using qualitative research method with Python on Turkish Statistical Institute data and insurance company reports. The research results show that Turkey's ageing population's insurance needs are increasing, and the insurance sector is not yet at a level to meet these needs. The insurance system needs to increase accessibility by developing new products in line with silver economy strategies. Since there are limited studies in the literature examining the insurance system within the Silver Economy framework, the study aims to contribute to the literature.

Keywords: Finance, Insurance, Silver Economy, Health Insurance.

The economic potential of the ageing population is expressed as the "Silver Economy", a development accelerated by increasing life expectancy and decreasing birth rates. Older citizens are increasingly shaping economies, forming a large and growing segment in many areas of consumption, and the expansion of this demographic is expected to increase demand in many sectors. This economy encourages the development of innovative solutions covering sectors that shape future growth potential, offering a wide range of opportunities such as health, insurance, care, robotics, tourism, smart home solutions, and driverless vehicles (European Commission, 2018).

The population over 65 worldwide is expected to double in the next 30 years, reaching 203 million in 2054 and accounting for 23% of the total population (United Nations, 2024). In Türkiye, the population over 65 increased by 21.4% in the last five years from 7.2 million in 2018. These rates are expected to rise to 12.9% in 2030, 16.3% in 2040, 22.6% in 2060 and 25.6% in 2080 (Türkiye Statistical Institute, 2024). The increasing elderly population poses significant challenges to existing insurance and pension systems.

Türkiye's insurance system can seize the opportunity to develop in the context of the silver economy with innovative and inclusive solutions by adapting to the demographic transformation. In this context, the system can be restructured to support older individuals in living healthier, more independent, and more satisfying lives. The insurance sector can play a leading role in this field by offering innovative, accessible and cost-effective solutions suitable for the ageing population's needs. The insurance products to be developed can support the active lifestyles and preventive health services of older individuals while increasing their well-being with digital technologies and health monitoring systems. In order to achieve these goals, it is important to understand the unique needs of older individuals and develop compatible policies for them. This study examines the insurance system in Türkiye within the framework of the Silver Economy and evaluates the sector's capacity to respond to the needs of the ageing population. Since there are a limited number of studies in the literature examining the insurance system within the framework of the Silver Economy, the study aims to contribute to the literature.

1.LITERATURE REVIEW (CONCEPTUAL FRAMEWORK)

1.1. Silver Economy

The ageing population and the increasing life expectancy affect the social structure and intergenerational income transfer, increasing the importance of studies in this field (Demirbilek & Özgür, 2017: 15). With the increase in the elderly population, economic opportunities should be addressed with active ageing. Active ageing aims for individuals to spend their old age periods in a quality way by being healthy and safe and providing social participation (Korkmaz & Korkut, 2018: 258). However, the ageing process creates problems in labour markets and offers significant potential in terms of economic growth and new job opportunities (Demirbilek & Özgür, 2017: 15).

Silver economy is a term used to describe the market economy for the population in older age groups (SUDO, 2014). This economy covers all economic activities, products and services designed to meet the needs of individuals aged 50 and over (Iberdrola, 2024). For example, in health care, treatment and rehabilitation for the quality prevention of age-related changes and diseases play an important role. In addition, innovations are observed in everyday life, such as

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new forms of entertainment and additional educational projects for the older generation (Borovikov, 2023).

The silver economy requires more opportunities for elderly individuals to increase their quality of life, stay healthy, continue working and contribute to society. In this context, active ageing offers individuals essential support such as social security, health services and participation in social life (Demirbilek & Özgür, 2017: 14). Aslan et al. (2023) recommend in their studies that elderly-friendly work environments should be created, age discrimination should be prevented, and regulations such as elderly employment quotas should be made to increase the potential of the silver economy. In addition, it emphasizes the importance of activities aimed at increasing the employment of the elderly and supporting the participation of groups in the workforce that need special policies.

Market segmentation is important for understanding the elderly market and the silver economy. The elderly population is divided into four groups according to their age. Individuals between 50 and 59 are still active and at the peak of their careers, but their time is limited. The 60-74 age group is generally debt-free, retired and living in a golden age of disposable income, investing their free time and volunteering. In the 75-84 age group, spending abilities and desires decrease, and the first signs of loss of autonomy appear. Individuals aged 85 and over generally become dependent, lose autonomy, and significantly reduce their income and activities (SUDOE, 2014).

The silver economy's diversity and complexity offer great business opportunities while creating capacity-building and policy challenges for the economy and society (McGuirk et al., 2022). The silver economy is defined as the sum of all economic activities that serve the needs of individuals aged 50 and over (Active Advice, 2018). The silver economy refers to the economic opportunities arising from the specific needs of individuals aged 50 and over in Europe and the expenditures related to the ageing of the population. According to the European Commission, the size of this economy is estimated at €3.7 trillion and is expected to contribute over €5.7 trillion by 2025 (Interreg Europe, 2023).

The silver economy covers health, nutrition, entertainment, welfare, finance, transportation, housing, education and employment (Active Advice, 2018). Studies show that the ageing population's demand for services such as insurance, financial planning and healthcare services is increasing, which can lead to structural changes in economies. Countries such as Germany, Italy, France, Japan and China have established strong frameworks to meet the needs of their elderly populations with advanced insurance and healthcare policies (Nakatani, 2019; Ananta, 2012; Ying & Hanxiao, 2023). For example, the Japanese city of Toyama has launched the Silver Human Resource Centers program, which aims to maintain employment in the agricultural sector for the elderly. The Dutch city of Brabant promotes active ageing by developing new technologies for the elderly. The Italian city of Livorno is implementing initiatives such as training programs, apprenticeships and job security to increase the participation of older workers. Manchester and Newcastle in England have developed policies prioritizing public participation by establishing centres of excellence in ageing research (Weiss et al., 2005). Among China's silver economy strategies, it is suggested that they prioritize diversified development by focusing on sectors such as health, housing, entertainment, tourism, clothing and education for the needs of the elderly within the framework of active ageing. This approach aims to improve the quality of life and support social and economic progress by creating a strong industrial ecosystem serving the elderly. It is also thought that it will contribute to long-term growth in China's economic transformation (Wang et al., 2022).

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1.2. Insurance

The insurance contract is defined as "a contract in which the insurer undertakes to compensate for a danger or risk that harms a person's interest measurable in money in return for a premium, or to pay money or perform other actions due to the life span of one or more people or due to some events that occur in their lives" (Turkish Commercial Code, 2011). *Insurance* is an important mechanism that provides financial security for individuals, institutions, and society. It is generally divided into two main groups: life insurance and non-life insurance. Although it falls outside these categories, the Individual Retirement System is also an important type of insurance. Life insurance provides financial protection against risks related to the insured's life, ensures that compensation is paid to the heirs or legal heirs in the event of death, and its scope can be expanded with additional coverage such as accident, illness or disability. On the other hand, non-life insurance focuses on compensating for losses in tangible assets due to unexpected events. Both types of insurance aim to provide economic security by minimizing the risks to individuals and institutions (Türkiye Finance, 2024). According to the Insurance Association of Türkiye data 2023, 66 insurance companies, including 47 non-life insurance companies, 19 life and pension companies, and four reinsurance companies, were active (IAT, 2023a).

The world's population over 65 is expected to double in 30 years, reaching 203 million in 2054 and representing 23% of the total population. It is projected that the population in this age group will increase by another 13% between 2054 and 2100, reaching one-third of the total population by 2100. In 26 countries and regions in this group, more than one-third of the population is expected to be 65 years of age or older by 2100. These countries include Brazil, Chile and Colombia in Latin America; Tunisia and Türkiye in North Africa and West Asia; and Singapore in Southeast Asia. In order to cope with rapidly ageing populations, these countries should consider measures such as strengthening health and long-term care systems, increasing employment opportunities for the elderly, combating age discrimination and investing in new industries suitable for the elderly (United Nations, 2024). The population aged 65 and over in Türkiye, which was 7 million 186 thousand 204 in 2018, increased by 21.4% in the last five years and reached 8 million 722 thousand 806 in 2023. The proportion of the elderly population in the total population increased from 8.8% in 2018 to 10.2% in 2023. The proportion of the elderly population is expected to reach 12.9% in 2030, 16.3% in 2040, 22.6% in 2060 and 25.6% in 2080 (Türkiye Statistical Institute, 2024).

This data in the world and Türkiye shows that the increase in the elderly population offers significant opportunities, especially in the insurance sector, and that new products should be developed for this group. Among the sample products developed within the framework of the silver economy, MAPFRE Insurance's "Every Moment MAPFRE Insurance is With You" project for private health insurance customers over 65 stands out. This project aims to increase the quality of life and facilitate service access (Mapfre Insurance, 2024). Axa Insurance defines the upper age limit as 65, allowing individuals between the ages of 60-65 to benefit from complementary health insurance (Axa Insurance, 2024). Complementary Health Insurance covers additional fees incurred after SGK insurance in private health institutions contracted with SGK and can be used by individuals under 69 with SGK insurance. The insurance aims to reduce additional health costs for general health insurance holders under SGK coverage and their dependents (Neova Insurance, 2024). International health insurance for individuals over 60 provides comprehensive health services, allowing users to benefit from 24/7 telehealth services for non-emergency health problems. The insurance covers many services such as hospitalizations, treatment, rehabilitation, prescription drugs and dressings (Cignaglobal, 2024).

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Türkiye's interest in private and complementary health insurance is increasing due to health needs and the financial burden on private hospitals. The increasing need for health services at an advanced age can make health insurance started at an early age an important investment. However, insurance companies generally set certain conditions, such as age limits, for those who apply for insurance policies. The age limit for private health insurance is generally between 60-64 years old, and some insurance companies may also accept individuals over 70 who renew their policies regularly and do not have chronic diseases. However, insurance premiums for those over 65 are more costly because they are in a higher-risk group. Those who want complementary health insurance generally need to be SGK members and receive services from health institutions that agree with SGK. The age limit for this type of insurance is generally determined between 0-70 years old, and some insurance companies may change this limit between 55 and 80 years old (Sigortam.net, 2024).

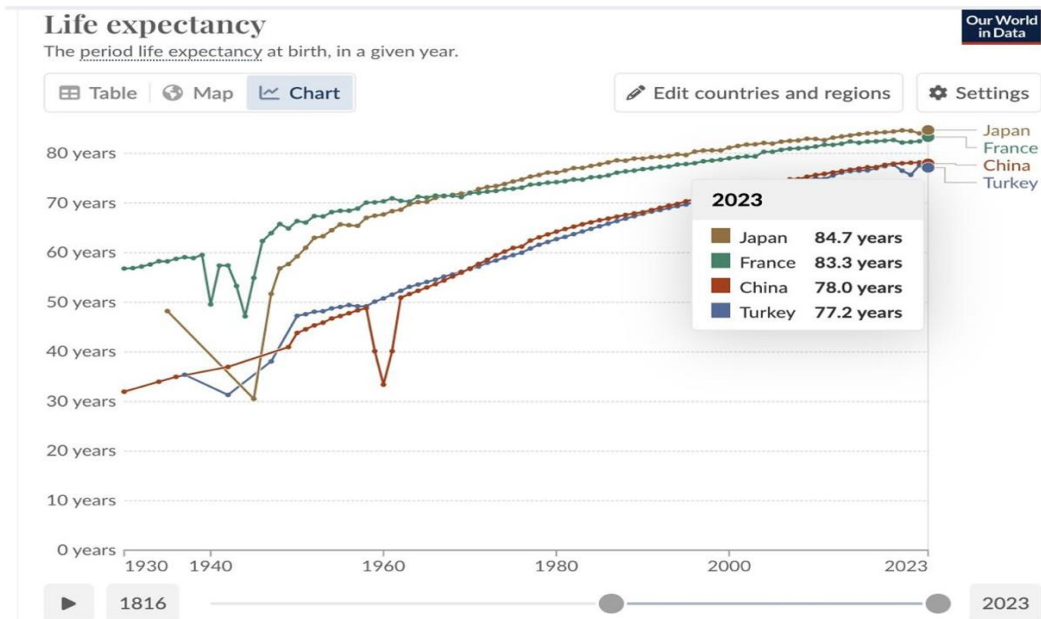
Within the framework of the silver economy, long-term care insurance is not just an insurance product but also a structure that requires a comprehensive ecosystem. In order to establish this ecosystem, steps such as increasing the number of care institutions, meeting personnel needs, and establishing and monitoring standards by the state are important. It is evaluated that the most effective model should be structured within the social security framework under a state-supported and compulsory system, as in international examples (IAT, 2023b).

2. RESEARCH METHOD

This study examines the population and insurance system in Türkiye within the framework of the Silver Economy and evaluates the sector's capacity to respond to the needs of the ageing population. In this context, this study conducted content analysis on secondary data using the Python program with the qualitative research method; the data was visualized, and the results were evaluated.

3. FINDINGS

The ageing of the population worldwide is increasingly shaping the Silver Economy, which presents unique opportunities and challenges for countries worldwide. In this study, Türkiye as compared to China, France and Japan, and the needs of an ageing population, health issues, and even programs that support independence and strategic steps were taken. The reasons for choosing these countries include their different policy frameworks, demographic patterns and economic systems. Graph 1 shows life expectancy at birth and demographic developments over time for Japan, France, China and Türkiye between 1930-2023.

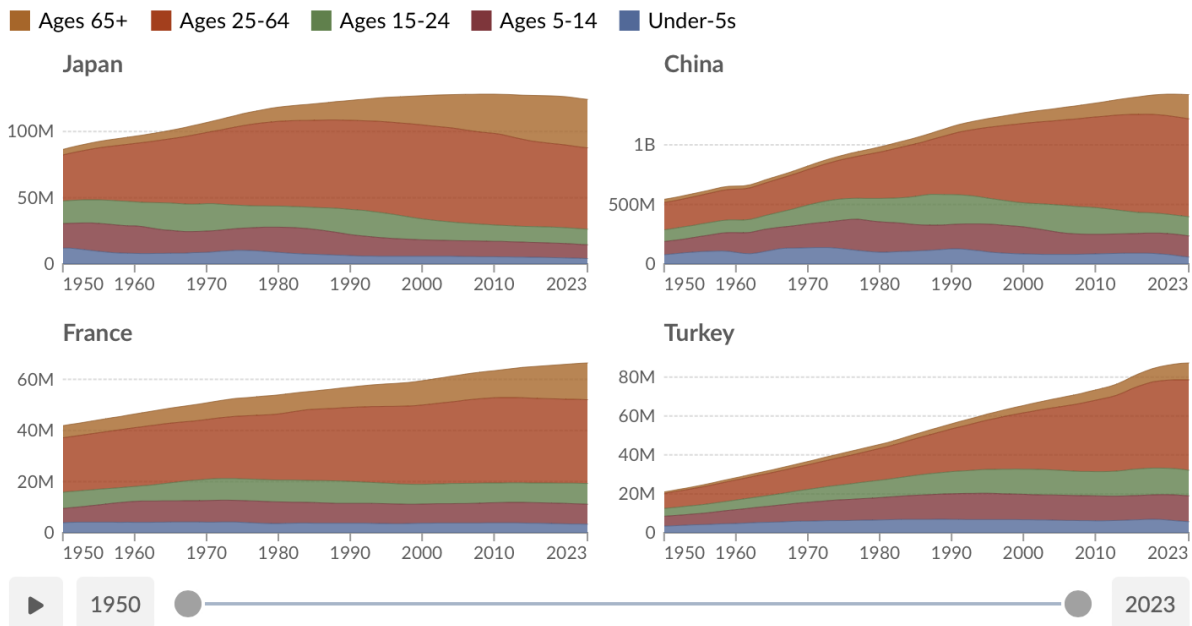


Source: Our World, (2024a)

As seen in Graph 1, the ranking of life expectancy by 2023 is Japan (84.7 years), France (83.3 years), China (78.0 years) and Türkiye (77.2 years). In the silver economy framework, the increase in life expectancy highlights the need for more innovation and strategic planning to meet the needs of an ageing population.

Graph 2 shows the population by age group in China, Japan, France and Türkiye between 1950 and 2023.

Graph 2: Population by Age Group



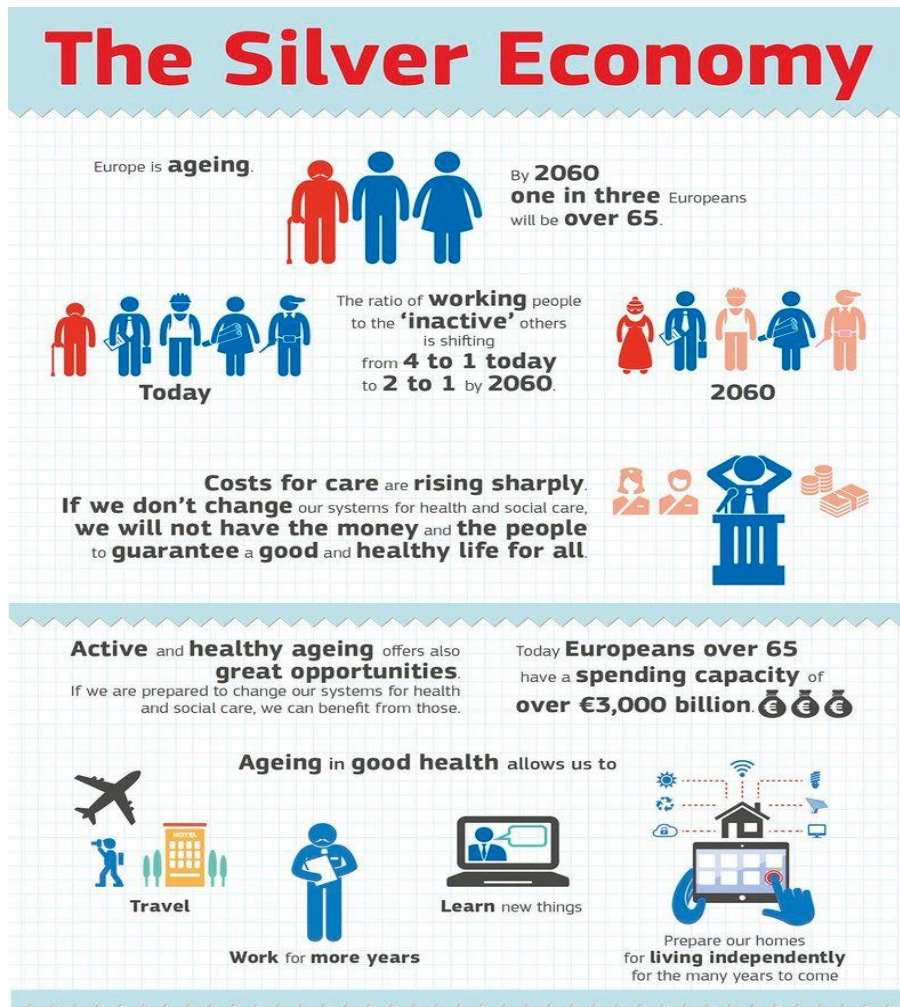
Source: Our World, (2024b)

In Graph 2, the percentage of the elderly aged 65 and over in China, Japan, France and Türkiye increased between 1950 and 2023. This is indicative of the global ageing population trend.

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 Japan has the most advanced ageing population, with a sharp increase in the elderly population and a decrease in the younger age groups, making elderly care and workforce sustainability extremely difficult. France is slowly moving towards an ageing society, with a more balanced age distribution and a growing elderly population. On the other hand, China and Türkiye, although still relatively young, are experiencing a decline in their young populations and a sharp increase in their elderly populations. This suggests that long-term planning is necessary to meet the upcoming social and economic demands.

Figure 1 shows data from the silver economy in Europe.

Figure 1: The Silver Economy in Europe



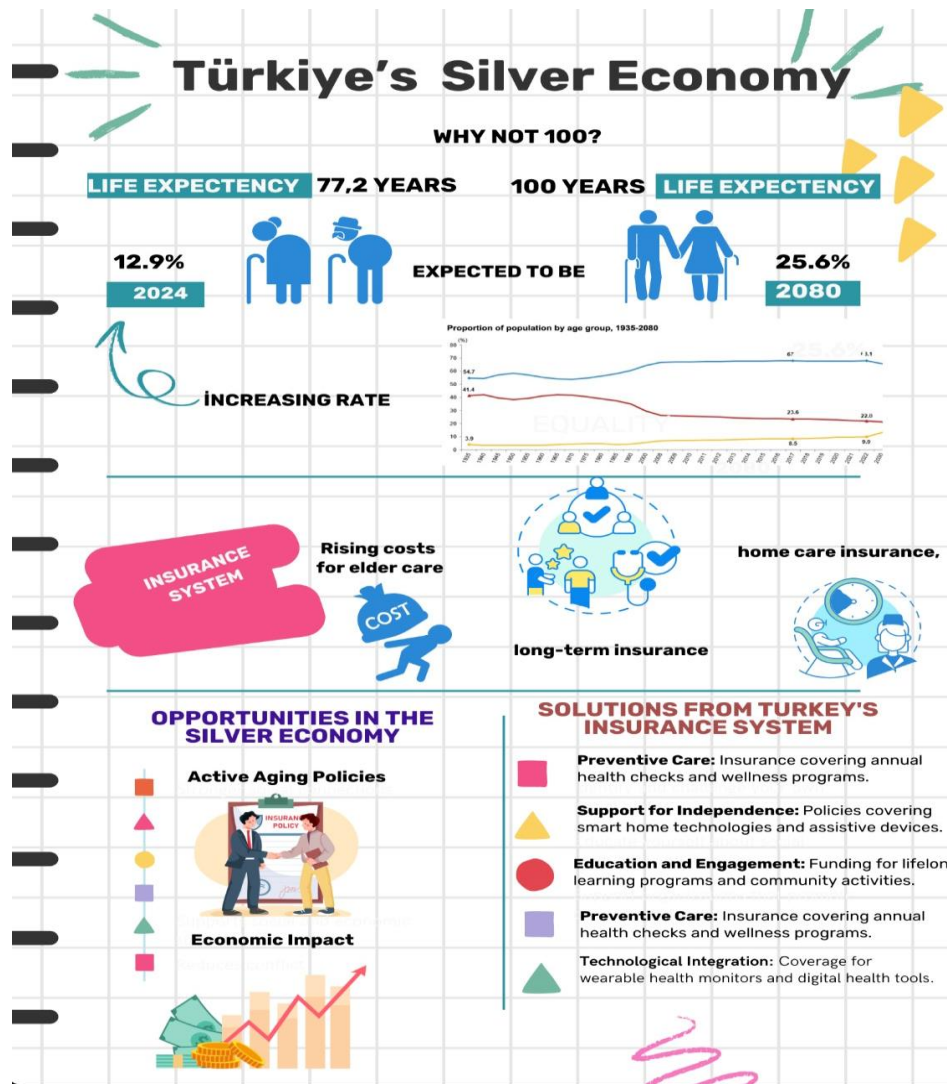
Source: Echalliance, (2024)

Figure 1 shows that the population in Europe is rapidly ageing, and it is predicted that one in three people will be over 65 by 2060. The ratio of working individuals to inactive individuals is expected to decrease from 4:1 to 2:1 by 2060. The increasing elderly population and this demographic change will also increase the costs of care; if the necessary arrangements are not made in the health and social care systems, providing a good and healthy life for everyone may cause financial difficulties. However, this situation also brings opportunities. The spending capacity of Europeans over 65 exceeds €3,000 billion, which offers significant potential for

10th International CEO Communication, Economics, Organization & Social Sciences Congress promoting active and healthy ageing. Healthy ageing allows individuals to work longer, travel, learn new skills, and live independently.

Figure 2 shows the silver economy in Türkiye.

Figure 2: Türkiye’s Silver Economy



Source: It was compiled by the authors based on the data taken from the Türkiye Statistical Institute (2024) website and available in the literature.

Figure 2 addresses the opportunities and challenges brought by the ageing population in Türkiye and offers solutions within the framework of the silver economy. While the elderly population rate is expected to increase from 12.9% in 2024 to 25.6% in 2080, life expectancy increases the need for products such as long-term care and home care insurance. While the insurance sector suggests solutions such as preventive health insurance, independence support, smart home technologies, and lifelong learning for elderly individuals, active ageing policies and economic opportunities are also emphasized. In addition, it emphasizes the insurance system's role in meeting the health and social participation needs of elderly individuals.

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Figure 1 and Figure 2 draw attention to the importance of transforming social structures to benefit from the economic potential of the increasing elderly population. Like Europe, Türkiye should develop policies for strong social support networks, sustainable health systems and managing elderly care costs to meet the increasing needs of the ageing population.

Conclusion

The increase in the elderly population in the world and Türkiye and the examination of silver economy policies of developed and developing countries are important. Health services for the elderly, long-term care insurance and products such as elderly-friendly technologies can both meet the needs of the elderly population and offer growth opportunities to businesses. It is observed that the population rate over 65 increased in China, Japan, France and Türkiye 1950-2023. While Japan and France offer advanced models in this field, it is evaluated that China and Türkiye should develop innovative solutions in retirement systems, health services and technologies by taking inspiration from these models. Türkiye should evaluate economic opportunities and create a sustainable infrastructure by considering the rapidly ageing population. The research results show that the insurance needs of Türkiye's ageing population are increasing, and the insurance sector is not yet at a level to meet these needs. The insurance system needs to increase accessibility by developing new products in line with silver economy strategies. Since there are a limited number of studies in the literature examining the insurance system within the framework of the Silver Economy, the study aims to contribute to the literature.

REFERENCES

- Active Advice. (2018). The EU Silver Economy: Market size, challenges and opportunities. AAL Market Observatory. Retrieved December 2, 2024, from <https://www.activeadvice.eu/news/market-insights/the-eu-silver-economy-market-size-challenges-and-opportunities/>.
- Ananta, A. (2012). Financing Indonesia's ageing population. In D. Singh & P. Thambipillai (Eds.), *Southeast Asian Affairs 2012* (pp. 135–150). ISEAS Publishing.
- Aslan, Ö., Gültekin, T., & Irmak, H. S. (2023). SWOT analysis on silver economy. *Social Security Magazine*, 12(23), 951–968. <https://doi.org/10.21441/sosyalguvence.1326321>.
- Axa Insurance. (2024). What are the health insurance details for people over 60? Retrieved December 5, 2024, from <https://www.axasigorta.com.tr/blog/60-yas-saglik-sigortasi-detaylari-nelerdir>.
- Borovikov, I. (2023). The silver economy: Five tips on marketing to older audiences. *Forbes Business Council*. Retrieved December 2, 2024, from <https://www-forbes-com.translate.goog/councils/forbesbusinesscouncil/2023/05/24/the-silver-economy-five-tips-on-marketing-to-older-audiences>.
- Cigna Global. (2024). International health insurance for seniors over 60. Retrieved December 4, 2024, from <https://www.cignaglobal.com/seniors-health-insurance>.
- Demirbilek, T., & Özgür, A. Ö. (2017). Silver economy and elderly employment in the context of active aging. *Journal of Elderly Problems Research*, 10(1), 14–28. Retrieved from <http://dergipark.ulakbim.gov.tr/yasad/>.
- Echalliance. (2024). Silver economy study: How to stimulate the economy by hundreds of millions of Euros per year. Retrieved December 1, 2024, from <https://echalliance.com/news/silver-economy-study-how-to-stimulate-the-economy-by-hundreds-of-millions-of-euros-per-year/>.
- European Commission. (2018). The silver economy. Retrieved December 2, 2024, from http://publications.europa.eu/resource/cellar/2dca9276-3ec5-11e8-b5fe-01aa75ed71a1.0002.01/DOC_1.
- IAT. (2023a). Insurance Association of Türkiye 2023 sector report. Retrieved December 2, 2024, from https://www.tsb.org.tr/content/Broadcasts/TSB_2023_YILI_SEKTOR_RAPORU.pdf.
- IAT. (2023b). Life Insurance Position Paper-2023. Retrieved December 2, 2024, from <https://www.tsb.org.tr/content/Broadcasts/Hayat%20Sigortalari%20Pozisyon%20Belgesi-2023.pdf>.
- Interreg Europe. (2023). Silver economy: Opportunities for SMEs. Retrieved December 2, 2024, from <https://www.interregeurope.eu/policy-learning-platform/events/silver-economy-opportunities-for-smes>.
- Iberdrola. (2024). Silver economy: Older people will be the engine of the economy of the future. Retrieved December 2, 2024, from <https://www.iberdrola.com/innovation/silver-economy>.

10th International CEO Communication, Economics, Organization & Social Sciences Congress

- Korkmaz, A., & Korkut, G. (2018). Social participation in the context of the silver economy and active ageing. *Work and Life*, 4(8), 257–272.
- Mapfre Insurance. (2024). MAPFRE Insurance is with you at all times. Retrieved December 5, 2024, from <https://www.mapfre.com.tr/sigorta-tr/iletisim/kampanya-ve-duyurular/her-aninda-yaninda/>.
- McGuirk, H., Conway Lenihan, A., & Lenihan, N. (2022). Awareness and potential of the silver economy for enterprises: A European regional level study. *Small Enterprise Research*.
- Nakatani, H. (2019). Population aging in Japan: Policy transformation, sustainable development goals, universal health coverage, and social determinants of health. *Global Health & Medicine*, 1(1), 3–10. <https://doi.org/10.35772/ghm.2019.01011>.
- Neova Insurance. (2024). Supplementary health insurance. Retrieved December 3, 2024, from <https://www.neova.com.tr/bireysel-urunler/tamamlayici-saglik-sigortasi>.
- Our World. (2024a). Life expectancy at birth. Retrieved December 1, 2024, from <https://ourworldindata.org/grapher/life-expectancy>.
- Our World. (2024b). Population by age group. Retrieved December 1, 2024, from <https://ourworldindata.org/grapher/population-by-age-group>.
- Sigortam.net, (2024). Complementary and Private Health Insurance for People Over 65. Retrieved December 1, 2024, <https://www.sigortam.net/saglik-sigortasi-yas-siniri>.
- SUDOE. (2014). The silver economy in southwest Europe. Retrieved December 2, 2024, from <https://4.interreg-sudoe.eu/contenido-dinamico/libreria-ficheros/310619FB-AFB6-AA98-B00D-5D03559BB329.pdf>.
- Türkiye Statistical Institute. (2024). *Statistics*. Retrieved December 2, 2024, from <https://data.tuik.gov.tr/Bulten/Index?p=Istatistiklerle-Yaslilar-2023-53710>.
- Türkiye Commercial Code. (2011). Turkish Commercial Code (Book 6: Insurance Law). Retrieved December 2, 2024, from https://www.org.tr/content/Legislations/Turk_Ticaret_Kanunu_6.Kitap.pdf.
- Türkiye Finance. (2024). What is insurance? What are the types of insurance? Retrieved December 2, 2024, from <https://www.turkiyefinans.com.tr/tr-tr/blog/sayfalar/sigorta-nedir.aspx>.
- Wang, Y., Zhao, W., & Meng, W. (2022). Bilateral effect of aging population on consumption structure: Evidence from China. *Frontiers in Public Health*, 10. <https://doi.org/10.3389/fpubh.2022.941485>.
- Weiss, R. S., Bass, S. A., Heimovitz, H. K., & Oka, M. (2005). Japan's silver human resource centers and participant well-being. *Journal of Cross-Cultural Gerontology*, 20(1), 47–66. <https://doi.org/10.1007/s10823-005-3797-4>.
- Ying, X. U., & Hanxiao, L. I. U. (2023). Current situation, problems and prospects of 'silver economy' in China. *Journal of Beijing University of Aeronautics and Astronautics Social Sciences Edition*, 36(1), 140–147. <https://doi.org/10.13766/j.bhsk.1008-2204.2021.0686>.



10th International CEO Communication, Economics, Organization & Social Sciences Congress
Uluslararası Makale/Dergi Tanımlamaları Üzerine Bir İnceleme

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ÖZET

Uluslararası makale, küresel düzeyde bilgi paylaşımını teşvik eden, akademik ve araştırma kapsamında yazılan bir bilimsel çalışmadır. Bir makalenin uluslararası olarak nitelendirilmesi ise tartışma konusudur. Bu tartışmada en öne çıkan unsur ise makalenin indekslendiği dergilerdir. Bilgi paylaşımında uluslararası indeksler, bir araştırmacının çalışmalarını geniş bir akademik topluluğa sunmasını kolaylaştırmaktadır. Bir makalenin uluslararası bir nitelik taşımasında etkili olan faktörler sadece indekslerle sınırlı tutulmayıp farklı sınıflandırmaların veya kriterlerin uygulamada değiştiği gözlemlenmektedir. Bu araştırma ülkemizde bir makalenin uluslararası nitelik taşımasındaki tartışmalara odaklanmaktadır. Araştırma sonucunda elde edilen sonuç ise Bilimsel İletişimde Çok Dilliliğe İlişkin Helsinki Girişiminin tüm araştırmalar için kabul ettiği “araştırma uluslararasıdır” iddiasıyla uyumaktadır.

Anahtar Kelimeler: Makale, Uluslararası Makale, Uluslararası Dergi.

An Examination of International Article/Journal Definitions

ABSTRACT

An international article is a scientific work written within the scope of academia and research that promotes global knowledge sharing. However, the classification of an article as international is a subject of debate. The most prominent factor in this discussion is the journal in which the article is indexed. International indexes facilitate the presentation of a researcher's work to a wider academic community. The factors that influence whether an article has an international character are not limited to indexes alone, and it has been observed that different classifications or criteria may vary in practice. This study focuses on the discussions regarding what makes an article internationally recognized in Turkey. The findings of the research align with the claim made by the Helsinki Initiative on Multilingualism in Scientific Communication, which asserts that "research is international" for all studies.

Keywords: Article, International Article, International Journal.

1. Giriş

Uluslararası bilimsel yayınlar akademik bilgi birikiminin paylaşılması ve geliştirilmesine en büyük katkıyı yapan araçlardır. Bilimsel yayınlar içinde öne çıkan makaleler, bilginin küresel alanda yayılmasına olanak tanımaktadır. Makalelerin çeşitli dillerde erişilebilir olarak sunulması, araştırmacıların bu yayınlara ulaşmasına imkân sağlamaktadır.

Bir makalenin uluslararası bir nitelik taşımasında etkili olan faktörler sadece indekslerle sınırlı tutulmayıp farklı sınıflandırmaların veya kriterlerin uygulamada değiştiği gözlemlenmektedir. Bu araştırma ülkemizde bir makalenin uluslararası nitelik taşımasındaki tartışmalara odaklanmaktadır.

2. Uluslararası Makale Tanımı

Bilim, toplumsal yapılar, bilgi temsilleri ve doğal dünya arasındaki karmaşık etkileşimler tarafından yönlendirilen dinamik bir girişimler sistemidir. Bilimsel bilgi, bilimsel disiplinler ve daha geniş alanlar halinde düzenlenmiş araştırma makaleleri, kitaplar, patentler, yazılımlar ve diğer akademik eserlerde somutlaştırılan kavramlar ve ilişkilerden oluşmaktadır. Bu toplumsal, kavramsal ve maddi unsurlar, bilgi, fikir, araştırma uygulamaları, araçlar ve örneklerin resmi ve gayri resmi akışları aracılığıyla birbirine bağlanmaktadır. Bu nedenle bilim, karmaşık, kendi kendini organize eden ve sürekli gelişen çok ölçekli bir ağ olarak tanımlanmaktadır (Fortunato vd., 2018).

Bilim, araştırmacılar tarafından geliştirilen ve çıktısı genellikle makaleler olan bilimsel yayınlardır. Bilimsel makaleler bilimsel ve hakemli dergilerde yayımlanan genellikle 5000-8000 kelime uzunluğunda olan ve belirli bir özgünlük taşıyan bilimsel yayın türleridir (Gürbüz & Şahin, 2014). Alanında bilime katkı sağlayan, hakemler tarafından değerlendirme süreçlerine tabi tutulan, matbu veya elektronik süreli yayınlarda belirlenmiş sürelerde yayımlanan çalışmaya makale denmektedir. Makale, belirli bir araştırma problemini ele almakta ve bu sorunu çözmek için bilimsel yöntemler kullanmaktadır. Hakem süreçleri ile tamamlanan makaleler, bir alanın birikmiş bilgisini temsil etmektedir.

Uluslararası makaleler ile ulusal makaleler arasında Türkiye’de genel bir ayırım bulunmaktadır. Uluslararası makale, küresel düzeyde bilgi paylaşımını teşvik eden, geliştiren, akademik ve araştırma kapsamında yazılan bir bilimsel çalışma olarak kabul edilmektedir. Ulusal makale ise genel olarak kendi resmi dilinde yazılan hedef kitlesi daha düşük olan çalışmalar için kullanılmaktadır. Bu ayırımıda öne çıkan unsurlar makalenin yayımlandığı dergi, hedeflediği kitle, dil ve indekslerdir. Bu unsurlara ilişkin özet bilgi Tablo 1’de verilmiştir.

Yayımlandığı Dergi Açısından Makale Ayırımı

Türkiye’de ulusal ve uluslararası makale ayırımında internet üzerinde en fazla karşılaşılan tanımlar Ulakbim (Ulusal Akademik Ağ ve Bilgi Merkezi) içinde yer alan bir seminere ait notlardır (Kozak, 2015). Burada geçen tanımlar aşağıda sıralanmıştır.

“Uluslararası hakemli dergi, bir editörü ya da editör kurulu olan, dünyanın farklı ülke ve üniversitelerini temsil eden ve araştırmalarıyla alanında saygınlık kazanmış araştırmacı ya da öğretim üyelerinden oluşan bilim ya da danışma kuruluna sahip olan ve bilimsel araştırmaların sonuçlarını yayımlamayı hedefleyen süreli bir dergi grubudur.”

“Yükseköğretim Kurulu mevzuatına göre ulusal hakemli dergi, editörü ve en az beş değişik üniversitenin öğretim üyelerinden oluşmuş danışma kurulu (bilim kurulu üyesi ya da hakem) olan, bilimsel özgün araştırma makalelerini en az bir hakemin olumlu görüşünü alarak yayımlayan, üniversite kütüphanelerinden erişilebilir olan süreli bir dergi grubudur.”

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Bu tanımlamalarda geçen “Yükseköğretim Kurulu Mevzuatı” içinde bu tanımlara en yakın olan ayırım akademik teşvik yönetmeliği içinde geçen ayırımdır. Burada yayın bölümünde akademisyenlerin makalelerini ulusal ve uluslararası olmak üzere ikiye ayırmaları istenmektedir (Tablo 1). Bunun dışında Yükseköğretim mevzuatı içerisinde herhangi bir yönetmelik veya yönergede uluslararası veya ulusal makale tanımlamasına rastlanılmamıştır.

Tablo 1. Akademik Teşvik Yönetmeliğine Göre Ulusal ve Uluslararası Dergi Ayrımı

YAYIN (30 puan)	SCI, SCI-Expanded, SSCI ve AHCI kapsamındaki dergilerde yayımlanmış araştırma makalesi
	SCI, SCI-Expanded, SSCI ve AHCI kapsamındaki dergilerde yayımlanmış derleme makale, (müstakil yayımlanmış olma şartıyla editöre mektup, yorum vaka takdimi, teknik not, araştırma notu ve kitap eleştirisi)
	Alan endeksleri (ÜAK tarafından tanımlanan alanlar için) kapsamındaki dergilerde yayımlanmış araştırma makalesi
	Diğer uluslararası hakemli dergilerde yayımlanmış araştırma makalesi
	ULAKBİM TR Dizin tarafından taranan ulusal hakemli dergilerde yayımlanmış araştırma makalesi

Bir başka uluslararası dergi tanımlaması ise Ulakbim içinde yer alan TR dizinde yer verilmiştir. Tr dizin içinde sık sorulan sorular içinde bu tanımlamanın yapıldığı görülmektedir. TR dizine ait internet sayfasında geçen ifadeler şu şekildedir (<https://trdizin.gov.tr/yarim/>):

Bir derginin uluslararası olması için ne gerekir?

TR Dizin Komite üyelerinin önerileri doğrultusunda bir derginin uluslararası olması için Dergi,

- *Uluslararası veri tabanlarından/dizinlerden erişilebilir olmalıdır.*
- *Makalelerde yabancı dilde Öz bulunmalıdır.*
- *Bir ciltteki makalelerin en az 1/3’ü yabancı dilde olmalıdır.*
- *Bir ciltteki makale yazarlarının 1/3’ü yabancı yazarlardan oluşmalıdır (Uluslararası Yazar Katkı Oranı). Makalenin yurtdışı adresli kabul edilebilmesi için yazar adresi yurtdışı olmalıdır.*

Bu bilgiler doğrultusunda Tablo 2’de yayımlandığı dergi açısından uluslararası ve ulusal makale ayırımına ait özet bilgiler sunulmuştur.

	Uluslararası Makale	Ulusal Makale
Yayımlandığı Dergi Açısından Makale Ayrımı	<ul style="list-style-type: none">• Hakemli• Uluslararası bilimsel dizinlerde taranması (ör. Web of Science, Scopus)• Yayın/bilim/danışma kurulunda farklı ülke ve üniversitelerini temsil eden ve araştırmacılar bulunması• Hedef kitlesi küreseldir.• Uluslararası Standart Süreli Yayın Numarası (ISSN) vardır.• Yayın ücreti genellikle düşüktür.	<ul style="list-style-type: none">• Hakemli• Ulusal indekslerde taranması (ör. TR Dizin)• Yayın/bilim/danışma kurulunda aynı ülkeden bilim insanlarının bulunması Örn: Tr dizindeki bir ulusal derginin yayın kurulu en az 1/3 farklı kurumlardan oluşmalıdır. Kurul üyelerinin çalıştıkları kurum isimleri ya da en az şehir, ülke bilgileri yer almalıdır.• Dergi genellikle ülke içindeki akademisyenlere ve araştırmacılara hitap eder.• Uluslararası Standart Süreli Yayın Numarası (ISSN) vardır.• Yayın ücreti genellikle yoktur veya çok düşüktür.

Kaynak: ULAKBİM, TR Dizin, APA, Elsevier, Springer, Wiley gibi yayınevlerinin yayın kriterlerinden uyarlanmıştır.

Dil Kullanımı ve Hedef Kitle Açısından Makale Ayrımı

Bilimsel toplulukların, bilim insanlarının tam potansiyellerine ulaşmalarını engelleyen engelleri anlamaları ve ortadan kaldırmaları gerekmektedir. Ancak, bireylerin dilsel, ekonomik ve cinsiyet geçmişlerinin bilimsel üretkenlikleri üzerindeki birleşik etkisi yeterince anlaşılmamıştır. Bu konuda araştırma yapan Amano ve arkadaşları (2023), İngilizcenin araştırmacılar için ne kadar zorlayıcı bir engel olduğunu yapmış oldukları araştırma ile ileri sürmüşlerdir. En az bir İngilizce hakemli makale yazan 8 ülkeden 908 çevre bilimciyle yapılan anket sonuçları önemlidir. Katılımcıların bir kısmı, orta düzeyde İngilizce bilen ülkelerden (Bolivya, İspanya ve Ukrayna), diğerleri ise İngilizce yeterliliğinin yaygın olmadığı ülkelere (Bangladeş, Japonya ve Nepal). Cevaplar, İngilizcenin resmi dil olduğu ülkelere (Nijerya ve Birleşik Krallık) kişilerin cevaplarıyla karşılaştırıldı. (Amano vd., 2024).

“Anadili İngilizce olmayan araştırmacılar, İngilizce bilimsel bir makaleyi ana dili İngilizce olanlara göre yaklaşık iki kat daha uzun sürede okuyabiliyorlar. Tezi üzerinde çalışan bir doktora öğrencisi için bu durum, sadece makale okumak için yılda 19 fazladan iş günü harcamak anlamına gelebiliyor. Bu bulgular, anadili İngilizce olmayan araştırmacıların verileri İngilizce okumak, yazmak ve sunmak için ihtiyaç duyduğu fazladan süreyi ölçmek için yapılan bir araştırmaya dayanıyor. Araştırmacılar, PLoS Biology dergisinde yayımlanan istatistiklerin şaşırtıcı olmayabileceğini, ancak dil engelini İngilizcesi akıcı olmayan akademisyenlerin kariyerleri üzerindeki etkilerini ölçmenin önemli olduğunu söylüyor.”

“Araştırma, İngilizce yeterliliği düşük ve bu dilde yalnızca bir makale yayımlayan araştırmacıların, ana dili İngilizce olanlara kıyasla bilimsel makaleleri okumaya ortalama yüzde 90,8 daha fazla zaman ayırdığını gösterdi.

Düşük ve orta düzeyde İngilizce seviyesine sahip bilim insanlarının makalelerinin, "kötü İngilizce" nedeniyle dergiler tarafından reddedilme oranının, ana dili İngilizce olanlara

10th International CEO Communication, Economics, Organization & Social Sciences Congress göre 2,5 veya 2,6 kat daha fazla olduğu vurgulandı. Araştırmada, İngilizce konuşulmayan ülkelerden bilim insanlarının neredeyse yüzde 43'ünün, makale revizyonları sırasında kendilerinden İngilizce yazımlarını geliştirmelerinin istendiği belirtilirken, bunun ana dili İngilizce olanlara göre 12,5 kat daha fazla olduğuna işaret edildi. Ana dili İngilizce olmayan bilim insanlarının yazdıkları makalelerin yüzde 75'ini veya daha fazlasını tashih için okuttuğu aktarıldı.

Bilimin evrensel dilinin İngilizce olduğu iddiası ve bu konudaki zorunlu uygulamalar nedeniyle birçok uluslararası dergi makalenin İngilizce olması gerektiğini söylemektedir. Hatta bu konuda bir makale İngilizce yazılmamış ise bu makalenin uluslararası olamayacağı söylentisi akademik çevrede konuşulmaktadır. Bu konudaki karşıt görüş ise Köksoy (1999) tarafından ileri sürülmüştür:

“Türkiye’de Türk toplumunun tahsis ettiği parasal kaynaklarla yapılacak bütün bilimsel araştırmalar Türk toplumu için, Türk toplumunun faydalanabilmesi için yapılacaksa öncelikle araştırmaların sonuçları Türkçe olarak Türkiye’de çıkartılan dergilerde yayınlanmalı ve Türkiye’de Türkçe olarak yapılan, gerekirse anında yabancı dile çevrilen kongre veya konferanslarda sözlü sunumu ve tartışması yapılmalıdır. Türkiye’de Türk toplumunun tahsis ettiği paralarla üretilen her türlü bilimsel ve teknolojik araştırmaların sonuçlarının ilk muhatabı, kullanıcısı, müşterisi ulusal toplum ve onun içindeki müşteri halkaları olmalıdır.”(Köksoy, 1999).

Dil kullanımı açısından uluslararası ve ulusal makale ayırımı ilişkin özet Tablo 3’te sunulmaktadır.

Tablo 3. Dil Kullanımı ve Hedef Kitle Açısından Uluslararası ve Ulusal Makale Ayırımı

	Uluslararası Makale	Ulusal Makale
Dil Kullanımı açısından	<ul style="list-style-type: none"> Genellikle İngilizce yazılır. Bilim dilinin evrensel dili İngilizce olması iddiası nedeniyledir. 	<ul style="list-style-type: none"> Ülkenin resmi dili (örneğin Türkçe) kullanılarak yazılır. Bu nedenle erişiminin kısıtlı olduğu düşünülür.
Hedef Kitle açısından	<ul style="list-style-type: none"> Belirli bir disiplinin küresel araştırmacılarına hitap eder. Çalışma, dünya genelinde akademik bir tartışmaya katkı sağlamayı amaçlar. 	<ul style="list-style-type: none"> Daha çok yerel veya ulusal akademik çevrelere yönelik hazırlanır. Çalışma, bir ülkenin özel ihtiyaçlarına, sorunlarına veya akademik gereksinimlerine odaklanabilir.

Tarandığı Dizinler Açısından Makale Ayırımı

Bilim, karmaşık, kendi kendini organize eden ve gelişen bir bilim insanları, projeler, makaleler ve fikirler ağı olarak tanımlanabilir. Bu temsil, iş birliği ağlarının incelenmesi yoluyla yeni bilimsel alanların ortaya çıkışını ve atıf ağlarının incelenmesi yoluyla etkili keşiflerin yolunu karakterize eden kalıpları ortaya çıkarmıştır (Fortunato vd., 2018). Bilim hızlandıkça ve giderek daha karmaşık hale geldikçe, bilgi sınırını genişletmek için gereken araçlar ölçek ve hassasiyet açısından arttı. Bu nedenle birçok uluslararası dizin bilginin evrensel paylaşımını hızlandırmaktadır. Tarandığı dizilen açısından makale ayırımı ilişkin özet bilgiler Tablo5’te aktarılmıştır.

	Uluslararası Makale	Ulusal Makale
Tarandığı Dizinler açısından	<ul style="list-style-type: none">Makalenin global ölçekte tanınma ve atıf alma şansı daha yüksektir. Uluslararası indeksler (Örn.) ASOS CrossRef DOAJ DRJI EBSCO EMERALD ERIH ISC PubMed Scopus Web of Science	<ul style="list-style-type: none">Atıf alma potansiyeli genellikle ülke sınırlarıyla sınırlıdır Ulusal indeksler Tr Dizin

3. Sonuç ve Değerlendirme

Bilimin dili, dini, ırkı ve cinsiyeti olmaması nedeniyle evrenseldir. Bilimin evrenselliği, bilimsel bilginin ve yöntemlerin tüm insanlık için ortak bir değer olduğunu göstermektedir. Bilimsel alanda dünyada yer alan her çalışmaya sadece araştırmacılar bir tık uzaklıktadır. Bugün bilgisayar başına geçen herkes tüm akademik çalışmalara herhangi bir indeks olmadan ulaşabilmekte, çevirisini çok kolay yapay zekâ ile yapabilmekte ve okuyabilmektedir. Ayrıca Bilgi veya bilimsel bir yayın ulusa ait olamaz tüm dünyaya açıktır. Araştırmacılar birçok yabancı yayına atıf yapmakta ve yabancı araştırmacılardan atıf almaktadırlar.

Bilimsel İletişimde Çok Dilliliğe İlişkin Helsinki Girişiminin tüm araştırmalar için kabul ettiği “araştırma uluslararasıdır” iddiasıyla uyuşmaktadır. Bu nedenlerle ulusal veya uluslararası makale ayrımının doğru olmadığı kanaati ile bilimsel açıdan bakıldığında tüm bilimsel eserlerin tüm dünyanın ortak değeri olduğunu ifade etmek yerinde olacaktır.

Bilimsel İletişimde Çok Dilliliğe İlişkin Helsinki Girişimine göre;

“Araştırma uluslararasıdır. Bizim sevdiğimiz yol bu! Çok dillilik yerel ilgili araştırmaları canlı tutar. Onu koru! Araştırma sonuçlarınızı kendi dilinizde yaymak etki yaratır. Onu doğrula! Bu, toplumla etkileşime geçmek ve bilgiyi akademinin ötesiyle paylaşmak için hayati önem taşır. Onu tanı! Ulusal dillerde bilimsel iletişim altyapısı kırılmıştır. Onu kaybetme!

KAYNAKÇA

Amano, T., Ramírez-Castañeda, V., Berdejo-Espinola, V., Chowdhury, S., Golivets, M., David González-Trujillo, J., Paudel, K., White, R. L., & Verissimo, D. (2024). *Language, economic, and gender disparities widen the scientific productivity gap*.

Fortunato, S., Bergstrom, C. T., Börner, K., Evans, J. A., Helbing, D., Milojević, S., Petersen, A. M., Radicchi, F., Sinatra, R., Uzzi, B., Vespignani, A., Waltman, L., Wang, D., & Barabási, A. L. (2018). Science of science. *Science*, 359(6379). <https://doi.org/10.1126/SCIENCE.AAO0185>

Gürbüz, Sait., & Şahin, Faruk. (2014). *Sosyal Bilimlerde Araştırma Yöntemleri* (2. Baskı). Seçkin Yayıncılık.

Köksoy, M. (1999). Uluslararası bilimsel dergiler ve Bilig. *Bilig*, 1(8), 1–11. <http://www.yesevi.edu.tr/bilig>

Kozak, M. (2015). *Uluslararası Bilimsel Nitelikte Dergi Yayınlamak için Ne Yapmalıyız?*

<https://ulakbim.tubitak.gov.tr/sites/images/Ulakbim/metink1.pdf>

TR DİZİN,

https://trdizin.gov.tr/kriterler/#TR_Dizin_Basvuru_Kosullari_ve_Dergi_Degerlendirme_Kriterleri



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<https://www.springer.com/gp>

<https://www.helsinki-initiative.org/>

<https://onlinelibrary.wiley.com/>



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**General Attitudes of Pedagogical Formation Program Students Towards
Artificial Intelligence: A Quantitative Study**

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ABSTRACT

The general aim of this study is to examine the general attitudes of pedagogical formation course students towards artificial intelligence in relation to various variables. In this context, the overall positive and negative attitude levels of pedagogical formation course students towards artificial intelligence have been investigated. Additionally, whether these attitudes vary according to gender, department, frequency of internet use, and the status and frequency of artificial intelligence usage has also been explored. This study employs a quantitative research method and utilizes a cross-sectional survey design, which is one of the general survey models. The population of the study consists of all voluntary students enrolled in the Pedagogical Formation Education Certificate Program at Fırat University in Elazığ during the fall semester of the 2024/2025 academic year. Therefore, no sampling was conducted. SPSS 22 statistical software was used for data analysis. Since the data distribution was homogeneous, independent samples t-test and one-way analysis of variance (ANOVA) were applied. The results indicated significant differences according to various variables.

Keywords: Artificial Intelligence, Attitude, Pedagogical Formation Course.

1. INTRODUCTION

Artificial intelligence, (AI) like in many other fields, is rapidly spreading in education, and individuals' attitudes towards this technology are becoming increasingly important. The attitudes of pedagogical formation course students towards artificial intelligence affect their technological readiness and how they will use technology in their future teaching careers. Therefore, determining the attitudes of pedagogical formation course students towards artificial intelligence and understanding how these attitudes shape according to different variables provides important insights into how future teachers will incorporate this technology into education. For this reason, this study aims to identify the attitudes of pedagogical formation students towards artificial intelligence and provide information for educational policies.

The general aim of this study is to examine pedagogical formation program students' general attitudes towards artificial intelligence according to various variables. In this context, the following questions have been addressed:

Pedagogical formation program students':

1. What are their general positive attitudes towards artificial intelligence, and do these attitudes differ based on gender, department, artificial intelligence usage status, and the frequency of artificial intelligence and internet use?
2. What are their general negative attitudes towards artificial intelligence, and do these attitudes differ based on gender, department, artificial intelligence usage status, and the frequency of artificial intelligence and internet use?

LITERATURE REVIEW

Artificial intelligence (AI) was first introduced as a concept in 1956 by John McCarthy at the Dartmouth Conference (Arslan, 2020, p. 71). AI, which has brought about profound changes in various disciplines (Yıldız, 2022; Adıgüzel, 2022; Çörekçi & Ergüzel, 2024), has been defined with different characteristics emphasized from its inception to the present day (Pirim, 2006, p. 81; Arslan, 2020, p. 76). With its most recent and comprehensive definition, AI refers to the capacity of computers to perform tasks generally associated with human intelligence. This concept involves the development of systems equipped with mental processes such as reasoning, meaning extraction, generalization, or learning from past experiences (Encyclopaedia Britannica, 2024).

Attitude can be defined as a learned and intrinsic characteristic that shapes an individual's behavior towards groups, objects, people, events, and situations, and influences their preferences (Senemoğlu, 2020, p. 417). Attitudes towards AI are generally divided into two opposing categories: positive and negative. While renowned scientists and technology leaders like Elon Musk, Stephen Hawking, and Bill Gates exhibit a negative attitude and view AI as a future threat, other prominent figures such as Mark Zuckerberg, Andrew Ng, and Pedro Domingos, who are some of the greatest minds working on AI, consider these fears and negative attitudes to be baseless and advocate for a supportive stance towards AI (Reese, 2020). But why are the attitudes and adaptations of individual people and governments towards AI so crucial? By the end of 2023, China and India lead the world in AI adoption. According to future predictions by the World Bank, this trend, along with investments in AI, will position China as the number one country in the global economic rankings in the future (Tecer, 2024, p. 141). The critical importance of AI and the attitudes developed towards it (Thomas, 2023; Duggal, 2023) can be understood from this and many similar examples.

AI applications have also made their impact in various fields of education with different functions (İşler & Kılıç, 2021, p. 4; Akdeniz & Özdiñç, 2021, p. 918; Arslan, 2020, p. 81). The cognitive competencies and attitudes of teachers form a significant input into the education system (Kraft, 2019, p. 21). Based on this, studies have been conducted in the literature not

10th International CEO Communication, Economics, Organization & Social Sciences Congress only on the AI usage skills of teachers and teacher candidates but also on the attitudes they hold towards AI (Pokrivcakova, 2024; Kuleto, Ilić, Bucea-Manea-Țoniș, Ciocodeică, Mihălcescu, & Mindrescu, 2022; Galindo-Domínguez, Delgado, Campo & Losada, 2024; Banaz & Maden, 2024).

2. METHODOLOGY

The Research Model

In this study, the quantitative research method and the individual survey model, one of the general survey models, have been preferred. In the individual survey model, the formation of variables in terms of type or quantity is examined. In this model, the variables related to the condition and units of the individual, institution, item, event, or group being studied are introduced one by one. This explanation can relate to the past or present, and may also include a developmental approach, covering both time periods. In individual surveys, it is crucial to present the characteristics directly and according to specific standards (Karasar, 2009).

Study Group

The study population consists of 352 students enrolled in the Pedagogical Formation Program at Firat University during the 2024/2025 academic year. Since the aim was to reach all students, no sampling was conducted. However, based on voluntary participation and the condition that the scale forms were completed correctly, a total of 266 students were included in the evaluation. Some demographic information about the participants is presented in Table 1.

Table 1. Demographic Information of Pedagogical Formation Program Students

Variable	Variable level	f	Percentage	Total	
Gender	Female	208	78,2	266	
	Male	58	21,8		
Department	Social sciences	38	14,3		
	Health and physical education	37	13,9		
	Mathematics and science	57	21,4		
	Pedagogical sciences	86	32,3		
	Business and communication	48	18,0		
Daily Internet usage duration	Less than 1hour	18	6,8		
	1-3 hours	132	49,6		
	4-6 hours	86	32,3		
	7 hours or more	30	11,3		
AI usage status	Users	101	38,0		
	Non-users	165	62,0		
AI usage frequency*	Never	165	62,0		
	Rarely	39	14,7		
	Sometimes	40	15,0		
	Often	22	8,3		
Total	23	266	100		266

*As no participants selected the "Always" option in the analysis, this option has not been included in the table.

Data Tool

In the study, the Artificial Intelligence General Attitude Scale developed by Schepman and Rodway (2020) and adapted into Turkish by Kaya, Aydın, Schepman, Rodway, Yetişensoy, and Demir Kaya (2022) has been used. This scale is designed as a tool to measure individuals' attitudes towards artificial intelligence. The scale includes two main dimensions that assess positive and negative attitudes. Participants indicate their attitudes within these dimensions using a 5-point likert-type scale.

The Artificial Intelligence General Attitude Scale has been reliably and validly adapted into Turkish. The analyses revealed that the scale has high reliability, with a Cronbach's alpha

10th International CEO Communication, Economics, Organization & Social Sciences Congress coefficient of 0.92. Furthermore, the factor analyses conducted demonstrated that both dimensions of the scale accurately measure attitudes towards artificial intelligence.

Data Analysis

The data were analysed using a computer-assisted statistical analysis program by the researcher. First, missing data in the dataset were identified, and through the analyses, it was found that these missing values were random. Therefore, missing data imputation was performed. Subsequently, eight items on the scale were reverse-coded. After that a normality test was performed to determine whether the dataset followed a parametric or non-parametric distribution. Since the group size was greater than 50 ($50 < 266$), the Kolmogorov-Smirnov (K-S) test was used to examine the normality of the distribution (Büyüköztürk, 2016). Additionally, the assessment of normality was carried out considering the skewness and kurtosis values. Table 2 presents the skewness and kurtosis values of the data, along with the results of the K-S test.

Table 2. Skewness-Kurtosis Values of Scores and Kolmogorov-Smirnov Test Results

Scale	N	Skewness	Kurtosis	P
Positive		-.513	.677	.005
Negative	266	.090	.222	.001
Total scale score		-.314	.967	.005

When Table 2 is examined, it can be seen that the values obtained from the K-S test are significant for both subdimensions of the scale ($p < .05$) and for the overall scale ($p < .05$). Therefore, it is observed that the normality assumption is violated for both subdimensions and the overall scale. This is a common issue encountered in studies with large sample sizes, which led to the examination of skewness and kurtosis values as an alternative way to determine the normality of the data (Pallant, 2020). For most analyses, a kurtosis value between ± 1.0 is generally considered ideal (George & Mallery, 2012).

It was observed that the skewness and kurtosis values of the total scale score and subdimensions fall within the accepted limits for normal distribution in the literature. Since these values indicate that the data follow a normal distribution, an independent samples t-test was used for bivariate comparisons of the scores obtained from the scale. For comparisons involving more than two variables, one-way analysis of variance (ANOVA) was applied. To determine the source of the significant differences obtained from the ANOVA results, post-hoc tests were conducted. The Levene test was used to check whether the variances were homogeneous, and in cases where variances were not homogeneous, the Welch test was preferred. In cases where variances were homogeneous, the Games-Howell post-hoc test was used, and if homogeneity could not be achieved due to differences in group sample sizes, the Hochberg test was applied.

3. FINDINGS

This section presents the analysis of the quantitative data obtained during the study process and the findings that emerged as a result of these analyses.

Table 3. Comparison of Artificial Intelligence Attitude Scores Based on Gender

Factor	Group	n	\bar{x}	sd	df	Levene	t	p
Positive	Female	208	3,53	0,67	264	F	-1,679	0,094
	Male	58	3,70	0,80		2,744		
Negative	Female	208	3,02	0,78	264	F	0,078	0,939
	Male	58	3,01	0,80		0,342		
Total					266			

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In the comparison of attitudes towards artificial intelligence based on gender, no significant differences were found between females and males in both the positive and negative subdimensions of the scale.

Table 4. Comparison of Positive Attitude Subdimension Scores Based on Department

Factor	Department	n	\bar{X}	df	Source of Variability	Sum of Squares	df	Mean square	F	p	Difference (Games-Howell)
Positive Attitude	Social Sciences	38	3,52	0,69	Between Groups	27,425	4	6,856	6,286	0,009	Mathematics /Science- Pedagogical Sciences
	Health-Physical Education	37	3,57	0,73							
	Mathematics and Science	57	3,86	0,60							
	Pedagogical Sciences	86	3,43	0,67	Within Groups	284,683	261	1,091			
	Business-Communication	48	3,50	0,79							
	Total	266	3,57	0,70	Total	312,108	265				

In the comparison based on department, a significant difference was found in the positive attitude subdimension of the scale between the Mathematics/Science and Pedagogy departments, in favor of the Mathematics and Science department.

Table 5. Comparison of Negative Attitude Subdimension Scores Based on Department

Factor	Department	n	\bar{X}	sd	Source of Variability	Sum of Squares	df	Mean square	F	p	Difference
Negative Attitude	Social Sciences	38	2,79	0,69	Between Groups	4,301	4	1,075	1,758	0,138	-
	Health-Physical Education	37	3,25	0,80							
	Mathematics and Science	57	3,09	0,85							
	Pedagogical Sciences	86	3,02	0,72	Within Groups	159,648	261	0,612			
	Business-Communication	48	2,95	0,84							
	Total	266	3,02	0,78	Total	163,949	265				

In the comparison based on department, no significant difference was found between the departments in the negative attitude subdimension of the scale.

Table 6. Comparison of Positive Attitude Scores Based on Internet Usage Duration

Factor	Net Use Time	n	\bar{X}	sd	Source of Variability	Sum of Squares	df	Mean square	F	p	Difference (Hochberg)
Positive Attitude	Less than 1 hour	18	3,54	0,76	Between Groups	6,951	4	0,477	4,856	0,003	7 hours and more - 1-3 hours
	1-3 hours	132	3,43	0,67							
	4-6 hours	86	3,66	0,64	Within Groups	125,014	261	2,317			
	7 hours and more	30	3,91	0,81							
	Total	266	3,57	0,70							

In the comparison based on daily internet usage duration, a significant difference was found in the positive attitude subdimension of the scale between those who use the internet for 7 hours or more daily and those who use it for 1-3 hours daily, with the group using the internet for 7 hours or more showing a more positive attitude.

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Table 7. Comparison of Negative Attitude Scores Based on Internet Usage Duration

Factor	Net Use Time	n	\bar{X}	sd	Source of Variability	Sum of Squares	df	Mean square	F	p	Difference
Negative Attitude	Less than 1 hour	18	2,75	0,90	Between Groups	5,421	4	1,807	2,987	0,067	-
	1-3 hours	132	2,93	0,73							
	4-6 hours	86	3,14	0,72	Within Groups	158,528	261	1,807			
	7 hours and more	30	3,26	0,98							
	Total	266	3,02	0,78	Total	163,949	265				

* Since the condition of homogeneity of variances could not be met, the results of the welch test were taken into account.

In the comparison based on daily internet usage duration, no significant difference was found between the groups in the negative attitude subdimension of the scale.

Table 8. Comparison of Artificial Intelligence Attitude Scores Based on Artificial Intelligence Usage Status

Factor	Group	n	\bar{X}	sd	df	Levene	t	p	
Positive	Users	101	3,80	0,70	264	F 0,745	p 0,389	4,357*	0,000
	Non-Users	165	3,42	0,67					
Negative	Users	101	3,14	0,87	264	F 5,468	p 0,020	1,807	0,072
	Non-Users	165	2,95	0,71					
Total						266			

*p<0.05

In the comparisons based on artificial intelligence usage status, a significant difference was found in the positive attitude subdimension of the scale in favor of those who use this technology. However, no significant difference was found in the negative attitude subdimension.

Table 9. Comparison of Positive Attitude Scores Based on Usage Frequency

Factor	AI Frequency	n	\bar{X}	sd	Source of Variability	Sum of Squares	df	Mean square	F	p	Difference (Hochberg)
Positive Attitude	Never	165	3,43	0,67	Between Groups	16,269	3	5,423	12,281	,000	Never - Sometimes Never - Often Often - Rarely Never - Rarely
	Rarely	39	3,48	0,75							
	Sometimes	40	3,85	0,62	Within Groups	115,695	262	,442			
	Often	22	4,23	0,48							
			165	3,57	0,70						
	Total					Total	131,965	265			

In the comparison based on the frequency of artificial intelligence usage, a significant difference was found in the positive attitude subdimension of the scale between those who never use AI and those who use it sometimes, with often users showing more positive attitudes. A significant difference was also found between those who never use AI and those who use it often, with often users showing more positive attitudes. Additionally, a significant difference was found between those who never use AI and those who use it rarely, with rare users showing more positive attitudes.

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Table 10. Comparison of Negative Attitude Scores Based on Usage Frequency

Factor	AI Frequency	n	\bar{X}	sd	Source of Variability	Sum of Squares	df	Mean square	F	p	Difference
Negative Attitude	Never	165	2,95	0,71	Between Groups	3,844	3	1,281	2,097	0,101	-
	Rarely	39	3,00	0,95							
	Sometimes	40	3,16	0,83	Gruplar İçi Within Groups	160,105	262	0,611			
	Often	22	3,34	0,85							
	Total	165	3,02	0,78	Total	163,949	265				

* Since the condition of homogeneity of variances could not be met, the results of the welch test were taken into account.

In the comparison based on the frequency of artificial intelligence usage, no significant difference was found in the negative attitude subdimension of the scale.

4. CONCLUSION AND RECOMMENDATIONS

In this study, which examines the attitudes of pedagogical formation course students towards artificial intelligence from the perspective of various variables, significant results were obtained. It was found that participants' gender had no effect on their attitudes towards artificial intelligence. Similar results were reported in the studies conducted by Mart and Kaya (2024) and Kum (2023). This can be explained by the elimination or significant reduction of gender-based approaches in factors shaping participants' attitudes. For example, it can be explained by the elimination or decrease of gender-based positive discrimination in accessing internet or artificial intelligence resources. On the other hand, a study conducted by Acet, Şensiz, Bilir, Cığerci, Çirişoğlu, and Yeşil (2024) with teachers of different professional seniorities found a significant gender difference. Similarly, Aksakal, Emre, and Özbek's (2024) study revealed differences in the negative attitude dimension among teachers with varying levels of professional seniority.

When comparing the participants by their academic departments, a difference was observed in the positive attitudes towards artificial intelligence, but no difference was found in their negative attitudes. It was observed that participants in the Mathematics and Science departments had more positive attitudes towards artificial intelligence. In the study by Tan, Ceylan, and Öztürk (2023), no significant difference was found in terms of the field variable. While this contradicts the results of the current study, it should be considered that the fields of Mathematics and Science were not included in that study, which might explain the discrepancy.

In the comparison based on the participants' internet usage time, the group with the longest usage time had more positive attitudes compared to other groups. No difference was found between these groups in terms of negative attitudes. Those who use artificial intelligence had more positive attitudes towards it compared to those who do not use it. Again, no difference was found between these two groups in terms of negative attitudes. In the evaluations based on the frequency of artificial intelligence usage, a difference was observed in positive attitudes, but no difference was found between the groups in terms of negative attitudes. As the frequency of artificial intelligence use increased, positive attitudes towards artificial intelligence also increased, and this was reflected statistically.

Based on the findings of the study, the following recommendations have been made.

- A difference in positive attitudes towards artificial intelligence was observed based on departments. Research can be conducted to identify the source of this difference between departments.
- To eliminate the differences in positive attitudes between departments and ensure that everyone benefits from the opportunities provided by artificial intelligence, AI-related outcomes can be incorporated into the curriculum.

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- As internet usage duration increases, positive attitudes towards artificial intelligence also increase. More internet and technology applications can be included in education to eliminate access limitations to the internet.
- It was found that those who use artificial intelligence have more positive attitudes than those who do not. To allow individuals to experience artificial intelligence, methods and techniques such as experiments, projects, and research related to AI can be added to the curriculum.

REFERENCES

- Acet, İ., Şensiz, N., Bilir, S., Çiğerci, Ü., Çirişoğlu, M., & Yeşil, S. (2024). İlkokul Öğretmenlerinin Yapay Zekâya İlişkin Tutumlarının Çeşitli Değişkenler Açısından İncelenmesi: Kastamonu Örneği. *International Journal of Social and Humanities Sciences Research (JSHSR)*, 11(112), 2055-2062.
- Adıgüzel, S. (2022). Afet durumlarında yapay zeka teknolojisi ile lojistik yönetimi örnekleri. *Akademik İzdüşüm Dergisi*, 7(1), 47-70.
- Aksakal, Ş., Emre, İ., & Özbek, M. (2024). Sınıf Öğretmenlerinin Yapay Zekâya İlişkin Tutumlarının Belirlenmesi. *Eğitimde Yeni Yaklaşımlar Dergisi*, 7(1), 1-13.
- Arslan, K. (2020). Eğitimde yapay zekâ ve uygulamaları. *Batı Anadolu Eğitim Bilimleri Dergisi*, 11(1), 71-88.
- Banaz, E., & Maden, S. (2024). Türkçe öğretmen adaylarının yapay zekâ tutumlarının farklı değişkenler açısından incelenmesi. *Trakya Eğitim Dergisi*, 14(2), 1173-1180.
- Duggal, N. (2023). *Future of AI: Trends, impacts, and predictions*. Built In. Retrieved December 9, 2024, from <https://builtin.com/artificial-intelligence/future-of-ai-trends-impacts-and-predictions>
- Encyclopaedia Britannica. (2024). *Artificial intelligence (AI)*. Encyclopaedia Britannica. Retrieved December 9, 2024, from <https://www.britannica.com/topic/Artificial-Intelligence-AI-At-a-Glance-2235722>
- Galindo-Domínguez, H., Delgado, N., Campo, L., & Losada, D. (2024). Relationship between teachers' digital competence and attitudes towards artificial intelligence in education. *International Journal of Educational Research*, 126, 102381.
- George, D., & Mallery, M. (2010). *SPSS for Windows Step by Step: A simple guide and reference, 17.0 update (10a ed.)*. Boston: Pearson.
- İşler, B., & Kılıç, M. (2021). Eğitimde Yapay Zekâ Kullanımı ve Gelişimi. *Yeni Medya Elektronik Dergisi*, 5(1), 1-11.
- Mart, M., & Kaya, G. (2024). Okul öncesi öğretmen adaylarının yapay zekâya yönelik tutumları ve yapay zekâ okur yazarlığı arasındaki ilişkinin incelenmesi. *Edutech Research*, 2(1), 91-109.
- Karasar, N. (2009). *Bilimsel araştırma yöntemi: Kavramlar-ilkeler-teknikler*. Ankara: Nobel Yayın Dağıtım.
- Kaya, F., Aydın, F., Schepman, A., Rodway, P., Yetişensoy, O., & Demir-Kaya, M. (2022). The roles of personality traits, al anxiety, and demographic factors in attitudes toward artificial intelligence. *International Journal of Human-Computer Interaction*, 1-18. <https://doi.org/10.1080/10447318.2022.2151730>
- Kuleto, V., Ilić, M. P., Bucea-Manea-Țoniş, R., Ciocodeică, D. F., Mihălcescu, H., & Mindrescu, V. (2022). The attitudes of K-12 Schools' teachers in Serbia towards the potential of artificial intelligence. *Sustainability*, 14(14), 8636.



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Kum, Ö. (2023). Grafik tasarım bölümü öğrencilerinin yapay zekâya yönelik tutumları (Tokat ili örneği). *EKEV Akademi Dergisi*, (96), 172-181.

Pallant, J. (2020). SPSS kullanma kılavuzu: SPSS ile adım adım veri analizi. (Çev. S. Balcı, B. Ahi). 3. Baskı. Ankara: Anı Yayıncılık. (Orijinal yayın tarihi, 2015).

Pirim, H. (2006). Yapay zeka. *Yaşar Üniversitesi E-Dergisi*, 1(1), 81-93.

Pokrivcakova, S. (2024). Pre-service teachers' attitudes towards artificial intelligence and its integration into EFL teaching and learning. *Journal of Language and Cultural Education*, 11(3), 100-114.

Reese, B. (2020). *Yapay zeka çağı dördüncü çağ: Akıllı robotlar, bilinçli bilgisayarlar ve insanlığın geleceği*. İstanbul: Say Yayınları.

Schepman, A., & Rodway, P. (2020). Initial validation of the general attitudes towards Artificial Intelligence Scale. *Computers in human behavior reports*, 1, 100014.

Senemoğlu, N. (2020). *Gelişim, Öğrenme ve Öğretme: Kuramdan Uygulamaya*, Ankara: Anı Yayıncılık.

Tan, Ç., Ceylan, Y., & ÖZTÜRK, O. (2023). Öğretmenlerin yapay zekaya karşı tutumlarının incelenmesi. *The Journal of Social Sciences*, 67(67), 72-83.

Tecer, B. (2024). *Yapay zeka hırsızları*. İstanbul: Hayygrup Yayıncılık.

Thomas, M. (2023). *The future of AI: How artificial intelligence will change the world*. Built In. Retrieved December 9, 2024, from <https://builtin.com/artificial-intelligence/artificial-intelligence-future>

Yıldız, A. (2022). Finans Alanında Yapay Zeka Teknolojisinin Kullanımı: Sistemik Literatür İncelemesi. *Pamukkale Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, (52), 47-66.



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**Pedagogical Formation Program Students' Views on Their Artificial
Intelligence Literacy Levels: A Quantitative Study**

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ABSTRACT

This study aims to investigate the levels of artificial intelligence literacy among students of the pedagogical formation course, considering various factors. The study focuses on four main areas of artificial intelligence literacy: awareness of artificial intelligence, usage of artificial intelligence, evaluation of artificial intelligence, and ethics of artificial intelligence. It explores whether the levels of literacy in these areas vary based on factors such as gender, academic department, frequency of internet usage, and the presence and frequency of artificial intelligence usage. The study population consists of all voluntary students enrolled in the Pedagogical Formation Certificate Program at Firat University in Elazığ during the fall semester of the 2024/2025 academic year. Therefore, no sampling was conducted. Data analysis was carried out using the statistical software SPSS 22. The results revealed significant differences based on various factors. The study shows that the artificial intelligence literacy levels of pedagogical formation students vary depending on various factors.

Keywords: Artificial Intelligence, Artificial Intelligence Literacy, Pedagogical Formation Program.

1. INTRODUCTION

In today's fast-paced development of Artificial intelligence (AI) technologies, it is crucial for educators to have sufficient knowledge in this field. However, there are only a few studies in the existing literature regarding the AI literacy levels of pedagogical formation students. This creates uncertainty about how educators will use this technology. Therefore, understanding the awareness, usage frequency, and ethical perspectives of pedagogical formation students regarding AI is very important for educational policies.

The general aim of this research is to examine the AI literacy levels of pedagogical formation course students based on various variables. In this context, the following questions have been explored:

- What are the *AI awareness literacy* levels of pedagogical formation course students, and do these literacy levels differ according to gender, department, AI usage status, and the frequency of AI and internet use?
- What are the *AI usage literacy* levels of pedagogical formation course students, and do these literacy levels differ according to gender, department, AI usage status, and the frequency of AI and internet use?
- What are the *AI evaluation literacy* levels of pedagogical formation course students, and do these literacy levels differ according to gender, department, AI usage status, and the frequency of AI and internet use?
- What are the *AI ethics literacy* levels of pedagogical formation course students, and do these literacy levels differ according to gender, department, AI usage status, and the frequency of AI and internet use?

2. LITERATURE REVIEW

Literacy, in addition to its well-known definitions, is the ability to identify, comprehend, interpret, create, communicate, and calculate using printed and written materials within different contexts (Unesco, 2024). AI literacy refers to the knowledge and skills that allow individuals to comprehend, assess, and use AI systems and tools in a critical, safe, and ethical manner to effectively engage in an increasingly digital world (Digital Promise, 2024).

AI literacy is part of Information and Communication Technology Literacy within 21st-century skills (MEB, 2023). The significance that AI has gained in today's world does not require everyone to become an AI expert; rather, it requires individuals to use AI responsibly and effectively (Texas Wesleyan University, 2024). Effective use of AI and overcoming associated fears can only be achieved through learning AI literacy (Bipartisan Policy Center, 2024). AI literacy is now considered an essential skill that teachers should possess (Tenberga & Daniela, 2024). For this reason, many studies have been conducted on this topic (Çelebi, Demir, & Karakuş, 2023).

3. METHODOLOGY

The Research Model

In this study, which examines the artificial intelligence literacy levels of pedagogical formation course students, a quantitative research method was used, and the individual survey model, one of the general scanning models, was preferred.

Study Group

The study population consists of 352 students enrolled in the Pedagogical Formation Course at Firat University during the 2024/2025 academic year. Since the aim was to reach all students, no additional sample selection was made. Considering the criteria of voluntary

10th International CEO Communication, Economics, Organization & Social Sciences Congress participation and the accurate completion of the scale forms, the study was evaluated based on a total of 266 students. Some demographic information about the participants is provided in Table 1.

Table 1. Demographic Information of Pedagogical Formation Course Students

Variable	Variable level	f	Percentage	Total
Gender	Female	208	78,2	266
	Male	58	21,8	
Department	Social sciences	38	14,3	
	Health and physical education	37	13,9	
	Mathematics and science	57	21,4	
	Pedagogical sciences	86	32,3	
	Business and communication	48	18,0	
Daily Internet usage duration	Less than 1hour	18	6,8	
	1-3 hours	132	49,6	
	4-6 hours	86	32,3	
	7 hours or more	30	11,3	
AI usage status	Being used	101	38,0	
	Not being used	165	62,0	
AI usage frequency	Never	165	62,0	
	Rarely	39	14,7	
	Sometimes	40	15,0	
	Often	22	8,3	
Total	23	266	100	266

*As no participants selected the "Always" option in the analysis, this option has not been included in the table.

Data Collection Tool

The Artificial Intelligence Literacy Scale (AILS) used in this study was developed by Wang, Rau and Yuan (2022) and aims to measure the artificial intelligence literacy levels of non-expert individuals. The scale consists of 12 items and is based on a four-factor structure. The Turkish adaptation and validity and reliability studies of the scale were conducted by Çelebi, Yılmaz, Demir, and Karakuş (2023).

Data Analysis

The data were analyzed using a computer-assisted statistical software package by the researcher. In the first stage, missing data analysis was performed on the dataset, and it was determined that there were no missing data. Then, reverse coding was applied to three items on the scale. Afterward, a reliability test was conducted to determine the overall reliability of the scale and the reliability coefficients of each factor. To determine whether the dataset was parametric or nonparametric, a normality test was performed. Since the group size was greater than 50 ($50 < 266$), the Kolmogorov-Smirnov (K-S) test was used to evaluate the normality of the distribution (Büyüköztürk, 2016). Additionally, since skewness and kurtosis values are important indicators in assessing normal distribution, these values were also considered. Table 2 presents the skewness and kurtosis values of the data, along with the K-S test results.

Table 2. Skewness-Kurtosis Values of Scores and Kolmogorov-Smirnov Test Results

Scale	N	Skewness	Kurtosis	P
Awareness	266	-.203	.234	.000
Usage		.030	-.616	.000
Evaluation		-.649	-.297	.000
Ethics		-.701	.196	.000
Total Scale Score		-.209	-.020	.074

When Table 2 is examined, it can be seen that the values obtained from the Kolmogorov-Smirnov (K-S) test are significant ($p < .05$) for the four sub-dimensions of the scale, while they

10th International CEO Communication, Economics, Organization & Social Sciences Congress are not significant ($p > .05$) for the overall scale. Therefore, it can be concluded that the normality assumption is violated for all sub-dimensions of the scale, but not for the overall scale. This situation is commonly encountered in studies with large sample sizes, so skewness and kurtosis values were also examined as an alternative way to determine the normality of the data (Pallant, 2020). A kurtosis value between ± 1.0 is generally considered ideal for most analyses (George & Mallery, 2012).

It was observed that the skewness and kurtosis values for the total score and sub-dimensions of the scale fall within the accepted limits for normal distribution in the literature. These values indicate that the data follow a normal distribution, which is why an independent samples t-test was used for bivariate comparisons of the scores obtained from the scale. For comparisons involving more than two variables, a one-way analysis of variance (ANOVA) was applied. Post-hoc tests were conducted to determine the source of significant differences obtained from the ANOVA. Levene's test was used to check for homogeneity of variances; in cases where the variances were found to be heterogeneous, the Welch test was preferred. When the variances were homogeneous, the Games-Howell post-hoc test was used. In cases where homogeneity could not be achieved, the Hochberg and LSD tests were used due to the unequal sample sizes between the groups.

4. FINDINGS

Table 3. Comparison of Artificial Intelligence Literacy Scores Based on Gender

Factor	Group	n	\bar{x}	sd	df	Levene		t	p	
Awareness	Female	208	4,82	1,09	264	F	p	-2,342*	0,020	
	Male	58	5,20	1,02		0,170	0,680			
Usage	Female	208	4,67	1,24	264	F	p	-1,276	0,203	
	Male	58	4,91	1,24		0,348	0,556			
Evaluation	Female	208	4,96	1,42	264	F	p	-,201	0,841	
	Male	58	5,01	1,57		1,167	0,281			
Ethics	Female	208	5,57	1,14	264	F	p	3,239	0,002	
	Male	58	4,92	1,40		5,615	0,019			
Total							266			

* $p < 0.05$

As a result of comparisons made based on gender, significant differences were identified in the sub-dimensions of AI literacy. These differences were found to be statistically significant in favor of women in the awareness and ethics dimensions.

Table 4. Comparison of Awareness Subscale Scores Based on Department

Factor	Department	n	\bar{x}	sd	Source of Variability	Sum of Squares	df	Mean square	F	p	Difference (Games - Howell)
Awareness	Social Sciences	38	4,92	1,21	Between Groups	27,425	4	6,856	6,286	0,000	Mathematics /Science- Pedagogical Sciences
	Health-Physical Education	37	5,05	1,11							
	Mathematics and Science	57	5,42	0,94							
	Pedagogical Sciences	86	4,54	1,05	Within Groups	284,683	261	1,091			
	Business-Communication	48	4,81	0,92							
Total		266	4,90	1,08	Total	312,108	265				

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As a result of comparisons made by departments, significant differences were observed in the awareness sub-dimension between the fields of mathematics / science and pedagogy, as well as between mathematics and science and business and communication studies. In both statistical analyses, the differences were found to be significant in favor of mathematics and natural sciences.

Table 5. Comparison of Usage Subscale Scores Based on Department

Factor	Department	n	\bar{X}	sd	Source of Variability	Sum of Squares	df	Mean square	F	p	Difference (Games - Howell)
Usage	Social Sciences	38	4,60	1,34	Between Groups	43,113	4	10,778	7,634	0,000	Health/PE-Pedagogical Sciences
	Health-Physical Education	37	5,20	1,28							
	Mathematics and Science	57	5,28	1,14							
	Pedagogical Sciences	86	4,31	1,15	Within Groups	368,509	261	1,412			Mathematics /Science-Pedagogical Sciences
	Business-Communication	48	4,53	1,08							
	Total	266	4,72	1,24	Total	502,194	265				

Significant differences were identified in the usage sub-dimension based on departmental comparisons. These differences were observed between health/physical education and pedagogy, between mathematics/science and pedagogy, and between mathematics/science and business/communication studies. The difference between health/physical education and pedagogy was found to be significant in favor of health and physical education. The differences between mathematics/science and both pedagogy and business and communication studies were statistically significant in favor of mathematics and science.

Table 6. Comparison of Evaluation Subscale Scores Based on Department

Factor	Department	n	\bar{X}	sd	Source of Variability	Sum of Squares	df	Mean square	F	p	Difference (Games - Howell)
Evaluation	Social Sciences	38	4,87	1,61	Between Groups	43,489	4	10,872	5,472	0,000	Mathematics /Science-Pedagogical Sciences
	Health-Physical Education	37	5,07	1,55							
	Mathematics and Science	57	5,70	1,10							
	Pedagogical Sciences	86	4,70	1,36	Within Groups	43,489	261	1,987			Mathematics /Science-Business/Communication
	Business-Communication	48	4,60	1,52							
	Total	266	4,97	1,456 40	Total	562,088	265				

* Since the condition of homogeneity of variances could not be met, the results of the welch test were taken into account.

Significant differences were found in the evaluation sub-dimension based on departmental comparisons. These differences were observed between mathematics/science and pedagogy, as well as between mathematics/science and business-communication studies, with the differences favoring mathematics and natural sciences in both cases.

Table 7. Comparison of Ethics Subscale Scores Based on Department

Factor	Department	n	\bar{X}	sd	Source of Variability	Sum of Squares	df	Mean square	F	p	Difference (Games - Howell)
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Ethics	Social Sciences	38	5,45	1,32	Between Groups	4,098	4	1,024	0,669	0,614	-
	Health-Physical Education	37	5,26	1,59							
	Mathematics and Science	57	5,49	1,08							
	Pedagogical Sciences	86	5,55	1,13	Within Groups	399,673	261	1,531			
	Business-Communication	48	5,25	1,19							
	Total	266	5,43	1,23							

* Since the condition of homogeneity of variances could not be met, the results of the welch test were taken into account.

No significant differences were found in the ethics sub-dimension of the scale based on departmental comparisons.

Table 8. Comparison of Awareness Subscale Scores Based on Internet Usage Duration

Factor	Net use time	n	\bar{X}	sd	Source of variability	Sum of squares	df	Mean square	F	p	Difference (LSD)	
Awareness	Less than 1 hour	18	4,77	1,41	Between Groups	9,472	3	3,157	2,733	0,040	1/3-4-6 hours	
	1-3 hours	132	4,74	0,98								
	4-6 hours	86	5,08	1,16								
	7 hours and more	30	5,22	0,94	Within Groups	302,636	262	1,155				1/3-7 hours and more
	Total	266	4,90	1,08	Total	312,108	265					

* Since the condition of homogeneity of variances could not be met, the results of the welch test were taken into account.

Significant differences were found in the awareness sub-dimension of the scale based on internet usage duration. These differences were observed between those who use the internet for 1-3 hours daily and those who use it for 4-6 hours, with the differences favoring the 4-6 hour group. Additionally, significant differences were found between those who use the internet for 4-6 hours and those who use it for 7 or more hours, with the differences favoring the 7 -hour and more group.

Table 9. Comparison of Usage Subscale Scores Based on Internet Usage Duration

Factor	Net use time	n	\bar{X}	sd	Source of Variability	Sum of Squares	df	Mean square	F	p	Difference (Hochberg)	
Usage	Less than 1 hour	18	4,27	1,38	Between Groups	30,349	3	10,116	6,952	0,000	7 hours and more – Less than 1 hour	
	1-3 hours	132	4,50	1,12								
	4-6 hours	86	4,89	1,25								
	7 hours and more	30	5,50	1,29	Within Groups	381,272	262	1,455				7 hours and more – 1/3 hours
	Total	266	4,72	1,24	Total	411,622	265					

Significant differences were found in the usage sub-dimension based on internet usage duration. These differences were observed between those who use the internet for 7 or more hours and those who use it for less than 1 hour, as well as between those who use it for 7 or more hours and those who use it for 1-3 hours. In both cases, the differences were statistically significant in favor of the 7-hour and above group.

Table 10. Comparison of Evaluation Subscale Scores Based on Internet Usage Duration

Factor	Net use time	n	\bar{X}	sd	Source of Variability	Sum of Squares	df	Mean square	F	p	Difference
Evaluation	Less than 1 hour	18	5,03	1,32	Between Groups	6,323	3	2,108	0,994	0,396	-
	1-3 hours	132	4,84	1,47							
	4-6 hours	86	5,04	1,46							
	7 hours and more	30	5,32	1,42	Within Groups	555,765	262	2,121			
	Total	266	5,03	1,42	Total	562,088	265				

No significant differences were found in the evaluation sub-dimension of the scale based on internet usage duration.

Table 11. Comparison of Ethics Subscale Scores Based on Internet Usage Duration

Factor	Net use time	n	\bar{X}	sd	Source of Variability	Sum of Squares	df	Mean square	F	p	Difference
Ethics	Less than 1 hour	18	5,25	1,54	Between Groups	2,922	3	,974	0,637	0,592	-
	1-3 hours	132	5,52	1,13							
	4-6 hours	86	5,41	1,18							
	7 hours and more	30	5,22	1,58	Within Groups	400,849	262	1,530			
	Total	266	5,43	1,23	Total	403,771	265				

No significant differences were found in the ethics sub-dimension of the scale based on internet usage duration.

Table 12. Comparison of Literacy Scores Based on Usage Status

Factor	Group	n	\bar{X}	sd	df	Levene	t	p
Awareness	Users	101	5,25	1,04	264	F	4,189*	0,000
	Non-Users	165	4,69	1,05		0,857		
Usage	Users	101	5,24	1,16	264	F	5,601	0,000
	Non-Users	165	4,41	1,18		0,425		
Evaluation	Users	101	5,31	1,43	264	F	3,019	0,000
	Non-Users	165	4,76	1,43		0,000		
Ethics	Users	101	5,33	1,30	264	F	-1,071	0,285
	Non-Users	165	5,49	1,19		0,380		
Total						266		

Significant differences were found in the awareness, usage, and evaluation sub-dimensions of the scale based on usage status. In all three sub-dimensions, the differences were statistically significant in favor of those who use AI.

Table 13. Comparison of Awareness Subscale Scores Based on Frequency of Use

Factor	AI Frequency	n	\bar{X}	sd	Source of Variability	Sum of Squares	df	Mean square	F	p	Difference (Hochberg)
Awareness	Never	165	4,72	1,07	Between Groups	28,495	3	9,498	8,774	0,000	Never – Often
	Rarely	39	4,88	1,08							
	Sometimes	40	5,15	0,94							
	Often	22	5,87	0,82	Within Groups	283,613	262	1,082			
	Total	165	4,90	1,08	Total	312,108	265				

Significant differences were found in the awareness sub-dimension of the scale based on usage frequency. These differences were observed between those who never use AI and those who use it often, as well as between those who use it rarely and those who use it often. In both cases, the differences were statistically significant in favor of those who use AI frequently.

Table 14. Comparison of Usage Subscale Scores Based on Frequency of Use

Factor	AI Frequency	n	\bar{X}	sd	Source of Variability	Sum of Squares	df	Mean square	F	p	Difference (Hochberg)
Usage	Never	165	4,43		Between Groups	56,349	3	18,783	13,852	0,000	Never – sometimes
	Rarely	39	4,69								
	Sometimes	40	5,42			355,273	262	1,356			

Often	22	5,74	Within Groups	Never - Often
	266	4,72		Sometimes - Rarely
Toplam			Total	Rarely - Often
			411,622	
			265	

Significant differences were found in the usage sub-dimension of the scale based on usage frequency. These differences were observed between those who never use AI and those who use it occasionally, between those who never use AI and those who use it frequently, between those who use it occasionally and those who use it rarely, and between those who use it rarely and those who use it frequently. In all cases, the differences were statistically significant in favor of those who use AI frequently.

Table 15. Comparison of Evaluation Subscale Scores Based on Frequency of Use

Factor	AI Frequency	n	\bar{X}	sd	Source of Variability	Sum of Squares	df	Mean square	F	p	Difference
Evaluation	Never	165	4,78	1,43	Between Groups	51,500	3	17,167	8,809	0,000	Never - sometimes
	Rarely	39	4,56	1,59							
	Sometimes	40	5,64	1,11	Within Groups	510,588	262	1,949			Never - Often
	Often	22	5,95	1,17							
	Total	266	4,97	1,45	Total	562,088	265				Sometimes - Rarely
									Rarely - Often		

* Since the condition of homogeneity of variances could not be met, the results of the welch test were taken into account.

Significant differences were found in the evaluation sub-dimension of the scale based on usage frequency. These differences were observed between those who never use AI and those who use it sometimes, with the differences favoring the sometimes users. Significant differences were also found between those who never use AI and those who use it often, with the differences favoring the frequent users. Additionally, differences were found between those who use AI occasionally and those who use it rarely, with the differences favoring the occasional users. Finally, significant differences were observed between those who use AI rarely and those who use it frequently, with the differences favoring the frequent users.

Table 16. Comparison of Ethics Subscale Scores Based on Frequency of Use

Factor	AI Frequency	n	\bar{X}	sd	Source of Variability	Sum of Squares	df	Mean square	F	p	Difference
Ethics	Never	165	5,52	1,20	Between Groups	5,171	3	1,724	1,133	0,336	-
	Rarely	39	5,38	1,41							
	Sometimes	40	5,12	1,15	Within Groups	398,599	262	1,521			
	Often	22	5,42	1,23							
	Total	165	5,43	1,23	Total	403,771	265				

No significant differences were found between groups in the ethics sub-dimension based on usage frequency.

5. CONCLUSION AND RECOMMENDATIONS

Based on the results of the study, differences in AI literacy levels were observed according to variables such as gender, department, usage status, and frequency of use. Women exhibited higher literacy levels in the awareness and ethics sub-dimensions. Students in mathematics and natural sciences reached higher literacy levels compared to those in pedagogical formation programs. As the frequency of AI usage increased, literacy levels in the

10th International CEO Communication, Economics, Organization & Social Sciences Congress awareness, usage, and evaluation sub-dimensions also improved. Additionally, as the duration of internet usage increased, higher literacy levels were found in the awareness and usage sub-dimensions. In Elçiçek's (2024) study, students' AI literacy levels vary according to gender and internet usage duration. Similarly, in Banaz and Demirel's (2024) study, teacher candidates' AI literacy levels differ based on gender and internet usage duration.

Based on the findings of the study, the following recommendations have been made.

- It has been observed that some groups have lower literacy levels, particularly in the awareness and ethics sub-dimensions. Extra programs can be organized to bridge this gap among students.

- It has been found that those who use AI and those who use it more frequently have higher literacy levels. Projects and activities that allow students to experience AI can be conducted to increase their literacy.

- One-on-one meetings with students can be conducted to identify the reasons behind low literacy levels.

REFERENCES

Banaz, E., & Demirel, O. (2024). Türkçe öğretmen adaylarının yapay zekâ okuryazarlıklarının farklı değişkenlere göre incelenmesi. *Dokuz Eylül Üniversitesi Buca Eğitim Fakültesi Dergisi*, (60), 1516-1529.

Bipartisan Policy Center. (2024). *The growing need for AI literacy*. Retrieved December 9, 2024, from <https://bipartisanpolicy.org/blog/growing-need-for-ai-literacy/>

Büyüköztürk, Ş. (2016). Sosyal bilimler için veri analizi el kitabı. 22. Baskı, Pegem Yayıncılık.

Çelebi, C., Demir, U., & Karakuş, F. (2023). Yapay Zekâ Okuryazarlığı Konulu Çalışmaların Sistematik Derleme Yöntemiyle İncelenmesi. *Necmettin Erbakan Üniversitesi Ereğli Eğitim Fakültesi Dergisi*, 5(2), 535-560.

Çelebi, C., Yılmaz, F., Demir, U., & Karakuş, F. (2023). Artificial intelligence literacy: An adaptation study. *Instructional Technology and Lifelong Learning*, 4/2, 291-306. <https://doi.org/10.52911/ital.1401740>

Digital Promise. (2024). *AI literacy*. Retrieved December 9, 2024, from <https://digitalpromise.org/initiative/artificial-intelligence-in-education/ai-literacy/>

Elçiçek, M. (2024). Öğrencilerin Yapay Zeka Okuryazarlığı Üzerine Bir İnceleme. *Bilgi ve İletişim Teknolojileri Dergisi*, 6(1), 24-35.

George, D., & Mallery, M. (2010). *SPSS for Windows Step by Step: A simple guide and reference*, 17.0 update (10a ed.) Boston: Pearson.

MEB. (2023). *21. yüzyıl becerileri ve değerlere yönelik araştırma raporu*. https://ttkb.meb.gov.tr/meb_iys_dosyalar/2023_05/11153521_21.yy_becerileri_ve_degerlere_yonelik_arastirma_raporu.pdf

Pallant, J. (2020). *SPSS kullanma kılavuzu: SPSS ile adım adım veri analizi*. (Çev. S. Balcı, B. Ahi). 3. Baskı. Ankara: Anı Yayıncılık. (Orijinal yayın tarihi, 2015).

Tenberga, I., & Daniela, L. (2024). Artificial Intelligence Literacy Competencies for Teachers Through Self-Assessment Tools. *Sustainability*, 16(23), 10386.

Texas Wesleyan University. (2024). *AI literacy is becoming increasingly crucial*. Retrieved December 9, 2024, from <https://westlibrary.txwes.edu/c.php?g=1339686&p=9982324>



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UNESCO. (2024). *Literacy*. Retrieved December 9, 2024, from <https://uis.unesco.org/en/glossary-term/literacy>

Wang, B., Rau, P.L. P., & Yuan, T. (2022). Measuring user competence in using artificial intelligence: validity and reliability of artificial intelligence literacy scale. *Behaviour & Information Technology*, 42 (9), 1324–1337. <https://doi.org/10.1080/0144929X.2022.2072768>



10th International CEO Communication, Economics, Organization & Social Sciences Congress
Erişilebilir Turizm Konulu Çalışmaların Bibliyometrik Analizi

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ÖZET

Erişilebilirlik; ürünlerin, hizmetlerin, mekanların ve tesislerin, temel kullanım bağlamlarında farklı yetkinliklere becerilere ve ihtiyaçlara sahip bireyler tarafından kullanılabilme yeteneği olarak tanımlanmaktadır. Bu bağlamda erişilebilir turizm, turizm ürün ve hizmetlerine yönelik farklı ihtiyaçları olan kişilerin turizm faaliyetlerine bağımsız, güvenli, kolay ve saygın bir şekilde katılımını sağlayan turizm faaliyetleri olarak ifade edilmektedir. Bu çalışmada erişilebilir turizm konusunda yapılan çalışmaların bibliyometrik analiz yöntemiyle incelenmesi amaçlanmaktadır. Bu amaç doğrultusunda WoS ve Scopus veri tabanlarındaki çalışmalar R Studio programı aracılığıyla incelenmiştir. Analiz edilen veriler 114 indeksli araştırma yayınından oluşmaktadır. Araştırma sonuçları erişilebilir turizm konusundaki çalışmaların 2021 yılından itibaren belirgin bir artış gösterdiğini göstermiştir. Erişilebilir turizm konusunda en fazla çalışmanın İspanya’da yapıldığı anlaşılmıştır. Araştırma sonuçlarının erişilebilir turizm konusunda çalışmak isteyen araştırmacılara yol gösterici olması öngörülmektedir.
Anahtar Kelimeler: Erişilebilir Turizm, Bibliyometrik Analiz, R Studio

A Bibliometric Analysis of Studies on Accessible Tourism

ABSTRACT

Accessibility is defined as the ability of products, services, places and facilities to be used by individuals with different competences, skills and needs in basic contexts of use. In this context, accessible tourism is defined as tourism activities that enable people with varying needs for tourism products and services to participate in tourism activities independently, safely, easily and respectfully. This study aims to examine the studies on accessible tourism by bibliometric analysis method. For this purpose, studies in WoS and Scopus databases were analyzed through R Studio program. The research data consists of 114 indexed research publications. The result of the study indicated that studies on accessible tourism have shown a significant increase since 2021. It was understood that the most studies on accessible tourism were conducted in Spain. The research results are expected to guide researchers who want to work on accessible tourism.

Keywords: Accessible Tourism, Bibliometric Analysis, R Studio.

Erişilebilirlik, ürünlerin, hizmetlerin ve mekanların farklı ihtiyaçlara ve yetkinliklere sahip bireyler tarafından güvenli, bağımsız ve kolay bir şekilde kullanılabilir olmasını ifade eden önemli bir kavramdır. Bu bağlamda erişilebilir turizm, turizm sektörünün farklı erişim ihtiyaçlarına sahip bireyler için eşit, bağımsız ve saygın bir deneyim sunmasını amaçlayan bir yaklaşım olarak ifade edilmektedir (Darcy ve Dickson, 2009). Özellikle engelli bireyler, yaşlılar, çocuklu aileler ve geçici kısıtlamaları olan bireyler gibi grupların turizm faaliyetlerine tam katılımını mümkün kılmayı hedefleyen erişilebilir turizm, evrensel tasarım ilkeleri doğrultusunda turizm ürün ve hizmetlerini herkes için erişilebilir hale getirme çabalarını kapsamaktadır. Bu durum, yalnızca sosyal bir sorumluluk olarak değil, aynı zamanda turizm sektörünün ekonomik potansiyelini artıran stratejik bir yatırım alanı olarak da değerlendirilmektedir (Bowtell, 2015).

Son yıllarda, erişilebilir turizm alanındaki çalışmaların artış göstermesi, bu konunun hem akademik hem de uygulama açısından daha fazla önem kazandığını ortaya koymaktadır. Özellikle bibliyometrik analiz yöntemleri kullanılarak erişilebilir turizm literatürüne yönelik yapılan incelemeler, bu alandaki çalışmaların genel eğilimlerini, anahtar araştırma konularını ve öncü araştırmacıları belirlemek için önemli bir araç haline gelmiştir. Araştırmalar, erişilebilir turizmin, uluslararası iş birliği ve disiplinler arası yaklaşımlarla gelişim gösterdiğini ortaya koymaktadır (Aria ve Cuccurullo, 2017; Zupic ve Čater, 2015). Bu durum, erişilebilir turizmin yalnızca yerel uygulamalarla sınırlı kalmadığını, küresel bir araştırma ve uygulama alanı haline geldiğini göstermektedir. Bu çalışmanın amacı, erişilebilir turizm literatürünü bibliyometrik analiz yöntemiyle inceleyerek, bu alandaki genel eğilimleri, öne çıkan konuları ve araştırmacılar arasındaki iş birliğini ortaya koymaktır. WoS ve Scopus veri tabanlarından elde edilen veriler, R Studio yazılımı ve Bibliometrix paketi kullanılarak analiz edilmiştir. Çalışma, erişilebilir turizm konusunda yapılacak gelecek araştırmalara yol gösterici bulgular sunması nedeniyle önemli ve özgündür.

1. KAVRAMSAL ÇERÇEVE

Erişilebilir turizm, bireylerin engellilik, yaşlılık ya da geçici kısıtlılık gibi durumlarından bağımsız olarak turizm faaliyetlerine eşit ve bağımsız şekilde katılmalarını sağlayan bir turizm türüdür. Evrensel tasarım ilkelerini benimseyen bu yaklaşım, farklı paydaşların koordinasyonunu gerektirir ve engelli bireylerin seyahatlerini kolaylaştıran bir sağlık turizmi kategorisi olarak da değerlendirilmektedir (Darcy ve Dickson, 2009: 34; Dalan ve Saltık, 2021).

Literatürde erişilebilir turizmin, ekonomik boyutları, engellilik modelleri ve destinasyon yönetimi gibi çeşitli yönleri incelenmiştir. Bu çalışmalar arasında hem erişilebilir turizmin ekonomik katkılarını (Bowtell, 2015) hem de sosyal model gibi engellilik anlayışlarının turistik hizmetlerin tasarımına olan etkisini ortaya koyan araştırmalar yer almaktadır (Buhalis ve Darcy, 2011; Nicolaisen vd., 2012). Bununla birlikte, erişilebilir turizmin tarihsel gelişimi, 1980'lerden itibaren engellilik ve erişilebilirlik konularına yönelik artan farkındalıkla başlamış ve zamanla daha kapsayıcı bir anlayışa evrilmiştir. Günümüzde bu anlayış, herkes için erişilebilir destinasyonlar ve hizmetlerin geliştirilmesini destekleyen bir çerçeve sunmaktadır (Darcy ve Dickson, 2009; Zajadacz, 2015).

Erişilebilir turizmin tarihsel gelişimi, 1980'lerde engellilik ve erişilebilirlik konularına yönelik farkındalıkla başlamıştır. İlk çalışmalar, fiziksel ve sosyal engellerin tespiti üzerine yoğunlaşırken, daha sonra erişilebilirlik sosyal bir mesele olarak ele alınmış ve turizm alanına yansımıştır (Buhalis ve Darcy, 2011; Nicolaisen vd., 2012). Günümüzde ise erişilebilirlik

10th International CEO Communication, Economics, Organization & Social Sciences Congress tanımı genişletilerek yaşlı bireyler, çocuklu aileler ve geçici engelleri olan bireyleri de kapsayacak şekilde evrensel tasarım prensiplerine dayalı bir yaklaşım benimsenmiştir (Darcy ve Dickson, 2009: 34; Akıncı ve Sönmez, 2015; Zajadacz, 2015). Buna karşın, engelli bireylerin bakış açılarına yönelik araştırmaların uzun süre ihmal edildiği görülmektedir. Özellikle erişilebilirlik bilgisi eksiklikleri ve turizm planlamasında karşılaşılan zorluklar, daha yakın dönemde ele alınmaya başlanmıştır (Daniels vd., 2005; Darcy, 2010). Genel olarak, erişilebilir turizm araştırmalarının, yalnızca turizm perspektifiyle sınırlı kalmadığı toplumsal eşitlik ve kapsayıcılık konularına da önemli katkılar sağladığını söylemek mümkündür. Bu bağlamda çok disiplinli bir yapıya sahip olan erişilebilir turizm konusunda literatürün bütüncül bir değerlendirmesi, konuyla ilgili çalışma sürecinin gelişiminin yanı sıra sınırlı çalışılmış boyutlarının belirlenmesi açısından önemlidir.

Literatür taraması çalışmaları, genellikle bir araştırmanın gelişimini anlamada kapsamlı bir yaklaşım olarak değerlendirilmektedir. Bibliyometrik analiz literatür taraması süreçlerinin standart iş akışı beş temel adımdan oluşmaktadır. Bunlar; analiz edilecek araştırmanın zaman çizelgesini ve konusunu belirleme, veri toplama, veri analizi, veri görselleştirme ve elde edilen bulguların yorumlanmasıdır (Zupic ve Čater, 2015). Bilimsel literatür taraması çalışmalarında bibliyometri; yönetim organizasyon, pazarlama gibi çeşitli sosyal bilimler araştırma alanlarında sıkça kullanılan bir yöntemdir. Bibliyometrik incelemelere verilen önemin artmasıyla uyumlu olarak bibliyometrik analiz için yararlanılan araçlar ve uygulamalar da çeşitlenmekte ve gelişmektedir.

2. YÖNTEM

Bu çalışmada erişilebilir turizm konusunda yapılan çalışmaların bibliyometrik analiz yöntemiyle incelenmesi amaçlanmaktadır. Bu amaç doğrultusunda WoS ve Scopus veri tabanlarındaki çalışmalar R Studio programı aracılığıyla incelenmiştir. Bibliometrix R, R programlama dili içerisinde literatür tarama çalışmaları (bibliyometri ve bilim metrikleri) için nicel veri analizi yetenekleri sunan bir açık kaynaklı yazılımdır (Aria ve Cuccurullo, 2017).

Bibliometrix R, veri toplama ve yükleme sürecinde, bilim haritalama için en büyük iki veri kaynağı olan Clarivate Analytics Web of Science (WOS) ve Scopus ile uyumlu bir şekilde çalışmak üzere geliştirilmiştir. Ayrıca, Dimensions, The Lens, PubMed ve Cochrane Library gibi diğer kaynaklardan veri alımını da desteklemektedir. Paket, birden fazla kaynaktan veri aktarımını kolaylaştırır ve Faktöriyel Analiz (FA) gibi gelişmiş yöntemlerle kavramsal yapıların analizine imkan tanır. Bu yöntem, metin madenciliği alanında öncü bir yaklaşım olarak değerlendirilmektedir (Derviş, 2019).

Çalışma kapsamında erişilebilir turizm literatürünün gelişim sürecini ve mevcut durumu ortaya koymak üzere WoS ve Scopus veri tabanlarındaki makaleler ele alınmıştır. Çalışmada erişilebilir turizm konusundaki makaleler yıllara göre dağılımı, yazarların üretkenliği, araştırmaların üniversitelere ve ülkelere göre dağılımı gibi başlıklar üzerinden bibliyometrik olarak incelenmiştir.

3. BULGULAR VE TARTIŞMA

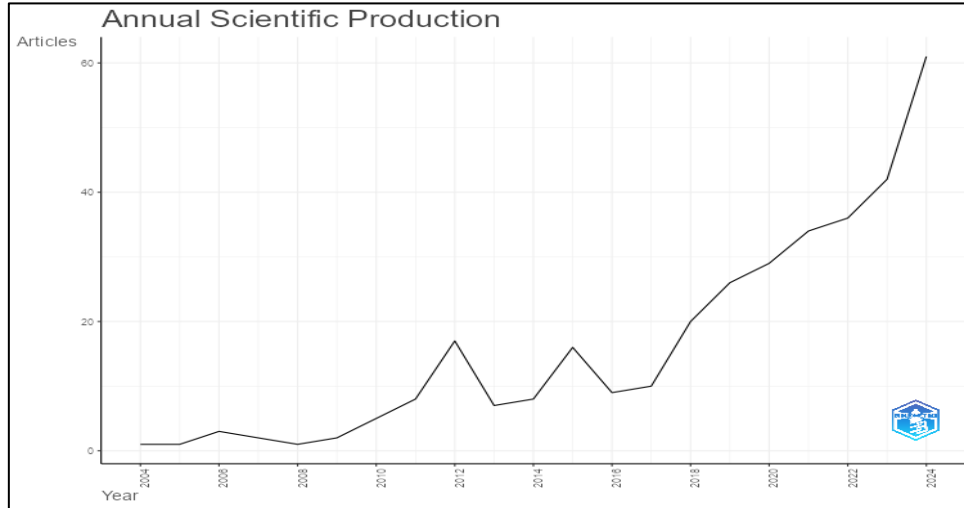
Bibliyometrik analiz sonucunda erişilebilir turizm literatürüne ilişkin tespit edilen genel bilgiler Tablo 1’de sunulmaktadır:

Tablo 1: Genel Bilgiler Tablosu

VERİ HAKKINDA TEMEL BİLGİLER	
Açıklama	Sonuçlar
Zaman Aralığı	2004:2024
Kaynaklar (Dergi)	157
Dokümanlar (Makale)	338
Yıllık Büyüme Oranı %	22.82
Dokümanların Ortalama Yaşı	4.66

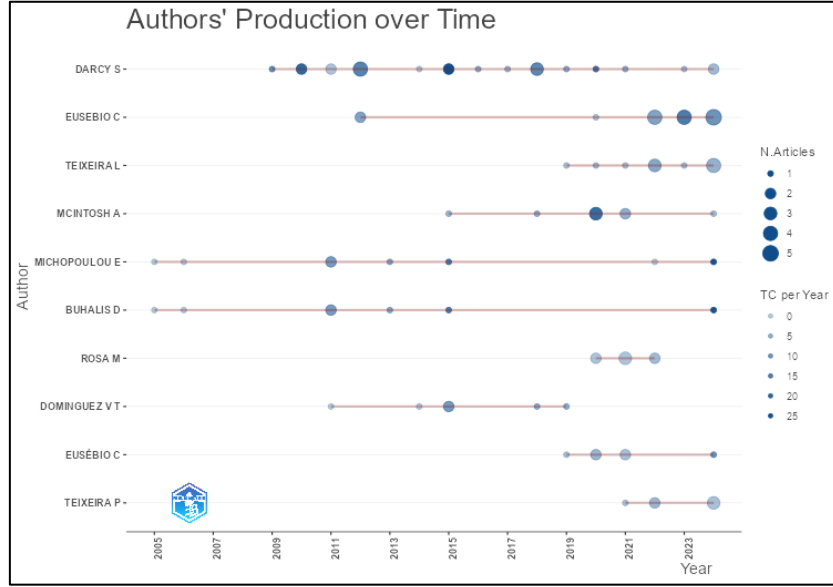
Genel bilgiler tablosu, 2004-2024 yılları arasındaki veriler üzerinden yapılan bibliyometrik analiz sonuçlarını sunmaktadır. İlk olarak, verilerin toplamda 157 farklı kaynaktan toplandığı ve 338 dokümanın analiz edildiği belirtilmektedir. Yıllık büyüme oranının %22,82 olması, bu alandaki araştırmaların hızla arttığını ve konunun giderek daha fazla ilgi gördüğünü göstermektedir. Ayrıca, dokümanların ortalama yaşının 4.66 olması, son birkaç yıl içinde yapılan çalışmaların çoğunluğu oluşturduğunu, dolayısıyla araştırma alanının aktif bir şekilde geliştiğini işaret eder.

Şekil 1: Yıllık Bilimsel Üretim Grafiği



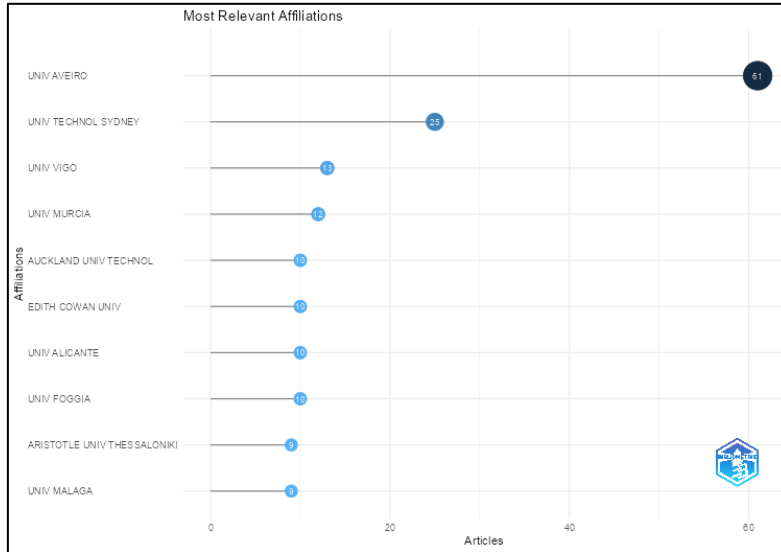
Erişilebilir turizm alanındaki çalışmaların yıllık bilimsel üretimine dair bu grafik yıllara göre makale üretimini göstermektedir. Grafikte sunulduğu üzere 2004-2015 arasında, erişilebilir turizmle ilgili çalışmaların sayısı oldukça düşük iken, 2017 yılında makale üretimi yükselmeye başlamış, bu yükseliş 2021 yılından itibaren ivmelenecek şekilde devam etmiştir. Erişilebilir turizmle yönelik akademik ilginin bir göstergesi olarak nitelendirilen bu artış, belirtilen dönemlerde toplumsal bağlamda erişilebilir turizm konusuna verilen önemin artmasının bir sonucu olarak değerlendirilmektedir.

Şekil 2: Zaman İçinde Yazarların Üretimi



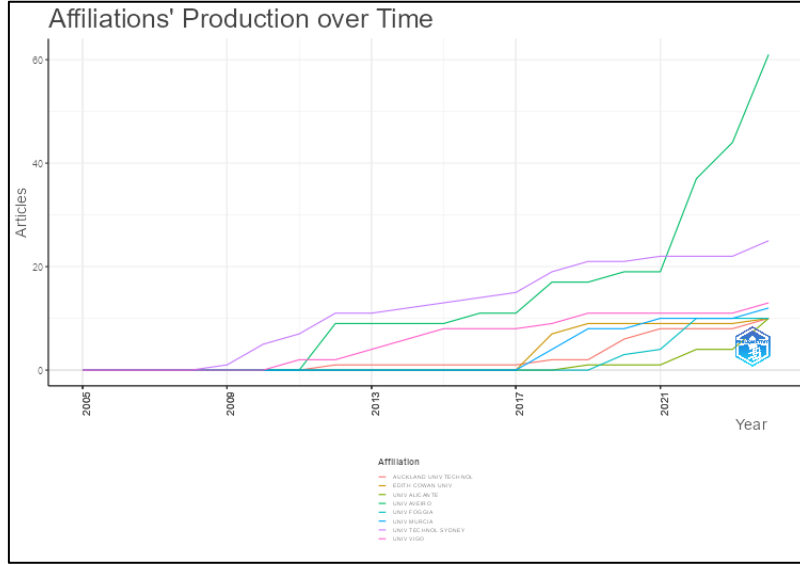
Erişilebilir turizm konusunda araştırma yapan yazarlar incelendiğinde, Darcy S. ve Buhalis, D., en üretken yazarlar arasında yer almaktadır. Özellikle Darcy S, 2010 yılından itibaren düzenli olarak makaleler yayımladığı görülmektedir. Yazarlar, erişilebilir turizm literatürünün gelişimine katkı sağlayan araştırmacılar olarak öne çıkmaktadır.

Şekil 3: En Çok Yayın yapan Üniversiteler



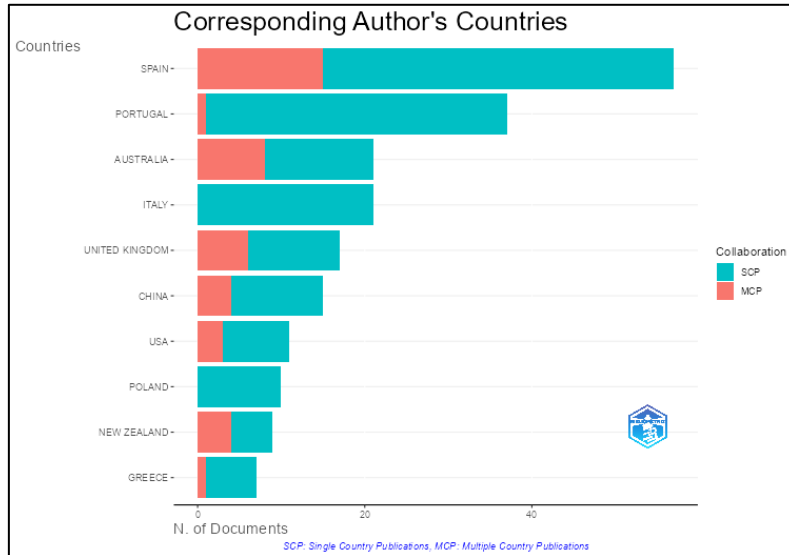
Grafikte, erişilebilir turizm alanında yapılan çalışmalara en çok katkı sağlayan üniversitelerin sıralandığı görülmektedir. En üst sırada Universidade de Aveiro yer almakta ve 61 makale ile diğer üniversitelerden belirgin şekilde öne çıkmaktadır. Onu, 25 makale ile University of Technology Sydney takip etmektedir. Diğer üniversiteler daha az sayıda makale ile katkıda bulunmuştur. Universidade de Vigo 13, Universidad de Murcia 12 makale ile listede yer almaktadır. Bulgular, Universidade de Aveiro'nun bu alandaki liderliğini ortaya koymaktadır.

Şekil 4: Üniversitelerin Yıllar İçindeki Üretkenlikleri



Grafikte, erişilebilir turizm alanında üniversitelerin yıllar içindeki makale üretimlerinin artış eğilimleri gösterilmektedir. 2005 yılından itibaren başlayan çalışmalar, özellikle 2013 ve sonrasında hız kazanmaya başlamıştır. Universidade de Aveiro, diğer üniversitelere kıyasla 2020'den sonra belirgin bir artış göstererek 2023 yılına doğru keskin bir yükseliş eğrisi sergilemiştir. Bu, üniversitenin bu alandaki lider konumunu pekiştirmektedir. University of Technology Sydney ve Universidade de Vigo gibi diğer üniversiteler de zamanla kademeli bir artış göstermiştir. Ancak bu üniversitelerdeki artış daha istikrarlı ve dengeli bir şekilde ilerlemiştir. Edith Cowan University ve Auckland University of Technology gibi diğer üniversitelerin katkıları ise daha sınırlı kalmıştır.

Şekil 5: Sorumlu Yazarların Ülkelere Göre Dağılımı



Şekil 5'te, farklı ülkelerdeki yazarlara ait çalışmaların sayısını ve iş birliği türlerini göstermektedir. İspanya, en fazla çalışma üreten ülke olarak öne çıkarken, Portekiz ve Avustralya onu takip etmektedir. İtalya, Birleşik Krallık, Çin, ABD, Polonya, Yeni Zelanda ve Yunanistan gibi ülkeler de listede yer almaktadır. İspanya, Portekiz ve Avustralya'da tek ülke içindeki iş birliğinin (SCP) baskın olduğu görülmektedir. Öte yandan, Avustralya, Birleşik

Erişilebilir turizm konusunda yapılan çalışmaların bibliyometrik analiz yöntemiyle incelenmesini amaçlayan bu çalışmada, WoS ve Scopus veri tabanlarındaki çalışmalar R Studio programı aracılığıyla incelenmesine ilişkin ön bulgular sunulmaktadır. Analiz edilen veriler 338 indeksli araştırma yayınından oluşmaktadır. Araştırma sonuçları erişilebilir turizm konusundaki çalışmaların 2021 yılından itibaren belirgin bir artışı göstermiştir. Bu artış hem akademik çevrelerin hem de uygulamada erişilebilir turizme yönelik artan ilgisini yansıtmaktadır. Bu sonuç, erişilebilir turizm üzerine yapılan çalışmalara olan ilginin artmaya devam edeceğinin ve bu alandaki literatürün genişlemeye devam edeceğini göstergesi olarak değerlendirilmektedir.

Analiz sonuçları, erişilebilir turizmle ilgili en üretken yazarların Darcy S. ve Buhalis D. gibi isimler olduğunu göstermektedir. Bu yazarlar, özellikle 2010 yılından sonra düzenli olarak makaleler yayımlamış ve alandaki akademik etkilerini artırmışlardır. Ayrıca, en aktif üniversitelerin başında Universidade de Aveiro yer almakta olup, bu üniversite 2020'lerden sonra erişilebilir turizm üzerine yapılan çalışmalarda belirgin bir artış sergilemiştir. Bu durum, söz konusu üniversitenin bu alandaki liderliğini pekiştirdiğini göstermektedir.

Bibliyometrik analizin ön bulgularına dayalı olarak erişilebilir turizm konusunda en fazla çalışmanın İspanya'da yapıldığı anlaşılmıştır. Ülkeler bazında yapılan analizde, İspanya, Portekiz ve Avustralya'nın öne çıkan ülkeler olduğu, bu ülkelerdeki araştırmaların uluslararası iş birlikleri ile yürütüldüğü dikkat çekmiştir. Erişilebilir turizm alanındaki araştırmaların uluslararası düzeyde daha fazla iş birliği ve etkileşimle gerçekleştirildiği, bu alandaki akademik üretimin hızla arttığı ve önemli üniversitelerin bu alanda önemli katkılarda bulunduğu ortaya çıkmıştır. Araştırma sonuçlarının erişilebilir turizm konusunda çalışmak isteyen, özellikle ulus ötesi iş birliği arayışında olan araştırmacılara ve uygulayıcılara yol gösterici olması öngörülmektedir.

Erişilebilir turizm, yalnızca engelli bireyler için değil, tüm bireyler için daha kapsayıcı bir turizm deneyimi sağlamayı hedefleyen önemli bir alan olarak önem taşımaktadır. Bu nedenle erişilebilir turizm konulu bibliyometrik çalışmalar, yalnızca konuyla ilgilenen akademisyenlere değil aynı zamanda sürdürülebilir kalkınma ve sürdürülebilir turizm konularında uygulama alanları olan ve çalışmalar yürüten profesyoneller, kamu kurumları ve sivil toplum kuruluşları açısından da önem taşımaktadır. Bu bağlamda, gelecek araştırmalarda erişilebilir turizm konusunda daha kapsamlı bibliyometrik incelemelerin yapılması ve inceleme kriterlerin yalnızca akademik gösterge ve başlıklar üzerinden değil çalışmaların içeriğini, odak noktasını ve etki gücünü de belirlemeye yönelik daha kapsamlı başlıklar üzerinden yapılması önerilmektedir. Yapılacak daha kapsamlı çalışmalarda bulguların sunumunda; kelime bulutları ve kavramsal yapı haritaları gibi araçlardan yararlanılmasının ilgili sektör temsilcilerinin bulguları anlama ve yararlanma süreçlerinde kolaylaştırıcı olacağı düşünülmektedir. Böylelikle erişilebilir turizm alanında akademi-sektör iş birliğini desteklemeye yönelik katkı düzeyi de artırılabilir.

KAYNAKÇA

- Akıncı, Z., & Sönmez, N. (2015). Engelli Bireylerin Erişilebilir Turizm Beklentilerinin Değerlendirilmesine Yönelik Nitel Bir Araştırma. *Anatolia: Turizm Araştırmaları Dergisi*, 26(1), 97-113
- Aria, M., & Cuccurullo, C. (2017). *Bibliometrix: an R-tool for comprehensive science mapping analysis*. *J Informet* 11 (4): 959-975.
- Bowtell, J. (2015). Assessing The Value And Market Attractiveness Of The Accessible Tourism Industry in Europe: A Focus On Major Travel And Leisure Companies. *Journal Of Tourism Futures*, 1(3), 203-222



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- Buhalis, D. & Darcy, S. (2011). Introduction: From Disabled Tourists To Accessible Tourism. *Accessible Tourism: Concepts And Issues*, 1-20.
- Dalan, C. & Arıkan Saltık, I. (2021). Paydaşların Bakış Açısıyla Muğla İli Sağlık Turizmi, *Türk Turizm Araştırmaları Dergisi*, 5(2): 1451- 147
- Daniels, M. J., Rodgers, E. B. D., & Wiggins, B. P. (2005). “Travel Tales”: An Interpretive Analysis Of Constraints And Negotiations To Pleasure Travel As Experienced By Persons With Physical Disabilities. *Tourism Management*, 26(6), 919-930.
- Darcy, S. (2010). Inherent Complexity: Disability, Accessible Tourism And Accommodation Information Preferences. *Tourism Management*, 31(6), 816-826.
- Darcy, S., & Dickson, T. J. (2009). A Whole-Of-Life Approach To Tourism: The Case For Accessible Tourism Experiences. *Journal Of Hospitality And Tourism Management*, 16(1), 32-44.
- Derviş, H. (2019). Bibliometric analysis using bibliometrix an R package. *Journal of scientometric research*, 8(3), 156-160.
- Nicolaisen, J., Blichfeldt, B. S., & Sonnenschein, F. (2012). Medical And Social Models Of Disability: A Tourism Providers' Perspective. *World Leisure Journal*, 54(3), 201-214.
- Zajadacz, A. (2015). Evaluation Of Models of Disability As a Basis for Further Policy Changes in Accessible Tourism. *Journal of Tourism Futures*, 1(3), 189-202.
- Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational research methods*, 18(3), 429-472.



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Usability of Artificial Intelligence (AI) in Educational Dimension

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ABSTRACT

The rapid development of internet technologies has been popular nowadays. It is believed that Artificial intelligence technologies are suitable for improving students' cognitive and analytical thinking skills. In particular, the Covid-19 pandemic has brought a supplemental perspective in education and it has led to frequent use of distance education. Along with this issue, internet, personal computers, tablet computers, smartphones and similar devices have been used frequently. As in all fields, the usage of artificial intelligence in education has been rising. In education, Artificial Intelligence (AI) has started to provide the possibility a more personalized and effective learning experience with the learners. AI can be defined as a field that enables computers to simulate human-like intelligence skills. The extensive usage of technology in education enriches learning experiences and and the increasing position of AI makes learning activities more effective. AI can find its place in many different dimensions of education. Within the context of education, the foremost thing that comes to mind is the teaching process and academic success. In the study, Artificial Intelligence is defined in detail and its emergence and historical development are emphasized. In addition, its benefits and usability are discussed.

Keywords: Artificial intelligence, Education, Student, Teacher, Technology.

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Introduction

Nowadays, the volume of obtained data, the developed algorithms and the developments in data storage systems along with the rapid development of internet technologies have made artificial intelligence technologies much more popular. Artificial intelligence (AI) technologies are a suitable technological method to improve students' cognitive and analytical thinking skills. It is believed that it will a remarkable contribution to the advancement of students' analytical and mental thinking, professional and social development, high-level problem solving and creativity skills when this method is carried out with an appropriate instructor integration.

The rapid change in scientific and technological fields today makes it difficult to know in advance what kind of difficulties will be encountered or what kind of needs will arise in human and social life. For this reason, modern education aims to raise people who can overcome difficulties on their own. Since it is not possible to produce solutions to all the problems that students will encounter throughout their lives through educational activities, the goals of education should focus on developing effective problem-solving skills (Baki, 2008).

American National Research Council (2012) identified three basic competency headings for the century learners: *cognitive, personal, and interpersonal* domain. Based on these competencies, 21st a strategy has been adopted in which artificial intelligence is handled and learning-teaching and problem solving are blended in a cognitive approach. Breakthroughs in information and communication technologies are directly reflected in education life. Artificial intelligence research which come into notice by imitating human intelligence is described as the modeling of human studying by machines (Coşkun & Gülleroğlu, 2021). Advances in AI technologies have led to transformative changes in healthcare, finance, education, and many other sectors, resulting in improved efficiency, decision-making processes, and outcomes across sectors (Kumar et al., 2020).

Today, traces of artificial intelligence are found in all areas of life from social media platforms and online shopping sites that offer personalized content, advertisements and suggestions; Voice assistants such as Siri, Alexa; security systems using face, license plate and object recognition technologies; vehicles with automatic driving features to UAVs (unmanned aerial vehicle) with the power to destroy even a tank (Luger & Stubblefield, 2014).

Artificial Intelligence (AI)

It can be said that artificial intelligence which is thought to have some human-specific skills also has the ability to understand what is spoken in human language. The capability of a computer program to comprehend the natural language used by people while talking among themselves is called natural language processing (Kul, 2020).

The concept of artificial intelligence was introduced by Alan Mathison Turing (1912–1954) by means of his studies which he conducted during and after World War II. Turing, who started the debate in this field by putting forward the idea of whether machines can think or not likened the human brain to an efficient digital computer. Turing who is the ancestor of today's computer, performed the Turing test to ascertain whether a machine could cogitate like a human. In an article he published in 1950, Alan Turing brought up the question of whether machines can think. Therefore, the modern history of artificial intelligence probably begins with Alan Turing in 1936. In an article Alan Turing published in 1950, he brought up the question of whether machines can think in an article he published. (Karakuş, 2024). AI was also mentioned in a letter of recommendation presented by John McCarthy and his friends at Dortmund Conference in 1956. McCarthy (2007) denoted that AI is a technological field that

10th International CEO Communication, Economics, Organization & Social Sciences Congress aims to perform activities like human minds such as thinking, decision-making. Since those days, definitions have continued to be made in many different ways.

When the literature is reviewed, it is noticed that the concept of AI has been studied with the dimension that was mostly related to computer science until recent years (Bircan & Salah, 2022). The social effects that have emerged with the developments in AI technologies have made AI an increasingly topic of discussion and research in social sciences such as law and ethics. In this context, it has been observed that there has been a sharp increase in research on AI in the field of social sciences since 2013 (Ligo et al., 2021).

In their book “Artificial Intelligence: Foundations of Computational Agents”, Luger and Stubblefield (2014) define artificial intelligence as a technology used for computers to exhibit human-like intelligence abilities, and stated that these abilities can be used in areas such as problem solving, learning, understanding, sensory perception, moving, communicating, planning and decision-making.

According to Popenici and Kerr (2017), artificial intelligence is a kind of computational system that could perform human – like activities, such as learning, adaptation, synthesis, and using data for complicated processing tasks. Nabiyevev (2021) describes AI as the capability of a computer or a computer - controlled machine to carry out assignments that require high-level mental processes, that is, the ability of machines to imitate human-specific skills. These capabilities include: - Developing solutions to complex problems. - Reasoning. - Reacting to a situation. - To make new inferences and generalizations by making use of old information.

In its broadest sense, AI refers to the field of computer science which can perform assignments. In the literature, there are different perspectives and different definitions to explain the concept of AI. Although it has been a salient issue for a long time, it is thought by people that there is no any exact description for AI in the related field (Mikalef & Gupta, 2021).

The Relationship Between Artificial Intelligence (AI) and Education

Artificial intelligence which is the science technology that will shape the future affects the field of education and has a great influence on human life (Ferikoğlu, 2021). In this context, it is necessary to mention the usage of these practices in educational fields that raises the society of the future. When the literature is reviewed, it is noticed that research on the usage of AI in education are limited (Akdeniz & Özdiñç, 2021).

The connection of AI with education has advanced in parallel with the development of web technologies (web 1.0, web 2.0, web 3.0, web 4.0) since the 2000s. In the studies carried out with these developments, the idea of providing more personalized teaching which has always been desired has been formed (Dağ, 2020). According to Arslan (2020), it is predicted that there will be a radical transformation in all stages of education as a result of the combination of technology with theories and that this transformation will be centered on the principle of one-to-one learning.

According to Zileli (2023), when the artificial intelligence is used in education and Natural Language Processing are focused on artificial intelligence, it is seen that individuals can benefit from artificial intelligence in many ways. Recently, technological developments have been seen in the field of natural language studies with the development of artificial intelligence (Firat, 2020). ChatGPT which is one of the artificial intelligence-based language model programs is

10th International CEO Communication, Economics, Organization & Social Sciences Congress used in chatbot and customer service applications based on machine learning; it is an algorithm used in different fields such as education and website assistance (Shawar and Atwell, 2007).

As time progresses, the machines used are becoming more complex. Although they are still far from being able to draw conclusions, interpret or make decisions like a human being, there have been salient advancements in artificial intelligence and machine learning applications in recent years (Mukhallafi, 2020).

In particular, the Covid-19 pandemic has led to frequent applications for distance education in the world then then the earthquake occurred in Türkiye in February directly affected 11 provinces and indirectly affected all of Türkiye, this way of life has become mandatory. According to Habertürk (2023) earthquakes which occurred on February 06, 2023, were accepted as “Disaster Areas Affecting General Life”. In this regard EBA Assistant (it is an Education Information Network, it is an online social education platform offered free of charge to each individual by the Ministry of National Education of Türkiye- General Directorate of Innovation and Educational Technologies) which started in Türkiye has been used in distance education is one of the AI-based language models. This application in which the questions of students and parents are answered has started to positively change the views on the use of AI in educational fields. With this distance education process, personal computers, tablet computers, smartphones and technological auxiliary devices connected to these devices were frequently used. The software used in these technological devices is also in an ongoing development.

The Usability of AI in Foreign Language

In the field of education, the usability of chatbots working with AI is becoming increasingly common. Some of the usages of chatbots in this field are to present a course content, provide answers to the questions faced by students and teachers during the education process, encourage dialogues, create homework resources, and give automatically generated feedback to the previously uploaded content (Mageira et al., 2022).

Especially in the field of language teaching, AI has the potential to provide learners with more personalized and effective learning experiences. AI could be defined as a field that allows computers to simulate near-human intelligence skills. The wide-ranging use of technology and the increasing position of AI in language education are enriching learning experiences and making them more effective.

In foreign language teaching, artificial intelligence-supported chatbots and intelligent systems can evaluate the uploaded content and determine the problems in these contents that need to be corrected. In addition, they can also make corrections to the content provided. This feature which emerges as a result of complex technical processes can be used for various purposes in teaching the English language as a foreign language.

AI- based learning platforms and applications include a huge capacity to provide a more efficacious learning experience by delivering customized content based on learners’ individual learning needs. For teachers, AI offers the opportunity to improve their teaching processes by providing support such as monitoring student progress, understanding student needs, and adapting learning materials to the purpose and level.

AI can be used in many ways in learning a foreign language. These can be listed as developing language skills such as text analysis, vocabulary studies, pronunciation studies, translation, and literacy and etc. With the right guidance of students, AI tools can offer a personalized

10th International CEO Communication, Economics, Organization & Social Sciences Congress environment. With the right training to be given to students on the usage of AI in foreign language learning, students' use and studying of a foreign language can be accelerated. Regardless of time and classroom environment, providing an individualized learning environment can be considered one of the biggest advantages of AI.

Conclusion

The issue of Artificial intelligence (AI) has been popular more and since about the years of 2000 , and the studies on it have been on the rise (Roll & Wylie, 2016). As well as all fields, the usage of Artificial intelligence in the field of education tends to rise. It can take its place in many different dimensions of education. There is a mutual interaction between AI teaching process and academic success.

The impact of AI on education perceived by teachers and students is mostly positively. Especially when viewed from the perspective of students, artificial intelligence-supported systems seem like games to the students, and the presence of personalized methods and instant feedback shows that they increase the motivation of the students. AI applications which are aimed at use in the field of education can also be used to develop educational materials. For example, customized learning material can be created based on students' levels and interests. This approach can provide students with effective learning environments. In this context, the selection and more effective use of resources and tools and etc., in course teaching, and the fact that routine tasks such as attendance, absenteeism and grading can be performed more quickly and practically positively affect the teacher's perception towards artificial intelligence. In general, artificial intelligence is thought to provide students with a more effective and personalized learning opportunity by bringing innovative approaches to traditional learning methods in the field of education.

REFERENCES

- Akdeniz, M., & Özdiñç, F. (2021). Eğitimde Yapay Zeka Konusunda Türkiye Adresli Çalışmaların İncelenmesi. *Van Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi*, 18(1), 912-932. <https://doi.org/10.33711/yyuefd.938734>
- American National Research Council (NRC). (2012). *Education for Life and Work: Developing Transferable Knowledge and Skills for the 21st Century*. Washington, DC: National Academies Press.
- Arslan K, (2020). Eğitimde Yapay Zeka Uygulamaları, *Batı Anadolu Eğitim Bilimleri Dergisi*, 11, 71-80.
- Baki, A. (2008). *Kuramdan uygulamaya matematik eğitimi*. Ankara: Harf Eğitim Yayıncılığı.
- Bircan, T., & Salah, A. A. A. (2022). A Bibliometric Analysis of the Use of Artificial Intelligence Technologies for Social Sciences. *Mathematics*, 10(23), Article 23. <https://doi.org/10.3390/math10234398>
- Coşkun F., & Gülleroğlu, H. D. (2021). Yapa Zekanın Tarih İçindeki Gelişimi ve Eğitimde Kullanılması, *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 54, 947- 966.
- Dağ, F.(2020). Eğitimde Yapay Zeka Uygulamalarına İlişkin Teknolojik ve Pedagojik Yaklaşımlar. İçinde, *Eğitimde Yapay Zeka*, Ankara: Pegem Akademi, pp.148-169.
- Karakuş, C. (2023). *Yapay Zekâ Ders Notu*. Balbiti p.187, Retrieved at <https://ckk.com.tr/ders/YZ/YZ%2000%20Yapay%20Zeka%20Ders%20Notu.pdf>
- Kul, S. (2020). Türkçe ders anlatan yapay zekaya giden yolda doğal dil işleme. *Yönetim Bilişim Sistemleri Dergisi*, 6(2), 43-56.
- Kumar, A., Gadag, S., & Nayak, U. Y. (2020). The Beginning of a New Era: Artificial Intelligence in Healthcare. *Advanced Pharmaceutical Bulletin*, 11(3).
- Ligo, A. K., Rand, K., Bassett, J., Galaiti, S. E., Trump, B. D., Jayabalasingham, B., Collins, T., & Linkov, I. (2021). Comparing the Emergence of Technical and Social Sciences Research in *Artificial Intelligence*. *Frontiers in Computer Science*, 3.
- Luger, G., & Stubblefield, W. (2004) *Artificial Intelligence: Structures and Strategies for Complex Problem Solving*. 5th Edition, The Benjamin/Cummings Publishing Company, Inc. <http://www.cs.unm.edu/~luger/ai-final/tocfull.htm>



10th International CEO Communication, Economics, Organization & Social Sciences Congress

- Habertürk. (2023). AFAD 6 ili daha afet bölgesi olarak açıkladı! İşte Afet bölgesi ilan edilen iller. <https://www.haberturk.com/afet-bolgesi-ilan-edilen-iller-2023-hangi-iller-afet-bolgesi-ilanedildi-deprem-bolgesi-olan-iller-hangileri-3579727/3> (Retrieved on September 15, 2024).
- Magiera, K., Pittou, D., Papasalouros, A., Kotis, K., Zangogianni, P., & Daradoumis, A. (2022). Educational AI chatbots for content and language integrated learning. *Applied Sciences*, 12(7), 3239. <https://doi.org/10.3390/app12073239>
- McCarthy, J. (2007, November 12). *What is artificial intelligence?* Retrieved at <http://jmc.stanford.edu/articles/whatisai/whatisai.pdf>
- Mikalef, P., & Gupta, M. (2021). Artificial intelligence capability: Conceptualization, measurement calibration, and empirical study on its impact on organizational creativity and firm performance. *Information & Management*, 58(3), 103434.
- Mukhallafi, T. (2020). Using artificial intelligence for developing English language teaching/learning: an analytical study from university students' perspective. *International Journal of English Linguistics*, 10(6), 40-53
- Nabiyev, V. (2021). Yapay Zeka Derin Öğrenme - Stratejili Oyunlar Örüntü Tanıma - Doğal Dil İşleme, Seçkin Yayıncılık, p.816, Ankara.
- Popenici S., & Kerr, S. (2017) Exploring the Impact of Artificial Intelligence on Teaching and Learning in Higher Education, *Research and Practice in Technology Enhanced Learning*, 12, 1-13
- Roll, I., & Wylie, R. (2016). Evolution and revolution in artificial intelligence in education. *International Journal of Artificial Intelligence in Education*, 26(2), 582–599. <https://doi.org/10.1007/40593-016-0110-3>
- Shawar, B. A., & Atwell, E. (2007). Chatbots: Are they really useful? *Journal for Language Technology and Computational Linguistics*, 22 (1). 29-49.
- Zileli, E. N. (2023). Yabancı dil olarak Türkçe öğreniminde ChatGPT örneği. *Uluslararası Karamanoğlu Mehmetbey Eğitim Araştırmaları Dergisi*, 5(1), 42-51.



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**Exploring Digital Trends in Maritime Education: A Bibliometric
Perspective**

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ABSTRACT

The rapid development of digital technologies has brought about significant changes in the maritime sector, both in operational practices and in education. In this context, the integration of digital technology-based course content into the curricula of maritime faculties has become crucial. However, a systematic conceptual framework to guide curriculum design in this area remains a significant gap in the literature. This study aims to provide a conceptual basis for the design of maritime faculty curricula that are adapted to digital technologies in the maritime sector. To achieve this, a bibliometric analysis was conducted on studies retrieved from the Web of Science (WoS) and Scopus databases. A total of 200 studies were considered following the database search. The R Studio and the Bibliometrix package were employed for data analysis, generating and evaluating visual outputs such as word clouds, country collaboration maps, co-occurrence networks, and factorial maps. The results revealed trends in the literature on digital technologies in the maritime sector between 2003 and 2025. While fundamental concepts such as “software” and “digitalisation” dominated the period 2003-2007, the terms “e-learning”, “cybersecurity”, “artificial intelligence”, “marine vehicles”, “internet of things”, “virtual reality”, “machine learning” and “digital twin” have emerged as prominent trends for 2022-2025. The conceptual framework proposed in this study offers valuable insights not only for the digitalisation strategies of educational institutions but also for professional practices within the maritime sector.

Keywords: Maritime Education, Digital Technologies, Bibliometric Analysis, Digitalization in Maritime Sector, Educational Innovation.

1. Introduction

Maritime 4.0 has ushered in the digitalization era in maritime operations, enabling the use of new technologies that could potentially allow ships to be operated fully autonomously (Stefani & Apicella, 2022; Shahbakhsh et al., 2022). This development is also evident in one of the sector's key components: port operations (Senarak, 2021). In particular, smart port technologies facilitate more effective planning, information sharing, and management of port operations. The use of these technologies enables not only individual port operations but also the improvement of process planning and management across sector stakeholders (Heilig et al., 2017; Heilig & Voß, 2017; Baldauf et al., 2018; Melnyk et al., 2024). These technologies play a critical role in optimizing operational processes and enhancing coordination between port operators, logistics service providers, and customs authorities (González-Cancelas et al., 2024). Moreover, the establishment of effective public-private sector collaboration mechanisms and the development of regulatory frameworks to ensure data security significantly increase the competitiveness of port operations (Ren et al., 2024; Toygar, 2024).

Port operators are experiencing a significant digital transformation, which has led to the need to understand the impact of digital technologies on maritime education and training. This transformation not only increases the operational efficiency of port businesses but also requires rapid adaptation to the ever-changing dynamics of the maritime industry. At this point, there is a need to develop learning designs and guiding principles to effectively integrate digital technologies into the maritime curriculum (Allan et al., 2013). Given these considerations, it becomes necessary to introduce students to the digital technologies used in port operations and prepare them for the maritime sector by adding such courses to the maritime business management curriculum. In many countries worldwide, initiatives are being made to ensure that sectoral developments are theoretically followed within university curricula. For example, blended learning techniques such as augmented reality (AR) and virtual reality (VR) are integrated into course content to provide practical training and increase student engagement (Mallam et al., 2019; Pipchenko & Kovtunenkov, 2020; Kumar & Rajini, 2024). These learning techniques contribute to the development of educational standards by providing students with opportunities to experience and transform professional work processes into valuable learning experiences (Voloshynov et al., 2021; Bačnar et al., 2024). Analyzing the outcomes of example applications, it is clear that curricula including digital technologies reshape educational standards and align training with the needs of the maritime industry.

In this context, the curriculum of the Maritime Business Administration department holds strategic importance in terms of adopting and applying digital technologies used in port operations. As of 2024, there are fifteen universities in Türkiye offering a Maritime Business Administration department, which admits students through a total of nineteen different programs across public, private, and Northern Cyprus universities. According to the 2024 Higher Education Institutions Exam (YKS) results, a total of 755 students have been placed in these programs. The examination of the 2023-2024 academic year Higher Education Statistics, via the Higher Education Council (YÖK) Program Atlas, provides data on registered student numbers for fifteen of these nineteen programs. Accordingly, the total number of students enrolled in these departments is 2836. To evaluate the curricula of Maritime Business Administration departments, universities were ranked from highest to lowest based on their entry scores, and the mandatory courses of the top five universities were analyzed. This analysis revealed a total of 215 compulsory courses, of which only four were related to digital technologies. These courses are Introduction to Information Technologies, Computer Applications, Artificial Intelligence, and Information Technology Usage. The low number of

10th International CEO Communication, Economics, Organization & Social Sciences Congress courses related to digital technologies in the curricula of these universities clearly indicates the need for such a study.

This study aims to analyze the status of Maritime Business Administration departments in Turkish universities in the context of digitalization and provide a foundational conceptual framework for developing a curriculum aligned with sectoral needs. The study includes a bibliometric analysis, and the results of the analysis reveal trends and gaps in the literature regarding digitalization in maritime education. The results of the study offer concrete suggestions for supporting the digital transformation process in the curricula of Maritime Business Administration departments in Turkish universities and contribute to the development of innovative educational approaches tailored to sectoral requirements.

2. Method

2.1. Definition of the Concept

The digitization in maritime transportation has been addressed in several studies (Kim et al., 2019; Ichimura et al., 2022; Del Giudice et al., 2022; Raza et al., 2023). While the impact of digitalization on education has been evaluated in various technological contexts, this transformation has not been reflected to the same extent in maritime education. In this study, the effects of digitalization on maritime education have been assessed using R Studio software and the Bibliometrix library. The results of the study were obtained by creating eight different visuals and one table. The research procedure shown in Figure 1 was designed based on the method followed in the study by Razmjooei et al. (2023). The scope of the research is limited to studies published in the Web of Science (WoS) and Scopus databases. The keywords used in the search were “Ship* AND Maritime AND Education AND Digital*.” As a result of the searches conducted on November 21, 2024, 161 studies were found in the WoS database and seventy-two studies in the Scopus database (Figure 1). After combining the records and removing duplicates, a total of two hundred studies were included in the analysis. As a result of the analysis, various visualizations such as “word cloud,” “country collaboration map”, “co-occurrence network”, “trend topics”, and “factorial map” were created and evaluated.

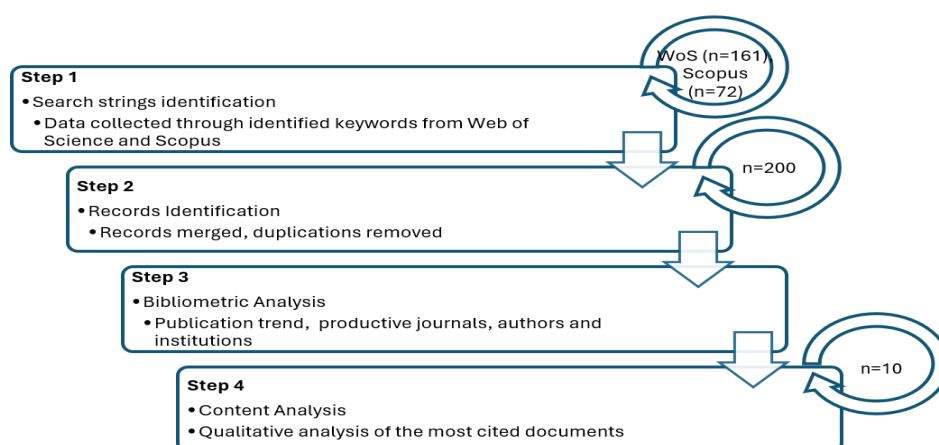


Figure 1. Basic procedure of the research

The bibliometric analysis evaluated the publication trends related to maritime education and digitalization in terms of year, journal, publishing country, institutions, authors, and the

10th International CEO Communication, Economics, Organization & Social Sciences Congress contributions of countries. According to the descriptive statistics of the obtained data, a total of two hundred documents were examined between 2002 and 2025. Of these documents, 120 are peer-reviewed journal articles, twenty-six are conference papers, and the remaining are book chapters, letters, reports, and reviews. The average citation count of the examined documents is 4.885, and their average age is calculated as 4.09 years. This data indicate that the related studies are generally still in the early stages.

3. Results

The aim of this study is to contribute to the development of Maritime Business Administration department curricula aligned with the digital technology applications used in the maritime sector. To this end, bibliometric research was conducted. In Figure 2, “annual scientific production” and “annual citation” data are presented based on the annual average citation per article. The digitalization studies in maritime education show an increase in academic production and interest in this field over time. While the publication volume has shown a continuous upward trend, 2022 stands out as the year with the most significant rise. Changes in citation counts over the years have also been observed; the annual average citation per article was calculated as 2.19 in 2023, 1.23 in 2022, 1.44 in 2021, and 0.57 in 2002. The recent increase in annual citation counts indicates that the topics of maritime education and digitalization are receiving growing academic attention.

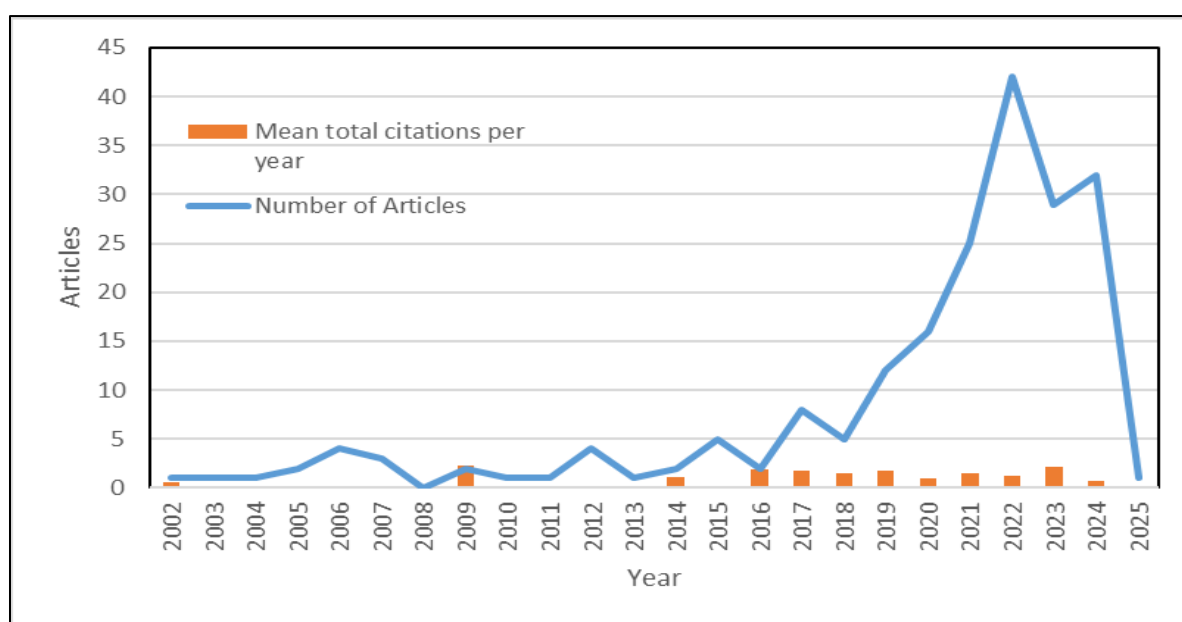


Figure 2. Annual Scientific Production and Annual Citation

In this study, two hundred papers written by a total of 3,854 authors from various publications were analyzed. The results evaluated the contributions of the most influential authors worldwide in terms of percentage. The ranking by publication count is presented in Figure 3; in this ranking, Cherni S holds the first position with 9.5%, Zhilenkov A is in second place with 5%, and Zinchenco E is in third place with 4.5%. These results highlight the impact of prominent authors and studies in the field of maritime education and digitalization.

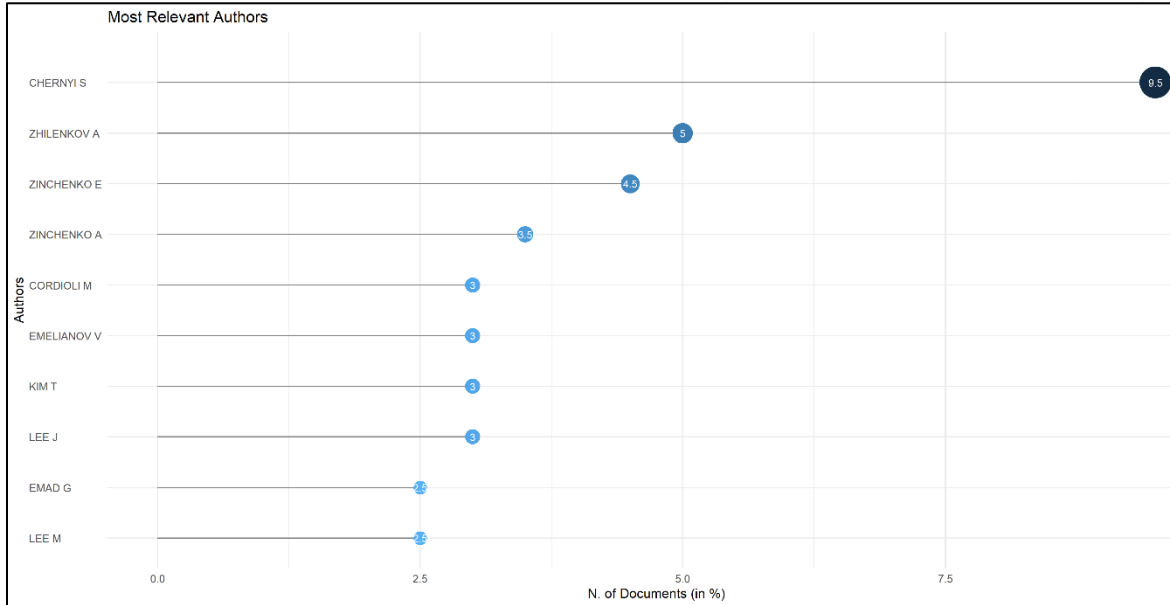


Figure 3. Most Relevant Authors

The publication outputs of the institutions to which the authors contributing to research on digitalization in maritime education are affiliated are presented in Figure 4.

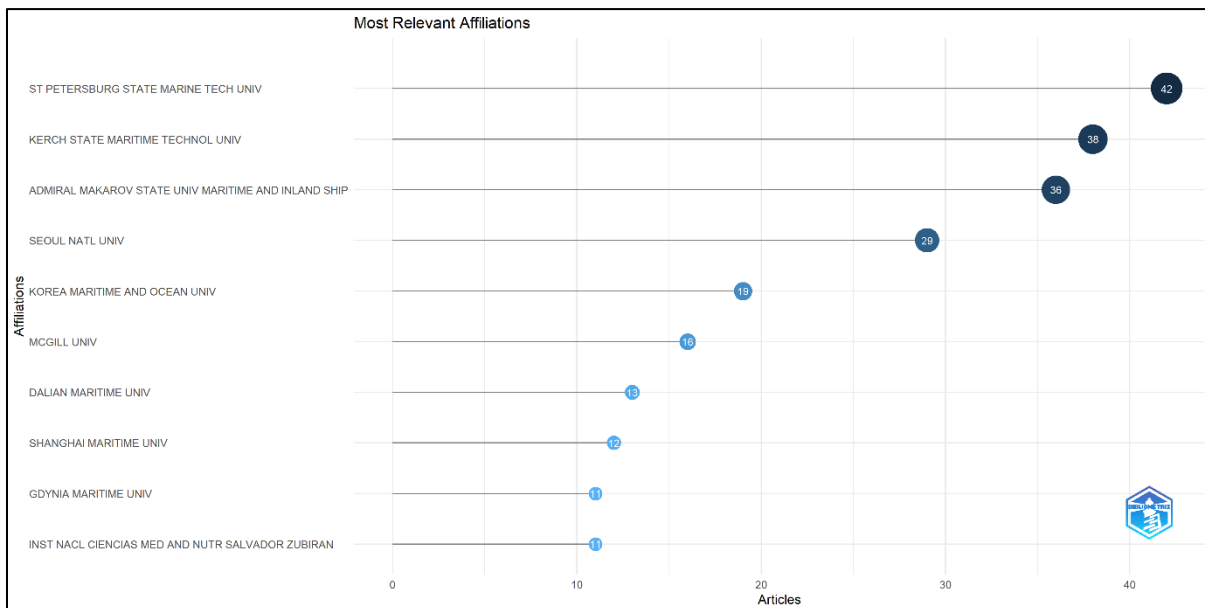


Figure 4. Most Relevant Affiliations

Between 2002 and 2025, the “St. Petersburg State Marine Technical University” ranked first in terms of the number of publications in the field of digitalization in maritime education, with 42 publications. It is followed by the “Kerch State Maritime Technological University” with 38 publications and the “Admiral Makarov State University of Maritime and Inland Shipping” with 36 publications. The country with the highest average citation counts per article are shown in Figure 5. The top three countries are Sweden (24.4%), Norway (16.5%), and Germany (14.7%). The high impact and visibility of these countries can be associated with the quality of

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 the research conducted. On the other hand, while the most influential authors and institutions come from Russia, the countries with the most citations are concentrated in Europe, indicating that the research outputs may have a broader impact on the European continent.

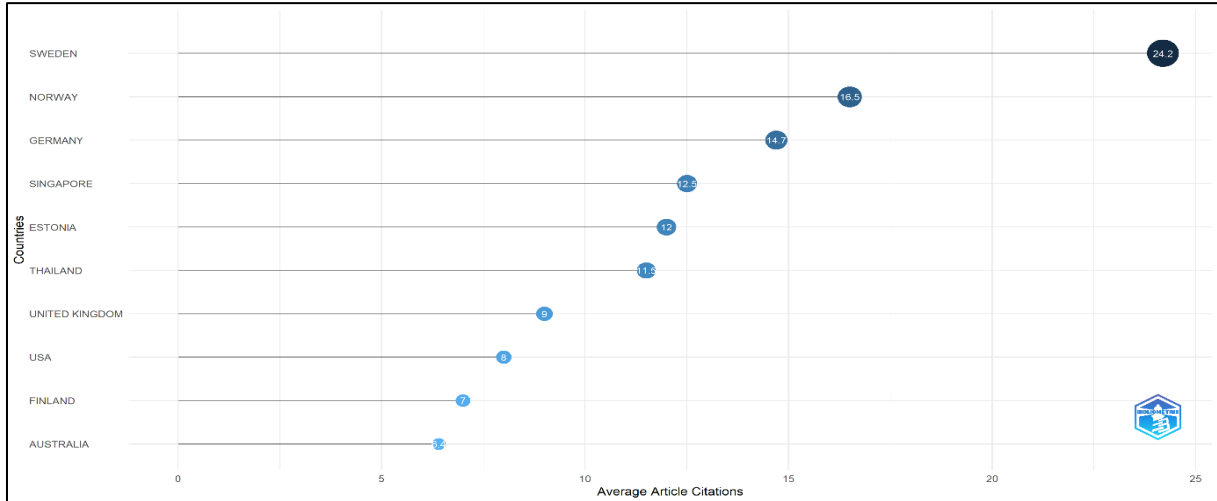


Figure 5. Most cited countries and collaborations

As shown in Figure 6, China and the United States stand out as the countries with the widest collaboration networks. They are followed by Greece and Japan, Portugal and Malaysia, and the United States and Italy. China’s collaboration network, shown in dark blue, has a particularly strong structure.

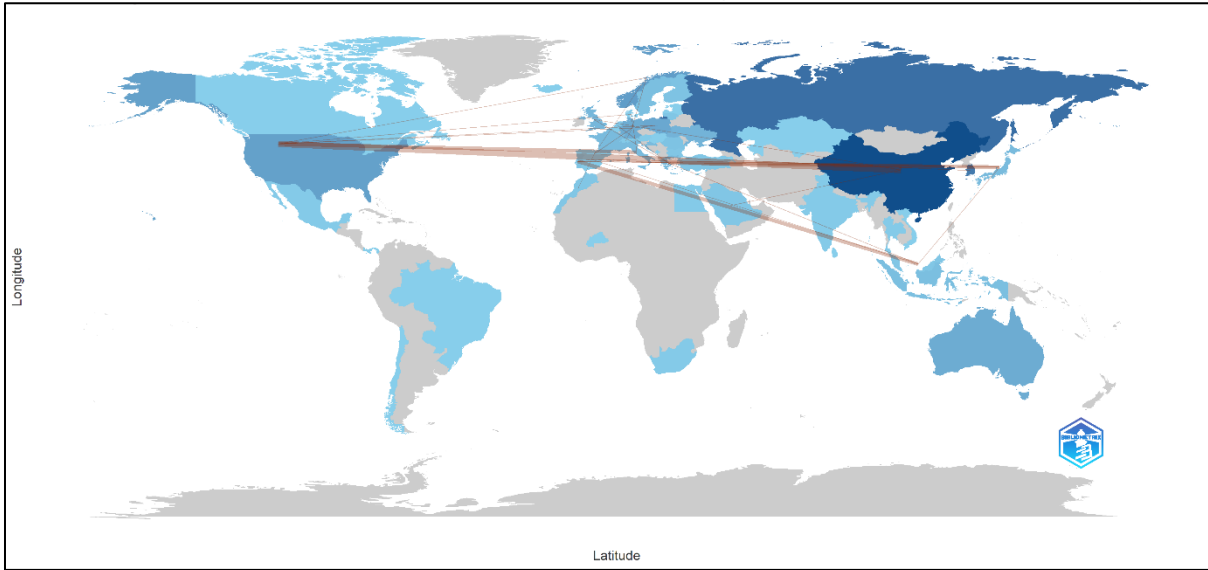


Figure 6. Country Collaboration Map

A total of 149 different sources published the documents analyzed in this research. The top three sources by publication count are “Journal of Marine Science and Engineering” (n=12), “Ocean Engineering” (n=4), and “Computer Applications in Engineering Education” (n=3) (Figure 7). The evaluations based on Bradford’s Law, which prioritizes the most productive and relevant sources (Alvarado, 2016), are consistent with this ranking.

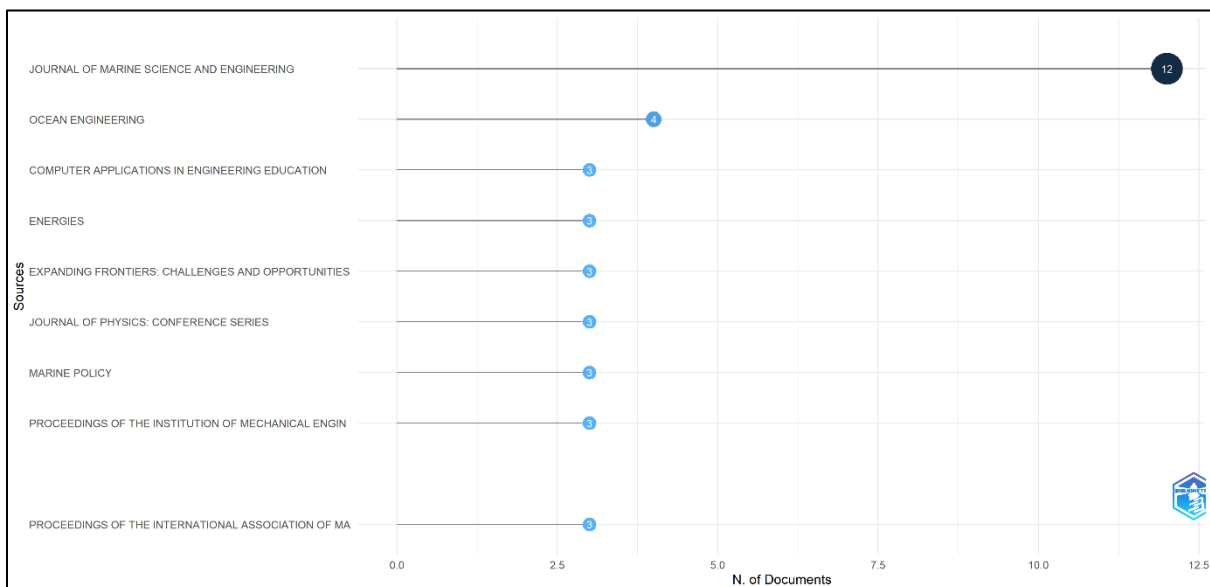


Figure 7. Most Relevant Sources

Keywords have been used to visualize the frequency of terms, with larger font sizes representing higher frequencies (Aldousari & Kithinji, 2024). Author keywords provide information on past research trends and focal points, while also allowing for the identification of potential directions for future research areas (Adeoye et al., 2023). Research trends and future topics related to maritime education are presented in Figure 8. The “Wordcloud” visualization highlights key terms such as “digital twin,” “machine learning,” “software,” “virtual reality,” “autonomous ship,” and “cyber security.”

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 digitalization stand out as a cluster that also requires the reflection of this transformation in educational processes.

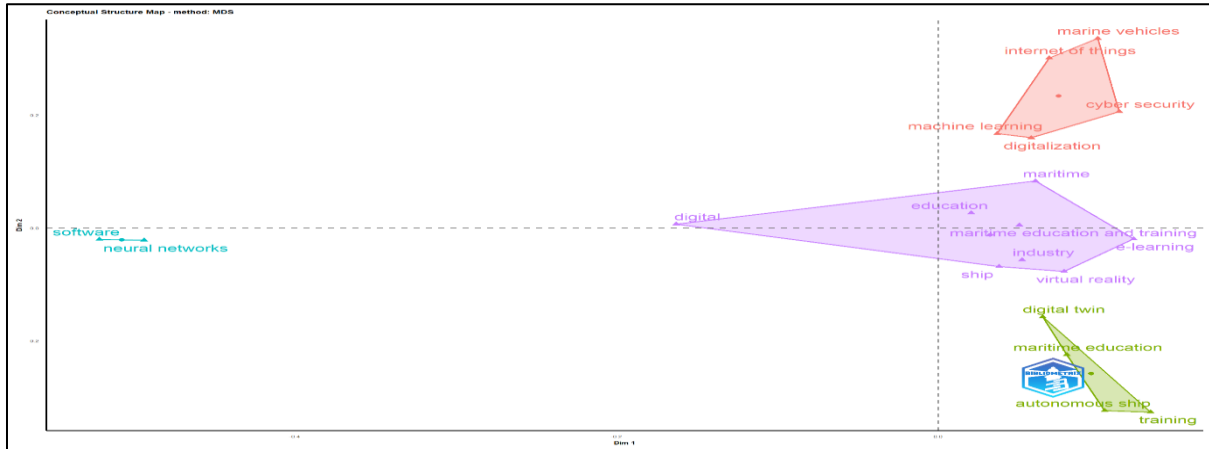


Figure 10. Conceptual structure map of the studies in digitalization of maritime education

Trends in the impact of digital technologies on maritime education between 2003 and 2025 were analyzed through keywords, and the results are presented in Table 1.

Table 1. Trends by years

Year	Authors' Keyword	Year	Authors' Keyword
2003-2007	Software Digital and Digitalization	2008-2012	E-Learning Digital and Digitalization
2013-2022	Software E-Learning Cyber-security Neural Networks Internet of Things Autonomous Ship Virtual Reality Machine Learning Digital Twin	2022-2025	E-Learning Cyber-security Artificial Intelligence Marine Vehicles Internet of Things Virtual Reality Machine Learning Digital Twin

The results reveal changes in emphasis within literature over different periods. Between 2003 and 2007, key concepts such as digitalization and software were dominant. During this period, digital technologies were defined, with limited practical examples. From 2008 to 2012, e-learning and digitalization became the focal points. This period saw an increasing interest in the adaptation of digitalization to educational environments. In particular, studies on the theoretical foundations and applicability of e-learning techniques became widespread. From 2013 to 2022, the focus shifted to more diverse and advanced technologies compared to previous periods. Prominent keywords included cybersecurity, Internet of Things, autonomous ships, machine learning, virtual reality, and digital twin. During this period, the integration of digitalization trends in the maritime sector into educational curricula and the development of innovative teaching approaches gained attention. Between 2022 and 2025, the importance of advanced technologies such as e-learning, artificial intelligence, virtual reality, digital twin, and machine learning noticeably increased. This period is considered a transformative phase where

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digital technologies are influencing not only educational processes but also sectoral applications.

4. Conclusion

This study identifies trends and researches the impact of digital technologies on maritime education between 2003 and 2025. The results of the study show that the reflection of digitalization in maritime education is still at an early stage. Trend analysis reveals that between 2003-2007, the fundamental concepts of digitalization and software applications were dominant, while between 2008-2012, there was a growing interest in e-learning and digitalization, leading to a focus on the adaptation of education processes. From 2013 to 2022, the focus shifted to more advanced technologies such as cybersecurity, the Internet of Things, machine learning, and autonomous ships, while between 2022 and 2025, the emphasis shifted to artificial intelligence, digital twins, and virtual reality applications.

In the analyzed studies, Sweden, Norway, and Germany emerged as the countries with the highest impact based on average citation counts, indicating that research from Europe holds a strong position in terms of quality and visibility. Additionally, Russian-based universities, particularly St. Petersburg State Marine Technical University, Kerch State Maritime Technological University, and Admiral Makarov State University of Maritime and Inland Shipping, have shown significant productivity in this field. In terms of international collaborations, China and the US have the largest networks, while more specific collaborations are observed between countries such as Greece-Japan, Portugal-Malaysia, and the US-Italy. Among the related authors, Cherni S. is observed to be the leading author based on the number of publications.

The results of this study highlight that the integration of digitalization into maritime education curricula is still limited and poses a significant barrier to adapting to the rapidly changing dynamics of the sector. Furthermore, this study shows that the number of courses related to digital technologies in the maritime business management programs of Turkish universities is insufficient to align with sectoral needs.

While this study provides a comprehensive analysis of the role of digital technologies in maritime business management, there are some limitations. Firstly, the analysis is limited to publications from only two databases. The exclusion of studies from other academic databases may have restricted the scope to some extent. Secondly, the search terms and methodological approach used may have narrowed the research scope. Thirdly, while the bibliometric analysis focused on identifying trends in the literature, the study's results do not evaluate the impact of these trends on curriculum development processes.

Some suggestions have been provided to overcome these limitations. For future studies, it is recommended to increase the diversity of databases and to conduct a detailed investigation of the impact of digital technologies on maritime education using quantitative or qualitative methods. Additionally, it is crucial to update the curricula of maritime business administration departments in Turkish universities to include digital technologies. The systematic integration of digital technologies into curricula will not only raise academic standards but also directly contribute to sectoral applications. University deans overseeing the departments will play a critical role in supporting the adaptation of both students and faculty members during the transition to new curricula that include digital technology courses. Furthermore, it is deemed essential to collaborate with sector stakeholders, such as port operators who effectively use digital technologies, and to form partnerships with international universities that have

10th International CEO Communication, Economics, Organization & Social Sciences Congress integrated these technologies into their curricula to align education with sectoral needs and technological advancements.

References

- Adeoye, R. I., Okaiyeto, K., & Oguntibeju, O. O. (2023). Global mapping of research outputs on nanoparticles with peroxidase mimetic activity from 2010–2019. *Inorganic and Nano-Metal Chemistry*, 53(2), 199–211. <https://doi.org/10.1080/24701556.2021.2020841>
- Aldousari, E., & Kithinji, D. (2024). Artificial intelligence and health information: A bibliometric analysis of three decades of research. *Health Informatics Journal*, 30(3), 14604582241283969. <https://doi.org/10.1177/14604582241283969>
- Allan, C., Symes, M., & Downing, J. (2013). Identifying e-learning principles for Maritime Education through the e-initiatives project: A design-based approach. In *ASCILITE-Australian Society for Computers in Learning in Tertiary Education Annual Conference* (pp. 18–22). Australasian Society for Computers in Learning in Tertiary Education. from <https://www.learntechlib.org/p/162004/>
- Alvarado, R. U. (2016). Growth of literature on Bradford's law. *Investigación Bibliotecológica: Archivonomía, Bibliotecología e Información*, 30(68), 51–72. <https://doi.org/10.1016/j.ibbai.2016.06.003>
- Bačnar, D., Barić, D., & Ogrizović, D. (2024). Exploring the Perceived Ease of Use of an Immersive VR Engine Room Simulator among Maritime Students: A Segmentation Approach. *Applied Sciences*, 14(18), 8208. <https://doi.org/10.3390/app14188208>
- Baldauf, M., Kitada, M., Mehdi, R., & Dalaklis, D. (2018). E-Navigation, digitalization and unmanned ships: challenges for future maritime education and training. In *INTED2018 Proceedings* (pp. 9525–9530). IATED. <https://doi.org/10.21125/inted.2018.2374>
- Del Giudice, M., Di Vaio, A., Hassan, R., & Palladino, R. (2022). Digitalization and new technologies for sustainable business models at the ship–port interface: A bibliometric analysis. *Maritime Policy & Management*, 49(3), 410–446. <https://doi.org/10.1080/03088839.2021.1903600>
- González-Cancelas, N., Camarero Orive, A., Vilarchao, A. R., & Vaca-Cabrero, J. (2024). Use of End-to-End Tool for the Analysis of the Digital Governance of Ports. *Logistics*, 8(2), 58. <https://doi.org/10.3390/logistics8020058>
- Heilig, L., & Voß, S. (2017). Port-centric information management in smart ports: A framework and categorisation. In *Ports and Networks* (pp. 236–250). Routledge.
- Heilig, L., Lalla-Ruiz, E., & Voß, S. (2017). Digital transformation in maritime ports: analysis and a game theoretic framework. *Netnomics: Economic research and electronic networking*, 18(2), 227–254. <https://doi.org/10.1007/s11066-017-9122-x>
- Ichimura, Y., Dalaklis, D., Kitada, M., & Christodoulou, A. (2022). Shipping in the era of digitalization: Mapping the future strategic plans of major maritime commercial actors. *Digital Business*, 2(1), 100022. <https://doi.org/10.1016/j.digbus.2022.100022>
- Kim, T. E., Sharma, A., Gausdal, A. H., & Chae, C. J. (2019). Impact of automation technology on gender parity in maritime industry. *WMU Journal of Maritime Affairs*, 18(4), 579–593. <https://doi.org/10.1007/s13437-019-00176-w>
- Kumar, N., & Rajini, G. (2024). Reimagining maritime education and training using latest technologies. *Salud, Ciencia y Tecnología-Serie de Conferencias*, 3, 895. <https://doi.org/10.56294/sctconf2024895>
- Mallam, S. C., Nazir, S., & Renganayagalu, S. K. (2019). Rethinking maritime education, training, and operations in the digital era: Applications for emerging immersive technologies. *Journal of Marine Science and Engineering*, 7(12), 428. <https://doi.org/10.3390/jmse7120428>
- Melnyk, O., Onyshchenko, S., Rudenko, S., Pavlova, N., & Muradian, A. (2024). Embracing Integrated Optimization Strategies for Cost-Effective Port Operations in Marine Logistics. In *Systems, Decision and Control in Energy VI: Volume I: Energy Informatics and Transport* (pp. 491–508). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-68372-5_27
- Pipchenko, O. D., & Kovtunencko, D. (2020). A suggestion of an application of blended learning in MET through a harmonized STCW model. *TransNav: International Journal on Marine Navigation and Safety of Sea Transportation*, 14. <https://doi.org/10.12716/1001.14.03.04>
- Raza, Z., Woxenius, J., Vural, C. A., & Lind, M. (2023). Digital transformation of maritime logistics: Exploring trends in the liner shipping segment. *Computers in Industry*, 145, 103811. <https://doi.org/10.1016/j.compind.2022.103811>
- Razmjooei, D., Alimohammadlou, M., Ranaei Kordshouli, H. A., & Askarifar, K. (2023). Industry 4.0 research in the maritime industry: a bibliometric analysis. *WMU Journal of Maritime Affairs*, 22(3), 385–416. <https://doi.org/10.1007/s13437-022-00298-8>



10th International CEO Communication, Economics, Organization & Social Sciences Congress

- Ren, X., Shen, J., Feng, Z., Wang, X., & An, K. (2024). The Impact of Digital Development on Port Security Resilience—An Empirical Study from Chinese Provinces. *Sustainability*, *16*(6), 2385. <https://doi.org/10.3390/su16062385>
- Senarak, C. (2021). Port cybersecurity and threat: A structural model for prevention and policy development. *The Asian Journal of Shipping and Logistics*, *37*(1), 20-36. <https://doi.org/10.1016/j.ajsl.2020.05.001>
- Shahbakhsh, M., Emad, G. R., & Cahoon, S. (2022). Industrial revolutions and transition of the maritime industry: The case of Seafarer's role in autonomous shipping. *The asian journal of shipping and logistics*, *38*(1), 10-18. <https://doi.org/10.1016/j.ajsl.2021.11.004>
- Stefani, A., & Apicella, L. (2022). A new educational model for Marine 4.0 technologies. In *Conference Proceedings of iSCSS* (Vol. 2022). <https://doi.org/10.24868/10724>
- Toygar, A. (2024). Sustainability in the Maritime Industry: Integration of Digital Twin and Autonomous Control. In *Strategic Innovations for Dynamic Supply Chains* (pp. 31-49). IGI Global. <https://doi.org/10.4018/979-8-3693-3575-8.ch002>
- Voloshynov, S. A., Zhuravlev, F. M., Riabukha, I. M., Smolets, V. V., & Popova, H. V. (2021). Application of VR technologies in building future maritime specialists' professional competences. *CEUR Workshop Proceedings*. <https://doi.org/10.31812/123456789/4623>



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**Mevduat Bankalarının Paytech (Dijital Ödeme Teknolojileri) Performansı:
Türkiye Örneği**

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ÖZET

Finansal Teknoloji (FinTech) sektörünün alt dalı olarak gelişme gösteren PayTech (Payment Technology), dijital ödeme teknolojileri olarak ifade edilmektedir. PayTech, geleneksel finansal işlemlerde kolaylık, hız, güvenlik, küresel düzeyde erişim ve verimlilik sağlayan teknolojileri kapsamaktadır. PayTech ile bireylerin, kurumların dijital ortamda para gönderme, alma ve yönetme süreçlerini daha verimli bir şekilde gerçekleştirmek mümkün olmaktadır. Bu çalışma Türkiye’de 2024 yılı itibariyle faaliyet gösteren mevduat bankalarının PayTech performanslarını tespit etmeyi ve performansları karşılaştırmayı amaçlamaktadır. Bu amaçla araştırmada bankaların mobil ödeme, mobil cüzdan, dijital cüzdan, temassız ödeme, sanal pos, bulut pos, QR kod, dijital müşteri sayısı, dijital işlem oranı, açık bankacılık faaliyetleri PayTech göstergeleri olarak belirlenmiş ve bankaların kurumsal raporları ve web sitelerinden İçerik Analizi yöntemi ile veri seti elde edilmiştir. Nitel ve nicel veriler üzerinde sayısallaştırılma yapılarak bankalara ilişkin performans puanları oluşturulmuştur. Araştırma sonucunda bankaların PayTech performanslarının birbirinden farklılaştığı tespit edilmiştir.

Anahtar Kelimeler: PayTech, Dijitalleşme, Mevduat Bankaları, Türkiye

Performance of Deposit Banks in Paytech (Digital Payment Technologies): The Case of Turkey

ABSTRACT

PayTech (Payment Technology), a subfield of the Financial Technology (FinTech) sector, refers to digital payment technologies. PayTech encompasses technologies that provide convenience, speed, security, global accessibility, and efficiency in traditional financial transactions. Through PayTech, individuals and organizations can perform money transfer, receipt, and management processes more efficiently in digital environments. This study aims to identify and compare the PayTech performance of deposit banks operating in Turkey as of 2024. For this purpose, mobile payment, mobile wallets, digital wallets, contactless payment, virtual POS, cloud POS, QR codes, the number of digital customers, digital transaction ratios, and open banking activities have been determined as PayTech indicators. A data set was compiled using the Content Analysis method based on banks' corporate reports and websites. Performance scores for the banks were calculated by quantifying qualitative and quantitative data. The findings reveal that the PayTech performances of the banks differ significantly from one another.

Keywords: PayTech, Digitalization, Deposit Banks, Turkey.

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Teknolojik deęişim ve dönüşümler finansal hizmetlerin geleneksel süreçlerini radikal bir şekilde etkilemektedir. Bankacılık, sigortacılık, yatırım danışmanlığı alanları bu deęişim ve dönüşümler ile yeni çözümler, ürünler ve hizmetler sunmakta ve daha dinamik bir yapıya kavuşmaktadır.

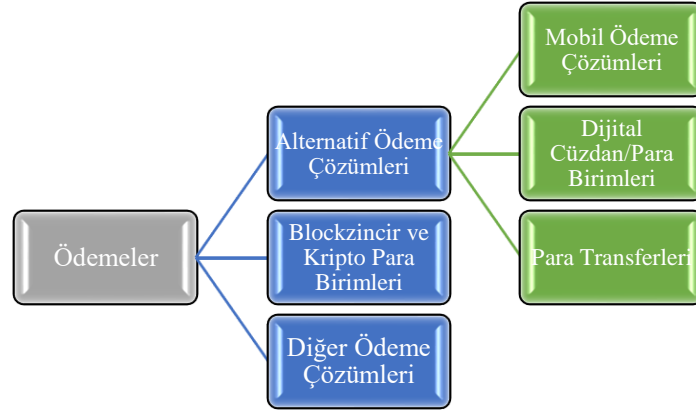
Bankacılık sektörü günümüzde rekabetin en hızlı deęişim gösterdiği alanlardan biri olarak dikkat çekmektedir. Sektörde yer alan kuruluşlar hem birbirleriyle hem de sektöre giren finansal teknoloji şirketlerle (FinTech-Fintek) yoğun bir rekabet ortamında faaliyet göstermektedir. Fintek; finansal hizmetleri yenilikçi, tamamlayıcı ve hızlandırıcı iş modelleri ile sayısal teknolojiler kullanarak sunan kuruluş veya üründür (www.cbfo.gov.tr). Fintek firmaları geldikleri aşamada geniş yelpazede finansal hizmetler sunmaktadır ve her geçen gün de daha geniş bir yelpazede ürün /hizmetler sunma potansiyelini taşımaktadır. Fintek'lerin başlıca; ödeme sistemleri, kişisel finans ve varlık yönetimi, yatırım, sigortacılık, kitle fonlaması, büyük veri ve blokzincir ve kripto para alanlarında çözümler sunduklarını söylemek mümkündür (Canbaz ve Erbaş, 2021). Ödemeler alanını ifade eden PayTech ise Fintek çözümleri arasında %60 gibi bir oranla en büyük paya sahip olan Fintek alanı olarak karşımıza çıkmaktadır (Imerman ve Fabozzi, 2020; Gupta vd,2024).

PayTech (dijital ödeme teknolojileri), teknoloji içeren tüm ödemeleri ifade etmektedir. Dijitalleşmenin finansal hizmet alanlarında yaygınlaşması, PayTech gibi yeni nesil ödeme çözümlerinin perakende (bireysel) ve kurumsal bankacılık işlemlerinde de yoğun bir şekilde kullanımının önünü açmıştır. Dijital ve mobil cüzdanlar, para transferleri gibi yeni nesil ödeme yöntemlerine yönelen bankalar ve Fintek firmaları arasında da işbirlikleri kurulmakta ve müşteriler için birçok farklı kanaldan hizmet alma imkanı sağlamaktadır. Dijitalleşmenin etkisiyle bankalar hem kendi aralarında hem de sektöre yeni giren hızlı, çevik çözümler üreten Fintek firmaları ile rekabet etmektedir. Bu durum bankaların finansal ve operasyonel performanslarının yanında dijital uyum performanslarının da tespitini önemli hale getirmektedir. Zira deęişen müşteri beklentileri, artan rekabet de bankaları teknolojik yatırımlara ve çözümlere zorlanmaktadır. Marka bağlılığını korumak, esnek kalabilmek, faaliyetlerini geliştirmek isteyen bankalar da her geçen gün yeni inovasyonları çalışma alanlarına dahil etmektedir.

Bu çalışmada da bahsedilen gerekliliklerle Türkiye'de 2024 yılı itibariyle faaliyet gösteren mevduat bankalarının PayTech performanslarını tespit etmeyi ve performansları karşılaştırmayı amaçlamaktadır. Bu amaçla araştırmada bankaların dijital müşteri sayısı, dijital işlem oranı, aktif dijital kullanıcı oranı, mobil ödeme, mobil cüzdan, dijital cüzdan, temassız ödeme, sanal pos, bulut pos, QR kod ve açık bankacılık PayTech kategorileri olarak belirlenmiş ve bankaların kurumsal raporları ve web sitelerinden İçerik Analizi yöntemi ile veri seti elde edilmiştir. Nitel ve nicel veriler üzerinde sayısallaştırılma yapılarak bankalara ilişkin performans puanları oluşturulmuştur. Araştırmada ilk olarak PayTech kavramı üzerinde durulmuş ve konuya ilişkin literatür incelemesine yer verilmiştir. Sonrasında ise araştırmanın metodolojisi, bulgular ve sonuç bölümü sunulmuştur.

Finans ve teknolojinin (finansal teknoloji) harmanlanmasını tanımlayan bir terim olan Fintek, dijitalleşme olgusunun bir sonucu olarak ortaya çıkmıştır. Fintek ödeme yöntemleri, kripto paralar, bireysel finans, alternatif finansman, varlık yönetimi, neo-bankalar, insurtech gibi çok çeşitli alanları kapsamaktadır. Yaygın kabul edilen bir sınıflandırmanın bulunmadığı fitek çözümlerine bankacılık çerçevesinden bakıldığında, para transferi, borçlanma, ödeme sistemleri, veri yönetimi, müşteri hizmetleri, süreç yönetimi, risk yönetimi, siber güvenlik, varlık yönetimi, gibi hizmetler üzerinde yoğunlaştığı görülmektedir. Bu hizmetlere ilişkin kullanılan teknoloji trendleri ise, yapay zekâ, makine öğrenmesi, derin öğrenme, büyük veri, veri madenciliği, nesnelerin interneti ve blokzincir şeklindedir (Candemir, 2020).

Dijital ödeme; dijital bir cihaz ve bir kanal iletişimi kullanarak bir ödeme hesabından diğerine değer transferidir PayTech, teknoloji içeren tüm ödemeleri ifade eder. Bu, genel olarak finans yerine işlemlere ve ödemelere odaklanan, hızla büyüyen bir Fintek sektörüdür (Panetta, 2023).



Şekil 1: Ödemeler Alanı Fintek Çözümleri
Kaynak: Dorfleitner vd., 2017.

Şekil 1’de belirtilen ödemeler alanında alternatif ödeme çözümleri, blokzincir ve kripto para birimleri ve bunlar dışında kalan diğer ödeme çözümleri yer almaktadır.

Nakit, çek, kredi kartı, banka kartı gibi geleneksel ödeme yöntemleri dışında kalan ödeme araçları alternatif ödeme çözümleri olarak ifade edilmektedir. Bu yöntemler; şimdi al sonra öde (Buy Now Pay Later-BNPL), mobil ödeme çözümleri, dijital cüzdan, hesaptan hesaba (Account to Account A2A), ön ödeme, sonradan ödeme ve pos finansmanı şeklindedir (Dorfleitner vd, 2017; Worldpay, 2024:155). Blokzincir teknoloji üzerinden hizmet sunan ve kripto gibi sanal para birimlerinin işlemlerine ilişkin çözümler de ödemeler alanına ilişkindir. Ödemeler alanına ilişkin akıllı saat, akıllı bileklik gibi taşınabilir/giyilebilir ödeme çözümleri de diğer ödeme çözümleri olarak ifade edilmektedir (Dorfleitner vd, 2017; Gümüş vd, 2020).

❖ Alternatif ödeme çözümlerinin alt kırımlarından ilki mobil ödeme çözümleridir. Mobil ödeme çözümleri; mobil iletişim araçları ile mal, hizmet, fatura, fon ödemelerinin gerçekleşmesini sağlayan teknolojilerdir (Dahlberg vd, 2006). Bu çözümleri yakından mobil ödeme ve uzaktan mobil ödeme olarak iki grupta incelenebilir. Yakından mobil ödeme çözümleri; mobil cüzdan, QR, RFID, NFC ve Bluetooth çözümlerinden oluşurken, uzaktan mobil ödemeler WAP, çevrimiçi cüzdan ve SMS çözümlerini kapsamaktadır (Örs, 2018: 17).

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❖ Dijital cüzdan; elektronik cüzdan olarak da bilinen mobil cüzdanı da kapsayan hem dijital para birimlerinin hem de ödeme bilgilerinin saklanabileceği bir sistemdir (Mallat 2007). Alipay, Apple Pay, Google Pay, BKM Express dijital cüzdan örnekleridir.

❖ Para transferleri en çok kullanılan finansal teknolojiler arasında yer almaktadır. Hesaptan hesaba (Account to account) gibi banka havale/eft işlemleri de alternatif ödeme çözümlerine dahildir (Dorfleitner, 2017).

2. LİTERATÜR İNCELEMESİ

Bankaların Fintek, PayTech şirketleri ve bu şirketlerin sağlamış olduğu çözümler üzerine literatür incelemesi yapıldığında; Fintek ve PayTech kavramlarına ilişkin derleme çalışmaların, bu teknoloji şirketlerinin performanslarının, bu şirketlere ilişkin hukuki düzenlemelerin, bu çözümlerin bankaların operasyonel ve finansal performansları üzerindeki etkilerinin incelendiği çalışmalar aşağıda örneklendirilmiştir.

Kayed vd. (2024) çalışmalarında, bankaların Fintek entegrasyonlarının performans ölçütlerine etkilerini ele almıştır. Araştırma kapsamında, 13 halka açık ticari bankanın on yıllık finansal performansı panel veri analizi yöntemiyle incelenmiştir. Çalışma bulguları, Fintek gelişiminin banka kârlılığını önemli ölçüde artırdığını ve aynı zamanda risk alma seviyelerini olumsuz yönde etkilediğini göstermektedir. Bu durumun, bankaların finansal performansı ve istikrarı üzerinde anlamlı ve olumlu bir etki yarattığı belirtilmiştir.

Şahin (2024) çalışmasında, küresel ekonomide giderek yaygınlaşan Fintek hizmetlerinin, gelecekte yapay zeka ve kripto para teknolojilerindeki gelişmelerle birlikte yeni inovatif olanakların ortaya çıkmasının kaçınılmaz olduğunu vurgulamaktadır.

Treu (2022) çalışmasında, finansal teknolojilerin tarihsel gelişimini ele alarak literatür taramasına dayalı bir inceleme yapmıştır. Bu çalışma kapsamında, finansal ve teknoloji kavramlarının tanımlarındaki çeşitliliği belirlemiş ve bu terimleri sistematik bir çerçeveye oturtmayı amaçlamıştır.

Una vd, (2023) çalışmalarında, başlıca fintek ödeme modelleri (mobil para, internet tabanlı fintek ödemeleri ve dijital para) ve bu modellerin operasyonel ve finansal riskleri incelemektedir. Ayrıca çalışmada bu ödeme modellerinin kamu hizmetlerine nasıl entegre edileceğini tartışmaktadır.

Canbaz ve Erbaş (2021) çalışmalarında, Fintek'lerin geleneksel bankacılığa kıyasla daha olumlu bir görünüm sergilediğini, ancak henüz gelişme aşamasında olmaları nedeniyle şube bankacılığı alışkanlıklarının direnç göstermesi ve güven sorunlarının ortaya çıkmasının doğal karşılanması gerektiğini ifade etmişlerdir. Bununla birlikte, bu durumun gelecekte Fintek'ler lehine değişeceğini öngörmüşlerdir.

Dal vd. (2021) çalışmalarında, Fintek'lerin bir ekosistem oluşturduğunu, bu ekosistemin önemli bir veri kaynağı sunduğunu ve bu verinin rekabet hukuku kapsamındaki düzenlemelerinin esnek bir yapıya sahip olmasının, yeni Fintek'lerin gelişimine olanak tanıyacağını ifade etmişlerdir. Ayrıca, Fintek ekosisteminin geliştirilmesi için Fintek merkezlerinin kurulmasının, eğitim kurumlarında Fintek bölümlerinin desteklenerek sektöre yönelik bilgi sahibi nitelikli insan

10th International CEO Communication, Economics, Organization & Social Sciences Congress kaynağının yetiştirilmesinin önemine dikkat çekmişlerdir. Bununla birlikte, Fintek sektörü ile devlet otoritesi arasında etkili iletişim kanalları kurulduğunda güçlü bir iş birliğinin sağlanabileceğini vurgulamışlardır.

Błach ve Klimontowicz (2021) çalışmalarında, PayTech'lerin pazar faaliyetlerine yönelik incelemelerin nispeten yeni bir araştırma alanı olduğunu vurgulamışlardır. Bu bağlamda, karşılaştırmalı analiz yöntemini kullanarak PayTech'lerin iş modellerini ve piyasa davranışlarını ele almış ve tanımlamışlardır.

Eren (2021) çalışmasında, QR kod teknolojisi kullanılarak gerçekleştirilen mobil ödeme yöntemlerini incelemiş ve bu ödeme yöntemlerinin gelecekteki sosyo-kültürel davranışlar üzerindeki etkilerine ilişkin verileri 233 kişi üzerinde anket yöntemiyle toplamıştır. Araştırma sonuçları, QR kodla yapılan mobil ödemelerin Türkiye'de henüz başlangıç aşamasında olduğunu ve özellikle genç nüfus arasında dinamik bir şekilde ilerlediğini göstermiştir. Ayrıca, QR kod tabanlı mobil ödemelerin gelecekte önemli bir büyüme potansiyeline sahip olduğuna işaret ettiği belirtilmiştir.

Harasim ve Janina (2021) çalışmalarında, bankalar, Fintek'ler ve Bigtek'leri ayrı ayrı ele alarak karşılaştırmalı ve eleştirel bir analiz gerçekleştirmiştir. Çalışmada, bankalar ile Fintek'ler arasındaki iş birliği ve etkileşim incelenmiş; bankaların ve Fintek'lerin varlıklarının, becerilerinin ve özelliklerinin büyük ölçüde birbirini tamamladığı ifade edilmiştir. Bu bağlamda, rekabet yerine iş birliğinin tercih edilmesinin her iki tarafı da daha güçlü kılacağı öne sürülmüştür.

Akın (2020) çalışmasında, dijitalleşen dünyada bankacılık sektörünün hızla yerini aldığını ve diğer sektörlere kıyasla daha hızlı entegre olarak geleneksel şube bankacılığına kıyasla işlem maliyetlerini 43 kat düşürüp mobil bankacılıkta verimliliğe daha kısa sürede ulaştığını ifade etmiştir. Ayrıca, dünyadaki büyük Fintek şirketlerinin, müşteri odaklı inovatif hizmetleri sayesinde bankacılık sistemindeki geniş dijital müşteri kitlesinden faydalanarak yenilikçi uygulamalarda iş birliğinin artmasını beklediğini belirtmiştir. Bununla birlikte, dijital bankacılığın bir sonucu olan inovatif uygulamaların sayısındaki artışın rekabeti güçlendirdiğini, ancak aynı zamanda siber tehdit risklerine karşı korunma süreçlerinin önemini de artırdığını vurgulamıştır.

Candemir (2020) çalışmasında, bankacılık ve Fintek sektörlerine A'WOT analizi uygulayarak dijitalleşen bankacılık sisteminde müşteri kazanımı açısından Fintek'lerle etkileşimde bulunmanın, pazar payını artırmak için önemli bir fırsat sunduğunu ifade etmektedir.

Bozpolat ve Seyhan (2020) çalışmalarında, banka müşterilerinin ödeme teknolojilerini kabullenme süreçlerini belirlemek amacıyla 500 mobil ödeme kullanıcısı üzerinde anket uygulamışlardır. Araştırmada, öncelikle açıklayıcı ve doğrulayıcı faktör analizleri gerçekleştirilmiş, ardından path analizi ile veriler değerlendirilmiştir. Elde edilen sonuçlar, mobil ödeme sisteminin yeni bir teknoloji olması nedeniyle bireylerin fiili davranışlarını henüz belirgin bir şekilde etkilemediğini ortaya koymuştur.

Dorfleitner vd. (2017) çalışmalarında, Almanya'da faaliyet gösteren 349 Fintek şirketini incelemiş ve bu şirketlerin toplamda 2 milyar Euro'luk bir hacme sahip olduğunu tespit

10th International CEO Communication, Economics, Organization & Social Sciences Congress etmişlerdir. Ayrıca, 2035 yılı itibarıyla Fintek sektörünün 148 milyar Euro'luk bir pazar hacmine ulaşmasının beklendiğini ifade etmişlerdir. Araştırmada, bankaların %87'sinin Fintek'lerle iş birliği yaptığı ve gelecekte de bu iş birliğini sürdürmeyi planladıkları belirtilmiştir.

Literatürde yer alan çalışmalarda, Fintek'in PayTech, gibi alt kırılımlarının banka performansını hangi kanallar aracılığıyla etkilediğini inceleyen çalışmaların yetersiz olduğu görülmektedir. Özellikle, Fintek şirketleri tarafından sağlanan ve banka kârlılığını ya olumlu ya da olumsuz etkileyen finansal hizmetler de henüz araştırılmamıştır (Dasilas ve Karanovic, 2023). Bu gereklilikle ve yine Türkiye'de Fintek dikeyleri arasında en yüksek sayıda ödeme kuruluşlarının olması (Türkiye Fintek Rehberi, 2023) ve ödemeler alanının ülkemizde en faal alan olması nedeniyle de bu çalışmada Fintek alt kırılımı olan PayTech'in çözümlerlerinden yararlanan mevduat bankalarının performansları araştırılmaktadır. Bu araştırma ile Fintek ve banka iş birliğinin banka performansına etkisi tespit edilerek literatüre katkı sağlanacağı düşünülmektedir.

3. METODOLOJİ

Bu başlık altında araştırmanın kapsamı, veri seti ve yöntem bilgilerine yer verilmiştir.

3.1. Araştırmanın Kapsamı ve Veri Seti

Kasım 2024 tarihi itibarıyla Türkiye'de faaliyet gösteren mevduat banka sayısı 33'tür. (bddk.org.tr). Mevduat bankalarının 4'ünün yalnız kurumsal bankacılık alanında faaliyet göstermesi (Bank Of China Turkey A.Ş., Citibank A.Ş., Deutsche Bank A.Ş. Ve Jp Morgan Chase Bank National Association) ve 12 bankanın sağlıklı verilerine ulaşılamaması nedeni ile (Anadolubank, Arap Türk Bankası A.Ş., Bank Mellat, Habib Bank, Icbc Turkey Bank A.Ş., Intesa Sanpaolo S.P.A., Mufg Bank Turkey A.Ş., Rabobank A.Ş. Societe Generale S.A., Turkish Bank A.Ş., Turkland Bank A.Ş., Türk Ticaret Bankası A.Ş.) Tablo 2'de belirtilen 17 mevduat bankası araştırmanın örneklemini oluşturmaktadır. Araştırmada PayTech çözümleri/iş modellerine ilişkin değişkenler Dorfleitner vd, (2017); Bashayreh ve Wadi, (2021); Kayed vd, (2024) çalışmalarına benzer şekilde Tablo 1'de belirlenmiştir.

Tablo-1: PayTech Değişkenleri ve Sayısallaştırma

Değişkenler	Puanlama	Kaynak
Dijital Müşteri Sayısı	Açıklama yok ise "0 puan" Nitel Açıklama var ise "1 puan" Nicel açıklama (işlem hacmi, gelir düzeyi vb.) var ise "2 puan"	Banka Web Sitesi, Faaliyet/Entegre Faaliyet Raporları
Dijital İşlem Sayısı	Açıklama yok ise "0 puan" Nitel Açıklama var ise "1 puan" Nicel açıklama (işlem hacmi, gelir düzeyi vb.) var ise "2 puan"	Banka Web Sitesi, Faaliyet/Entegre Faaliyet Raporları
Aktif Dijital Kullanıcı Oranı*	Açıklama yok ise "0 puan" Nitel Açıklama var ise "1 puan" Nicel açıklama (işlem hacmi, gelir düzeyi vb.) var ise "2 puan"	Banka Web Sitesi, Faaliyet/Entegre Faaliyet Raporları

Dijital Cüzdan	Açıklama yok ise “0 puan” Nitel Açıklama var ise “1 puan” Nicel açıklama (işlem hacmi, gelir düzeyi vb.) var ise “2 puan”	Banka Web Sitesi, Faaliyet/Entegre Faaliyet Raporları
Mobil Cüzdan	Açıklama yok ise “0 puan” Nitel Açıklama var ise “1 puan” Nicel açıklama (işlem hacmi, gelir düzeyi vb.) var ise “2 puan”	Banka Web Sitesi, Faaliyet/Entegre Faaliyet Raporları
QR Kod ile Ödeme	Açıklama yok ise “0 puan” Nitel Açıklama var ise “1 puan” Nicel açıklama (işlem hacmi, gelir düzeyi vb.) var ise “2 puan”	Banka Web Sitesi, Faaliyet/Entegre Faaliyet Raporları
Mobil Pos ile Ödeme	Açıklama yok ise “0 puan” Nitel Açıklama var ise “1 puan” Nicel açıklama (müşteri sayısı, yüzdesel artış bilgileri) var ise “2 puan”	Banka Web Sitesi, Faaliyet/Entegre Faaliyet Raporları
Temassız Ödeme	Açıklama yok ise “0 puan” Nitel Açıklama var ise “1 puan” Nicel açıklama (işlem miktarı, yüzdesel artış, bilgileri) var ise “2 puan”	Banka Web Sitesi, Faaliyet/Entegre Faaliyet Raporları
Sanal Ödeme	Açıklama yok ise “0 puan” Nitel Açıklama var ise “1 puan” Nicel açıklama var ise “2 puan”	Banka Web Sitesi, Faaliyet/Entegre Faaliyet Raporları
Bulut Pos Ödeme**	Açıklama yok ise “0 puan” Nitel Açıklama var ise “1 puan” Nicel açıklama var ise “2 puan”	Banka Web Sitesi, Faaliyet/Entegre Faaliyet Raporları
Açık Bankacılık Modeli	Açıklama yok ise “0 puan” Nitel Açıklama var ise “1 puan” Nicel açıklama (işlem miktarı, müşteri sayısı vb.) var ise “2 puan”	Banka Web Sitesi, Faaliyet/Entegre Faaliyet Raporları

*: Aktif dijital kullanıcı sayısı / Toplam dijital müşteri sayısı

** : pos sistemlerinin bulut tabanlı olarak kullanılmasını sağlayan teknoloji.

Tablo 2’de belirtildiği üzere araştırmada 11 değişken için bankaların kurumsal web sitesi ve 2023 yılı entegre faaliyet raporları İçerik analizi yöntemi ile incelenmiş ve elde edilen açıklamalar için sayısallaştırma yapılarak performans puanı belirlenmiştir.

3.2.Yöntem

Araştırmada banka şirketlerinin son yayımlanan kurumsal raporları ve web siteleri İçerik analizi yöntemi ile incelenmiştir. İçerik analizi, çok sayıda metin kelimesini açık kodlama kurallarına dayanarak daha az sayıda içerik kategorisine sıkıştırmak için kullanılan sistematik ve tekrarlanabilir bir teknik olarak tanımlanmaktadır (Stemler, 2000). Bu yöntem, metinsel, görsel ve ses verilerine uygulanabilecek kadar çok yönlüdür. İçerik analizi için en yaygın veri kaynağı ise yazılı metinlerdir (Stemler, 2015). Bu yöntem, araştırmacının verileri daha iyi anlamak ve teorik konuları test etmek için kullandığı bir araçtır. İçerik analizi sayesinde, kelimeler daha az sayıda içerik kategorisine ayrılabilir. Aynı kategorilere yerleştirilen kelimelerin, ifadelerin ve benzerlerinin aynı anlamı paylaştığı kabul edilir. Ayrıca içerik analizi, bağlamlarına uygun olarak verilerden tekrar edilebilir ve geçerli çıkarımlar yapmayı mümkün kılan bir araştırma yöntemidir. Bu yöntem, bilgi üretmek, yeni içgörüler sağlamak, gerçekleri temsil etmek ve eyleme yönelik pratik rehberler oluşturmak amacıyla kullanılır (Elo ve Kyngäs, 2008).

10th International CEO Communication, Economics, Organization & Social Sciences Congress Araştırmada İçerik analizi ile elde edilen nitel ve nicel veriler yazarlar tarafından açıklama yok ise “0 puan”, nitel bir açıklama var ise “1 puan”, işlem hacmi, müşteri sayısı gelir gibi nicel bir açıklama var ise “2 puan” şeklinde sayısallaştırılmıştır. Sayısallaştırma, Daub (2007), Vormedal ve Ruud (2009), Aras, Tezcan ve Kutlu Furtuna, (2018), Şendurur ve Temelli (2018), Can ve Özgül (2019), Aggarwal ve Singh (2019) ve Peker, (2024) çalışmalarında yer alan kodlamalara benzer şekilde gerçekleştirilmiştir. İşlem sonucunda bir banka en fazla 22 puan en az 0 puan alabilecektir.

1. BULGULAR ve TARTIŞMA

Araştırmada Türkiye’de faaliyet gösteren 17 mevduat bankasının kurumsal web sitesinde ve 2023 yılı entegre faaliyet raporlarında PayTech çözümlerini /iş modellerini kullanım ilişkin açıklamaları tespit edilmiş ve bu açıklamalar performans puanlarına dönüştürülerek ulaşılan sonuçlar Tablo 2’de belirtilmiştir.

Kodlamanın nasıl yapıldığı **Akbank** üzerinden örneklendirilecek olunursa; dijital müşteri sayısı değişkeni için “**2023 yılı itibarıyla Akbank’ın dijital müşteri sayısı 11 milyonu aşmış durumda...**” ifadesi “2 puan”, dijital işlem oranı değişkeni için “**...2023 yılında Akbank Mobil’den finansal işlem yapan müşteri sayısı %35, toplam finansal işlem adedi ise %55 oranında artış göstermiştir**” ifadesi “2 puan”, aktif dijital kullanıcı oranı değişkeni için “**...2023 yılı sonuna kadar kazanılan yeni müşterilerin üçte ikisi dijital kanallar aracılığıyla edinilmiştir**” ifadesi “2 puan” olarak hesaplanmaktadır. (Akbank, 2023).

Dijital cüzdan teknolojisi değişkeni için Türkiye Ekonomi Bankası (TEB) örneğine bakıldığında “**...CEPTEB mobil uygulaması üzerinden dijital cüzdan hizmeti sunmaktadır. Müşteriler, bu uygulama ile kart bilgilerini dijital ortamda saklayarak güvenli ve hızlı ödeme yapabilmektedir**” ifadesi “1” puan” olarak hesaplanmaktadır. (TEB, 2023).

Mobil cüzdan değişkeni için Türkiye İş Bankası A.Ş. örneğine bakıldığında “**Dijital iş birlikleri ile ödeme sistemleri hizmetlerinin kapsayıcılığını artırmak amacı gden İş Bankası, ödeme kuruluşu iştiraki MOKA ile işbirliğine giderek, Trkiye'deki Samsung kullanıcılarına özel olarak hayata geçirilen mobil cüzdan uygulaması S-Wallet’ın ön ödemeli kart alt yapısını sunmaya başlamıştır.**” ifadesi “1 puan” olarak hesaplanmaktadır. (İş Bankası, 2023).

Vakıflar Bankası T.A.O QR kod ile ödeme değişkeni için, “**... QR Kod ile Yapılan İşlem Sayısı 2023: 18.849.70**” ifadesi “2 puan” olarak hesaplanmaktadır. (Vakıflar Bankası, 2023).

Mobil pos ile ödeme değişkeni için “**Odeabank, işletmelere yönelik mobil POS ve sanal ödeme çözümleri sunarak, dijital ödeme altyapısını desteklemektedir**” ifadesi “1 puan” olarak hesaplanmaktadır. “**TEB, Soft POS (cep telefonlarının POS olarak kullanılabilmesi) geliştirme çalışmalarını da sürdürmektedir**” ifadesi “0 puan” olarak hesaplanmaktadır (TEB, 2023).

Temassız ödeme değişkenine ilişkin “**Burgan Bank (ON Dijital), temassız ödeme ve sanal kart hizmetleri sunarak müşterilerinin güvenli ve hızlı alışveriş yapmalarını sağlamaktadır.**” ifadesi “1 puan” olarak hesaplanmaktadır (Burgan Bank, 2023).

Sanal pos ile ödeme değişkeni için Fibabank örneğinde “**E Sanal POS cirosu ise 2023 yılında geçen yıla göre %116 artarak 510 milyon TL’ye yükselmiştir. Fibabanka’nın sanal POS**

10th International CEO Communication, Economics, Organization & Social Sciences Congress *işlemleri Banka'nın toplam POS cirosundan %81 oranında pay almaktadır*” ifadesi “2 puan” olarak hesaplanmaktadır. (Fibabanka, 2023).

Yapı Kredi A.Ş.'nin açık bankacılık modeline ilişkin “*Yapı Kredi, açık bankacılık servislerini müşterilere açan ilk bankalardan biri olmanın yanında uygulama geneline entegre edilmiş katma değerli hizmetler geliştirilerek sektörde fark yaratmış, açık bankacılık için ilk iletişim yapan banka olarak müşterileri açık bankacılık ile tanıştırmıştır. ... 300 binden fazla müşterinin Yapı Kredi Mobil'i tek banka olarak kullanabilmesi, hesaplarının takibini ve para transferlerini tek noktadan gerçekleştirmesi sağlanmıştır.*” ifadesi “2 puan” olarak hesaplanmaktadır (Yapı Kredi, 2023).

Araştırma bulguları incelendiğinde Akbank “16 performans puanı” ile 1. sırada yer alırken, Yapı Kredi “15 performans puanı” ile PayTech performansı açısından 2. sırada yer alan iki banka olmuştur. QNB Bank “14 performans puanı” ile 3. sırada yer alırken, Türkiye İş Bankası ve Türkiye Garanti Bankası “13 performans puanı” ile 4. sırayı paylaşmışlardır. Türkiye Ziraat Bankası, Türkiye Vakıflar Bankası T.A.O. ve Fibabanka ve Denizbank “12 “performans puanı” ile 5. sırada yer alan bankalardır. ING Bank ve Türkiye Halbankası “11 performans puanı “ile 6. Sırayı, 10 performans puanı” ile Odeabank ve TEB 7. sırayı paylaşan bankalar olmuştur. On Dijital Bank “9 performans puanı” ile 8. sırada ve “8 performans puanı” ile Şekerbank 9. sırada yer almaktadır. Alternatifbank “7 performans puanı” ile 10. sırada ve “4 performans puanı” ile HSBC 11. ve son sırada yer almaktadır.

SONUÇ ve ÖNERİLER

Finansal hizmetler alanındaki teknolojik gelişmeler, açık bankacılık, üretken yapay zeka, dijital para, dijital kimlik konuları günümüz bankacılık sektörünün en önemli gündemleri arasında yer almaktadır. Bankalar her geçen gün yeni uygulamalar, iş modelleri, çözümler sunarak dijitalleşme süreçlerine hız kesmeden devam etmektedir.

Mevduat bankalarının dijitalleşme ve ödeme teknolojilerindeki performansı, bankacılık sektöründe dijital dönüşümün rekabet avantajı yaratma ve müşteri deneyimini iyileştirme üzerindeki etkisi açısından büyük önem taşımaktadır. Özellikle Türkiye gibi mobil ödeme kullanımının hızla arttığı pazarlarda, kullanıcıların hızlı, güvenli ve erişilebilir ödeme çözümleri talep etmesi, bu konuyu hem güncel bir araştırma alanı haline getirmektedir.

Bu araştırmada Türkiye’de faaliyet gösteren mevduat bankalarının ödemeler alanına ilişkin dijital performans sonuçları değerlendirildiğinde, en yüksek performans puanına ulaşan bankalar sırasıyla Akbank, Yapı Kredi ve QNB olmuştur. Bu bankalar, özellikle geniş kapsamlı dijital müşteri kitlesi, QR ve mobil ödeme çözümleri ve yüksek aktif kullanıcı oranları ile dikkat çekmektedir. QNB bulut bilişim teknolojisini ödeme çözümlerine entegre eden birkaç bankadan biri olmuştur. Türkiye İş Bankası ve Türkiye Garanti Bankası da bulut bilişim teknolojileri konusunda açıklamaları olmayan ve performans sıralamalarında 4. sırayı paylaşan bankalar olmuştur. Türkiye Vakıflar Bankası, T.C. Ziraat Bankası, Fibabank, Halkbankası, Odeobank, TEB ve Şekerbank orta düzey performans gösteren bankalar olmuşlardır. Araştırma kapsamında en düşük performans puanlarına sahip banka ise HSBC ve Alternatifbank olarak belirlenmiştir. Bu bankalar temassız ödeme, mobil pos ve bulut bilişim gibi modern ödeme teknolojileri konusunda daha az yatırıma sahip olarak görülmektedir.

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Ödeme teknolojileri açısından araştırma sonuçları değerlendirildiğinde, temassız ödeme teknolojilerine ilişkin neredeyse tüm bankaların açıklamaya sahip olduğu görülmektedir. Bulut pos teknolojisinin henüz bankalar tarafından yaygınlaşmamış olduğu söylenebilir. mobil ödeme sistemlerine yönelik artan müşteri talebi, bankaların yenilikçilik süreçlerini şekillendiren önemli bir etken olarak öne çıkmaktadır. Yine açık bankacılık modeli hakkında bir banka hariç tüm bankaların açıklamaları olduğu görülmektedir. Bu gelişmenin açık bankacılıktan açık finansa geçişte önemli bir adım olduğunu da söylemek mümkündür. Bu bulgular, bankaların dijital dönüşüm süreçlerine yaptıkları yatırımların ve ödeme teknolojilerinde benimsedikleri stratejik yaklaşımların sektördeki rekabet üstünlüğüne doğrudan katkı sağladığını göstermektedir. Lider konumda yer alan bankaların link ile ödeme, blokzincir tabanlı ödeme teknolojileri gibi ödeme teknolojilerine de entegre olması performanslarını geliştirmelerine katkı sağlayacaktır. Performans sıralaması düşük olan bankaların yeni nesil ödeme çözümlerine yapacakları yatırımlar ile bu alanda gelişme göstermeleri mümkün olacaktır.

Araştırmanın en önemli kısıtı, mevduat bankalarının entegre faaliyet raporlarında ve web sitelerinde dijital dönüşümlerine ilişkin açıklamalarının yetersiz oluşudur. Dijital uyumun ve entegrasyonun daha fazla açıklamalarla ölçülebilir olması, bankaların bu alana ilişkin performans düzeylerini tespit etmeye ve geliştirmeye olanak tanıyacaktır.

Gelecek dönemlerde yapılacak çalışmalarda bankaların dijital entegrasyonunun, finansal ve operasyonel performanslarına, müşteri memnuniyetine etkileri araştırılabilir. Dijital ödeme çözümlerine ilişkin düzenlemeler incelenebilir. Kripto varlık, finansman, yatırım gibi diğer finansal hizmetlere ilişkin performans ölçümü gerçekleştirilebilir.

Tablo-2. Mevduat Bankalarının PayTech Performansları

Mevduat Bankaları/Değişkenler	Dijital Müşteri Sayısı	Dijital İşlem Sayısı	Aktif Dijital Kullanıcı	Dijital Cüzdan	Mobil Cüzdan	QR ile Ödeme	Mobil Pos Ödeme	Temassız Ödeme	Sanal Pos Ödeme	Bulut Pos Ödeme	Açık Bankacılık Modeli	Puan	Sıra
AKBANK T.A.Ş.	++	++	++	+	++	++	+	++	+	-	+	16	1
YAPI VE KREDİ BANKASI A.Ş.	++	++	++	+	++	+	+	+	+	-	++	15	2
QNB BANK A.Ş.	++	++	++	+	+	++	-	+	+	+	+	14	3
TÜRKİYE GARANTİ BANKASI A.Ş.	++	++	++	+	-	++	+	+	+	-	+	13	4
TÜRKİYE İŞ BANKASI A.Ş.	++	++	++	+	+	+	+	+	+	-	+	13	4
DENİZBANK A.Ş.	-	++	++	++	+	+	+	+	+	-	+	12	
FİBABANKA A.Ş.	++	++	++	-	-	+	+	+	++	-	+	12	
T.C. ZİRAAT BANKASI A.Ş.	++	++	++	-	-	+	+	+	+	+	+	12	5
TÜRKİYE VAKIFLAR BANKASI T.A.O.	++	++	++	-	-	++	+	+	+	-	+	12	
ING BANK A.Ş.	+	++	+	+	+	+	+	+	+	-	+	11	6
TÜRKİYE HALK BANKASI A.Ş.	++	++	++	-	-	+	+	+	+	-	+	11	
ODEA BANK A.Ş.	++	++	-	+	-	+	+	+	+	-	+	10	7
TÜRK EKONOMİ BANKASI A.Ş.	+	++	++	+	+	+	-	+	-	-	+	10	
BURGAN BANK A.Ş. (ON Dijital bankacılık)	++	++	++	-	-	+	+	+	-	-	-	9	8
ŞEKERBANK T.A.Ş.	+	++	++	-	-	+	-	-	+	-	+	8	9
ALTERNATİFBANK A.Ş.	-	+	++	-	+	-	+	-	+	-	+	7	10
HSBC BANK A.Ş.	-	-	+	+	+	-	-	-	-	-	+	4	11

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- Aggarwal, P., & Singh, A. K. (2019). CSR and sustainability reporting practices in India: An in-depth content analysis of top-listed companies. *Social Responsibility Journal*, 15(8), 1033–1053.
- Akın, F. (2020). Dijital dönüşümün bankacılık sektörü üzerindeki etkileri. *Balkan ve Yakın Doğu Sosyal Bilimler Dergisi*, 6(2), 15–27.
- Akbank. (2023). 2023 Faaliyet raporu. Erişim Tarihi: 30 Kasım 2024, <https://www.akbank.com/tr-tr/Sayfalar/default.aspx/>
- Alternatif Bank. (2023). 2023 Faaliyet raporu. Erişim Tarihi: 30 Kasım 2024, <https://www.alternatifbank.com.tr/>
- Aras, G., Tezcan, N., & Furtuna, Ö. K. (2018). Çok boyutlu kurumsal sürdürülebilirlik yaklaşımı ile Türk bankacılık sektörünün değerlendirilmesi: Kamu-Özel banka farklılaşması. *Ege Akademik Bakış*, 18(1), 47–61.
- Bankacılık Düzenleme ve Denetleme Kurumu (BDDK). (2024). Kuruluş listesi. Erişim Tarihi: 27 Kasım 2024, <https://www.bddk.org.tr/Kurulus/Liste/77>
- Bashayreh, A., & Wadi, R. M. A. (2021). The effect of Fintech on banks' performance: Jordan case. (pp. 812-821). Springer International Publishing.
- Błach, J., & Klimontowicz, M. (2021). The determinants of PayTech's success in the mobile payment market—the case of BLIK. *Journal of Risk and Financial Management*, 14(9), 422.
- Bozpolat, C., & Seyhan, H. (2020). Mobil ödeme teknolojisi kabulünün teknoloji kabul modeli ile incelenmesi: Ampirik bir araştırma. *Çankırı Karatekin Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 10(1), 119–145. <https://doi.org/10.18074/ckuiebfd.619852>
- Burgan Bank. (2023). 2023 Faaliyet raporu. Erişim Tarihi: 30 Kasım 2024, <https://www.burgan.com.tr/>
- Candemir, G. (2020). *Bankacılık sektöründe yeni trendler ve teknolojik gelişmeler: Fintek sektörü üzerine bir uygulama* (Yayımlanmamış Doktora Tezi). Marmara Üniversitesi, İstanbul.
- Can, E., & Özgül, B. (2018). Türk ihracat şirketleri sürdürülebilirlik ifadeleri üzerine bir içerik analizi. *İstanbul Management Journal*, 29, 7–30. <https://doi.org/10.26650/imj.2018.29.84.0001>
- Canbaz, M. F., & Erbaş, S. (2021). Katılım bankacılığında fintek eğilimleri ve sektöre katkıları. *Finans Ekonomi ve Sosyal Araştırmalar Dergisi*, 6(3), 477–489. <https://doi.org/10.29106/f.977>
- Cumhurbaşkanlığı Finans Ofisi (CBFO). (2024). Fintek sözlüğü. Erişim Tarihi: 2 Aralık 2024, <https://www.cbfo.gov.tr/fintek-sozlugu>
- Dahlberg, T., Mallat, N., Ondrus, J., & Zmijewska, A. (2006). Mobile payment market and research - past, present and future. *Working Papers on Information Systems*, 6(48), 1–16.
- Dal, C., Yılmaz, B., Kıran, N. F., Güleş, B., & Ermiş, D. (2021). Ödeme hizmetlerindeki finansal teknolojilere yönelik inceleme raporu. IV. Denetim ve Uygulama Dairesi, Rekabet Kurumu. Ankara, Türkiye.
- Daub, C. H. (2007). Assessing the quality of sustainability reporting: An alternative methodological approach. *Journal of Cleaner Production*, 15(1), 75–85.
- Dasilas, A., & Karanović, G. (2023). The impact of FinTech firms on bank performance: Evidence from the UK. *EuroMed Journal of Business*.
- Dorfleitner, G., Hornuf, L., Schmitt, M., & Weber, M. (2017). *FinTech in Germany*. Cham: Springer International Publishing. ISBN: 978-3-319-54665-0.
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115.
- Fibabanka. (2023). 2023 Faaliyet raporu. Erişim Tarihi: 30 Kasım 2024, <https://www.fibabanka.com.tr/>
- Garanti Bbva. (2023). 2023 Faaliyet raporu. Erişim Tarihi: 30 Kasım 2024, <https://www.garantibbva.com.tr/>
- Gupta, S., Xie, Y., & Zafar, H. (2024). Fintech and digital payments: Developing a domain knowledge framework. *Journal of Information Systems Education*, 35(2), 189–202. <https://doi.org/10.62273/HIGA9274>
- Gümüş, E., Medetoğlu, B., & Tutar, S. (2020). Finans ve bankacılık sisteminde yapay zekâ kullanımı: Kullanıcılar üzerine bir uygulama. *Bucak İşletme Fakültesi Dergisi*, 3(1), 28–53.
- Halk. (2023). 2023 Faaliyet raporu. Erişim Tarihi: 30 Kasım 2024, <https://www.halkbank.com.tr/>
- Harasim, J. (2021). FinTechs, BigTechs and banks – When cooperation and when competition? *Journal of Risk and Management*, 14, 614. <https://doi.org/10.1108/JFRA-09-2023-0526>
- Hsbc. (2023). 2023 Faaliyet raporu. Erişim Tarihi: 30 Kasım 2024, <https://www.hsbc.com.tr/>
- Imerman, M. B., & Fabozzi, F. J. (2020). Cashing in on innovation: A taxonomy of FinTech. *Journal of Asset Management*, 21(3), 167.
- Türkiye İş Bankası. (2023). 2023 Faaliyet raporu. Erişim Tarihi: 30 Kasım 2024, <https://www.isbank.com.tr/>
- Kayed, S., Alta'any, M., Meqbel, R., Khatatbeh, I. N., & Mahafzah, A. (2024). Bank FinTech and bank performance: Evidence from an emerging market. *Journal of Financial Reporting and Accounting*. <https://doi.org/10.1108/JFRA-09-2023-0526>

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- Mallat, N. (2007). Exploring consumer adoption of mobile payments—A qualitative study. *Journal of Strategic Information Systems*, 16(4), 413–432.
- Odea Bank. (2023). 2023 Faaliyet raporu. Erişim Tarihi: 30 Kasım 2024, <https://www.odeabank.com.tr/>
- Örs, M. E. (2018). Development of a technology acceptance model for mobile payment systems (Master Thesis). Middle East Technical University, Ankara.
- Panetta, I. C., Leo, S., & Delle Foglie, A. (2023). The development of digital payments—past, present, and future—from the literature. *Research in International Business and Finance*, 64, 101855.
- Peker, A. A. (2024). Sürdürülebilirlik uyum raporu ilkelerinin finansal olmayan kilit performans göstergelerine etkisi. *Business & Management Studies: An International Journal*, 12(2), 329–344.
- Qnb Bank. (2023). 2023 Faaliyet raporu. Erişim Tarihi: 30 Kasım 2024, <https://www.qnb.com.tr>
- Şahin, C. (2024). Geleneksel finansal kurumlara rakip bir yenilikçi finansal uygulama: Fintek. *Premium e-Journal of Social Sciences*, 8(38), 1–6.
- Şendurur, U., & Temelli, F. (2018). Türkiye’de faaliyet gösteren geleneksel bankalar ve katılım bankalarının sürdürülebilirlik açısından karşılaştırılması. *Muhasebe Bilim Dünyası Dergisi*, 20(2), 330–346.
- Stemler, S. (2000). An overview of content analysis. *Practical Assessment, Research, and Evaluation*, 7(1), 17. <https://doi.org/10.7275/z6fm-2e34>
- Stemler, S. E. (2015). Content analysis. *Emerging Trends in the Social and Behavioral Sciences: An Interdisciplinary, Searchable, and Linkable Resource*, 1-14.
- Şeker Bank. (2023). 2023 Faaliyet raporu. Erişim Tarihi: 30 Kasım 2024, <https://www.sekerbank.com.tr/>
- TEB. (2023). 2023 Faaliyet raporu. Erişim Tarihi: 30 Kasım 2024, <https://www.teb.com.tr/>
- Treu, J. (2022). The Fintech sensation – What is it about? *Journal of International Business and Management*, 5(1), 1–19.
- Türkiye Fintek Rehberi. (2023). Türkiye fintek ekosistemi durum raporu. Erişim Tarihi: 1 Kasım 2024, <https://www.cbfo.gov.tr/turkiye-fintek-ekosistemi-durum-raporu>
- Una, G., Verma, A., Bazarbash, M., & Nakaguchi Griffin, N. (2023). Fintech payments in public financial management: Benefits and risks. *IMF Working Paper No. 23/20*. International Monetary Fund, Washington, DC.
- Vakıfbank. (2023). 2023 Faaliyet raporu. Erişim Tarihi: 30 Kasım 2024, <https://www.vakifbank.com.tr/tr>
- Vormedal, I., & Ruud, A. (2009). Sustainability reporting in Norway – An assessment of performance in the context of legal demands and socio-political drivers. *Business Strategy and the Environment*, 18(4), 207–222.
- Worldpay. (2024). The global payment reports. Erişim Tarihi: 2 Aralık 2024, <https://worldpay.globalpaymentsreport.com/en>
- Yapı Kredi. (2023). 2023 Faaliyet raporu. Erişim Tarihi: 30 Kasım 2024, <https://www.yapikrediinvestorrelations.com>
- Ziraat. (2023). 2023 Faaliyet raporu. Erişim Tarihi: 30 Kasım 2024, <https://www.ziraatbank.com.tr/>



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Sürdürülebilir Bir Geleceğe Güç Vermek: Çevresel Yenilenme İçin Gelişen Teknolojilerin Sosyoekonomik Bir İncelemesi

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ÖZET

İklim değişikliği ve çevresel bozulmayla mücadele, yenilikçi çözümler gerektirir. Bu çalışma, ekonomik büyümeyi çevresel zarardan ayırma potansiyeline sahip yeni teknolojileri araştırıyor. Sürdürülebilirlik hedefleriyle uyumlu teknolojik gelişmeleri belirlemek için bir model öneriyoruz. Analizimiz, açık deniz rüzgar enerjisi, yenilenebilir enerjiyle birleştirilmiş karbon yakalama, laboratuvarında yetiştirilen et ve çevreye duyarlı blok zinciri uygulamaları gibi umut vadeden alanları vurguluyor. Bu bulgular, politika yapıcılar için değerli içgörüler sunarak, yatırımları ekolojik geçişi ve insanlık için sürdürülebilir bir geleceği teşvik eden teknolojilere yönlendiriyor

Anahtar kelimeler: İnsan toplumu; Sosyoekonomik sistemler; Kirlilik; Fosil yakıt; Yeni teknolojiler.

Jel Kodları: L26, O18, R11, B21.

Powering A Sustainable Future: A Socioeconomic Review of Emerging Technologies For Environmental Regeneration

ABSTRACT

Combating climate change and environmental degradation demands innovative solutions. This study explores emerging technologies with the potential to decouple economic growth from environmental harm. We propose a model for identifying technological advancements aligned with sustainability goals. Our analysis highlights promising areas like offshore wind power, renewable energy-coupled carbon capture, lab-grown meat, and environmentally conscious blockchain applications. These findings offer valuable insights for policymakers, guiding investments towards technologies that promote ecological transition and a sustainable future for humanity.

Keywords: Human society; Socioeconomic systems; Pollution; Fossil-fuel; New technologies.

Jel Codes: L26, O18, R11, B21

1. Giriş

İnsanlığın çevre üzerindeki etkisinin incelenmesi, 1860'lara kadar uzanan zengin bir geçmişe sahiptir ve George Perkins Marsh'ın öncü çalışmalarıyla başlamıştır (Marsh, 1864). Sanayi Devrimi'nin başlangıcından bu yana, teknoloji ve sanayideki insan kaynaklı gelişmeler çevresel değişimin hızını önemli ölçüde artırmıştır. Bu derin etki, akademisyenler arasında yeni bir jeolojik çağ olan Antroposen'in tanımlanması için güçlü bir argüman ortaya koymuştur (Zalasiewicz & diğerleri, 2011; Crutzen & Stoermer, 2000). Bu çağ, insan faaliyetlerinin Dünya'nın atmosferik bileşimini şekillendirmede ne denli baskın bir rol oynadığını gösteren çarpıcı bir hatırlatmadır.

Antroposen'in başlangıç sınırı hâlâ tartışmalıdır. Crutzen & Stoermer (2000) ve Steffen et al., (2007) gibi bazı araştırmacılar, 18. yüzyıldaki Sanayi Çağı'ndan ya da 20. yüzyılda iklim değişikliğinde gözlenen belirgin hızlanmadan yana görüş bildirmektedir (ör., Bowman et al., 2011; Steffen et al., 2007; Glikson, 2013). Ruddiman (2003) ise atmosferik CO₂ seviyelerindeki artışla aynı zamana denk gelen, yaklaşık 6.000 yıl öncesine dayanan bir başlangıç önermektedir. Foley et al., (2013, s.83), 1780'leri insan nüfusunda, karbon emisyonlarında ve atmosferik CO₂ konsantrasyonlarında yaşanan üstel büyüme dönemi olan "Büyük Hızlanma"nın başlangıcı olarak belirlemiştir.

İnsan etkisinin çevre üzerindeki çok yönlü doğası geniş ölçüde belgelenmiştir. Chin et al., (2013, s.1), hızla büyüyen kentleşme, nüfus patlamaları, kirlitici endüstrilerin yayılması ve arazi kullanımındaki geniş çaplı değişiklikleri başlıca etkenler olarak vurgulamaktadır. Avrupa ve Kuzey Amerika'nın köklü sanayi merkezlerinden, Brezilya, Türkiye ve Hindistan gibi yükselen devlere kadar küresel ekonomiler sanayileştikçe, bu ilerlemenin ekonomik faydaları inkâr edilemez (Coccia & Bellitto, 2018; Coccia, 2021). Ancak, bu ilerleme sürdürülemez uygulamalar nedeniyle iklimsel ve toplumsal bozulmalara yol açan önemli maliyetlerle ilişkilendirilmiştir (Steingraber, 1997). Constant ve diğerleri (2014), çevresel kirlilik seviyesi ile ekonomik büyüme arasında rahatsız edici bir korelasyon tespit etmiştir. Bu endişe verici eğilim, artan tüketim kalıpları, kaynak tükenmesi ve nihayetinde kirlilik ve çevresel bozulmadaki artışa yol açan kentleşme ve nüfus genişlemesinin zincirleme etkilerine atfedilebilir.

Sonuç olarak, nüfus artışı, teknolojik ilerlemeler, kitlesel üretim ve tüketim paradigmaları ile doğal kaynakların tükenmesi gibi bir dizi faktör, çevre kirliliğine önemli ölçüde katkıda bulunmakta ve iklimin istikrarı ile insan toplumlarının refahını tehlikeye atmaktadır (Coccia, 2021). İnsan faaliyetlerinden kaynaklanan küresel çevre tehditleri, bu tehditlerin yol açtığı kirlilik ve ilişkili iklim değişikliği bağlamında, sürdürülebilir teknolojilerin ve çevreci yeniliklerin tanımlanması ve uygulanması kritik bir meydan okumadır. Bu ilerlemeler, CO₂ emisyonlarındaki endişe verici artışı hafifletme potansiyeline sahiptir ve daha sürdürülebilir sosyo-ekonomik sistemlerin geliştirilmesinin önünü açabilir (Sanni & Verdolini, 2022). Bu çalışma, artan CO₂ emisyonlarını azaltma ve sürdürülebilir kalkınma hedeflerine katkıda bulunma potansiyeli taşıyan yeni teknolojik yönelimlerin analizine odaklanmaktadır.

2. Çevresel Risk Faktörleri: Genel Bir Bakış

Fosil yakıtların ve çığır açan teknolojik ilerlemelerin insanlığın ilerlemesini hem geçmişte hem de günümüzde nasıl yönlendirdiği ayrıntılı bir şekilde belgelenmiştir (Ayres, 1998) (ör., Coccia, 2010; Sterner et al., 1998, s.254). II. Dünya Savaşı sonrası yıllar, kömür, doğalgaz ve petrol bazlı kaynaklarla yoğun şekilde beslenen dramatik bir sanayileşme dalgasına sahne olmuştur (Campbell, 2002). Bu bağımlılık, ekonomik büyümenin motoru olmuş ve karmaşık organik kimyasallar, sentetik malzemeler ve petrokimyasalların üretimi dahil olmak üzere çeşitli sektörlerde yenilikleri teşvik etmiştir (Coccia, 2009, 2010, 2014, 2017c, 2018; Ayres,

10th International CEO Communication, Economics, Organization & Social Sciences Congress 1990a, 1990b). Ancak, birçok ilerlemede olduğu gibi, bu sanayileşme ve teknolojik dönüşüm süreci de çift yönlü bir kılıç işlevi görmüştür.

Bu süreç, ekonomik refahı teşvik etmesine rağmen aynı zamanda hızlı kentleşme, nüfus artışı ve endişe verici seviyelerde çevresel kirliliğin temel itici gücü haline gelmiştir. Bu faktörler, insan kaynaklı (antropojenik) ve toplumsal değişimlerin tetikleyicisi olarak bir domino etkisi yaratmıştır (Belpomme et al., 2007).

1972’de Meadows ve diğerleri, Dünya’nın doğal kaynaklarının ve ekolojik kapasitesinin, ileri teknolojilere rağmen 21. yüzyıl ötesinde öngörülen ekonomik ve nüfus artış oranlarını sürdürmeyeceği yönünde kritik bir endişeyi dile getirmiştir. Bu öngörü, nüfus artışının durdurulamaması, tarımsal üretkenlikteki azalma, yenilenemez kaynak rezervlerinin tükenmesi, sanayi sektörünün büyümesi ve artan çevresel kirlilik gibi bir dizi faktörün birleşimine dayanmaktadır (Meadows et al., 1972). Ancak Club of Rome raporu (Meadows et al., 1972), insanlığın sorumlu üretim uygulamalarını benimsemesi, kaynak verimliliğini artırmayı teşvik eden bir kültür geliştirmesi ve güçlü geri dönüşüm programlarına öncelik vermesi durumunda sürdürülebilir bir Dünya ekosistemi oluşturulabileceği konusunda umut vadetmiştir. Bu önlemlerin benimsenmesiyle, rapor mevcut ihtiyaçları karşılamanın yanı sıra gelecek nesillerin kendi ihtiyaçlarını karşılama yeteneğini tehlikeye atmayan sürdürülebilir bir kalkınma paradigmasına ulaşılabileceğini savunmuştur.

Adam (2021), Birleşmiş Milletler’in dünya nüfusunun 2100 yılına kadar 11 milyara ulaşacağına dair öngörülerini ele almıştır. Ancak bu öngörülerin kesin olmadığını unutmamak gerekir. Örneğin, Uluslararası Uygulamalı Sistemler Analizi Enstitüsü (Avusturya) 2014 yılında nüfusun 2070 civarında 9,4 milyar ile zirveye ulaşacağını ve ardından 2090’larda 9 milyara düşeceğini öngörmüştür. Benzer şekilde, Washington Üniversitesi (Seattle, ABD), nüfusun 2060’larda 9,7 milyara ulaşacağını ve 2100 yılına kadar yaklaşık 8,8 milyara gerileyeceğini öngörmüştür. Bu tahminler arasındaki farklılıklar, uzun vadeli nüfus öngörülerinin beraberinde getirdiği belirsizlikleri gözler önüne sermektedir. Doğurganlık oranları zamanla değişebilir ve pandemiler, çatışmalar veya doğal afetler gibi beklenmedik olaylar nüfus sayısını önemli ölçüde etkileyebilir.

Kesin rakamlardan bağımsız olarak, yüksek nüfus artışının sosyo-ekonomik sistemler için önemli bir zorluk teşkil ettiği açıktır (Global Change, 2022). Bu durum, doğal kaynaklar –fosil yakıtlar, mineraller, ağaçlar ve su– üzerindeki talebi artırır ve büyüyen nüfusun ihtiyaçlarını karşılamak için daha fazla baskı oluşturur. Bu durum, hızlı kentleşmeyi, malların yüksek üretim ve tüketim seviyelerini ve buna bağlı olarak atık üretimindeki artışı tetikler. Tüm bu etkilerin birleşimi, çevresel kirlilik ve çevredeki zararlı mikroorganizmaların çoğalmasına yol açarak iklim değişikliği ve küresel ısınmanın önemli nedenleri arasında yer alır (La Scalia et al., 2022).

Birçok ülke, pandemiler veya savaşlar gibi krizlerin ardından ekonomilerini desteklemek için hâlâ ucuz fosil yakıtlara büyük ölçüde bağımlıdır. Ancak bu bağımlılık, ağır bir maliyetle gelir. Fosil yakıt tüketiminden kaynaklanan karbon emisyonlarının etkisiyle 2100 yılına kadar küresel sıcaklıkların 5°C artacağına dair projeksiyon, karamsar bir tablo çizmektedir. Bu ısınma eğilimi, yıkıcı sonuçları olabilecek permafrost erimesi ile daha da kötüleşmektedir (Hausfather & Peters, 2020; Moss et al., 2010; Tollefson, 2020). Hükümetlerarası İklim Değişikliği Paneli (IPCC) ve NASA (Global Climate Change, 2022), iklim değişikliğinin insan toplumları üzerindeki uzun vadeli etkilerine ilişkin bazı öngörülerde bulunmuştur:

- Sera gazı emisyonlarının ısı tutucu özellikleri nedeniyle donsuz mevsimlerin uzaması.
- Ortalama yağış miktarının artması.
- Kuraklıkların ve sıcak hava dalgalarının sıklığında ve şiddetinde artış.
- Daha sık ve güçlü kasırgalar.
- Küresel deniz seviyelerinde 5 inçten fazla bir artış ve 2100 yılına kadar 1 ila 10 feet arasında ek bir yükselme.

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2020'lerin enerji manzarası çok yönlü bir meydan okuma sunmaktadır. Enerji karışımına üç ana kaynak hakimdir: ucuz fosil yakıtlar, enerji üretim kapasitesine rağmen çevresel etkileri bulunan nükleer enerji ve yenilenebilir enerji kaynakları. Yenilenebilir enerji, temiz bir enerji geleceği için büyük potansiyel taşımaktadır; ancak, üretim maliyetleri hâlâ yüksektir ve mevcut kapasiteleri küresel enerji talebini tam anlamıyla karşılamak için yetersizdir (Campbell, 2002). Bu karmaşık senaryo, giderek daha ciddi çevresel ve toplumsal tehditlerle başa çıkabilecek, daha dayanıklı ve uyumlu toplumların geliştirilmesini gerekli kılmaktadır.

Ali et al., (2021), doğal kaynak tükenmesi ile çevresel bozulma arasında özellikle gelişmiş ülkelerde pozitif bir korelasyon olduğunu ortaya koymuştur. Araştırma, yenilenebilir enerji tüketiminin çevresel bozulma üzerindeki azaltıcı etkisine de dikkat çekmektedir. İnsan faaliyetlerinin kaçınılmaz bir sonucu olarak, gezegen üzerindeki çevresel ve atmosferik tahribat büyük ölçekte zarar vermektedir. Bu durum, atmosferdeki oksijen seviyelerinde endişe verici ve potansiyel olarak geri dönüşü olmayan bir azalma da dahil olmak üzere bir dizi tehlikeli sonuç doğurmuştur.

Sonuç olarak, insan kalkınmasından kaynaklanan çevresel riskleri etkili bir şekilde hafifletebilmek için ulusların, yenilikçi ve sürdürülebilir teknolojilerin tanımlanmasına, araştırılmasına ve geliştirilmesine öncelik vermesi gerekmektedir. Bu teknolojiler, yalnızca çevrenin iyileştirilmesine değil, aynı zamanda insan refahının artırılmasına ve daha sürdürülebilir bir geleceğe doğru yol alınmasına da katkıda bulunabilir. Makalenin bir sonraki bölümü, çevresel kırılganlıkları azaltma ve kaynak tükenmesini en aza indirme potansiyeline sahip sürdürülebilir teknolojileri belirlemek için kullanılan metodolojiyi ele alacaktır.

3. Data ve Metod

3.1. Örneklem ve Veri

Bu çalışma, kapsamlı ve çok disiplinli bir veri tabanı olan Scopus'tan (2022) elde edilen verilere dayanmaktadır. Scopus (2022), dergi makaleleri, konferans bildirileri ve kitaplar gibi akademik yayınların yanı sıra çeşitli uluslararası patent ofisleri tarafından tutulan patent kayıtlarını da içermektedir. Çalışma, ilgili bilimsel dokümanları ve patentleri tanımlamak için Scopus (2022) içindeki "Belge Ara" işlevini kullanmaktadır. Arama sorguları, Çevre ve Sürdürülebilirlik Bilimleri literatüründe (Chapman et al.,2022; Gadikota, 2021; Gonzalo et al.,2022; Li et al.,2022; Wang et al., 2022; Balaji & Rabiei, 2022; Esmailzadeh, 2022; Elavarasan et al., 2022; Bapat et al., 2022; Moritz et al., 2022; Strepparava et al., 2022) tanımlanan anahtar sürdürülebilir teknolojileri temsil eden bir dizi terimi içermektedir. Çalışmada kullanılan veriler, 30 Mart 2022 tarihinde indirilmiştir.

Bu araştırmanın çerçevesinde, bilimsel ve teknolojik analizlerin gerçekleştirilmesi için temel yapı taşları olarak patentler ve bilimsel çıktılar kullanılmaktadır. Bu çıktılar arasında dergi makaleleri, konferans bildirileri, kitap bölümleri, incelemeler, kısa anketler ve hatta mektuplar yer almaktadır (Coccia et al., 2022). Bu tür araştırmalar, sosyal ve doğal sistemler arasında var olan karmaşık ilişkileri aydınlatılabilir. Aynı zamanda, bu ilişkilerin çevre kirliliğini azaltmaya yönelik girişimlere ve sürdürülebilirlik hedeflerine nasıl etki ettiğine dair bilgiler sağlayabilir. Sonuç olarak, bu çalışmanın temel amacı, hem mevcut hem de gelecek nesillerin ihtiyaçlarını karşılamak, aynı zamanda gezegenin hayati yaşam destek sistemlerini korumaktır.

Tablo 1. Sorgular ve Analiz Edilen Veriler

Queries of research on sustainable technologies	Data analyzed and type
"offshore wind turbine"	6,978 document results 3,791 patent results
"aluminium battery"	228 document results 1,033 patent results
"green hydrogen"	1,000 document results 172 patent results
"blue hydrogen"	77 document results 198 patent results
"carbon-negative technologies"	34 document results 10 patent results
"floating photovoltaic systems"	76 document results 43 patent results
"carbon capture and storage"	7,005 document results 1,204 patent results
"thermal energy storage"	15,573 document results 8,888 patent results
"blockchain technology"	10,768 document results 7,848 patent results
"cellular agriculture"	81 document results 21 patent results
"clean steel production"	92 document results 28 patent results
"wave power systems"	78 document results 341 patent results

3.2. Analiz

Bu çalışma, sürdürülebilir teknolojilerin tarihsel gelişimini bilimsel araştırmalar ve teknolojik yenilikler perspektifinden ele almaktadır. Analiz, aşağıdaki kriterleri içeren çok yönlü bir yaklaşım kullanmaktadır:

1. Yayın Hacmi ve Bilimsel Ürünlerin Çeşitliliği

Tablo 1’de yer alan arama sorguları ile belirlenen dergi makaleleri, konferans bildirileri, kitap bölümleri ve diğer ilgili formatlar nicel bir analize tabi tutulacaktır. Bu analiz, incelenen her bir teknoloji ile ilişkilendirilen yayın hacmine odaklanacaktır. 2022 yılına ait veriler özellikle hariç tutulmuştur. Bu sayede, hâlihazırda devam eden araştırmaların henüz yayımlanmamış olabileceği göz önünde bulundurularak, tarihsel eğilimlerin daha net bir şekilde değerlendirilmesi amaçlanmıştır.

2. Patent Çerçevesi ve Teknolojik Eğilimler

Bilimsel yayınlara ek olarak, bu çalışma patent analizi de yaparak olası buluş alanlarını ve umut vadeden teknolojik ilerlemeleri belirlemeyi hedeflemektedir. Tablo 1’deki arama terimleri kullanılarak elde edilen patent sayıları (2022 yılı verileri hariç) incelenerek sürdürülebilirlik sorunlarına yönelik önemli teknolojik eğilimler ve yörüngeler hakkında bilgi sağlanacaktır.

3. Betimsel İstatistiksel Analiz

Tablo 1’de belirtilen arama sorgularıyla elde edilen verilere kapsamlı bir betimsel istatistiksel analiz uygulanacaktır. Bu analiz, ortalama, standart sapma, çarpıklık ve basıklık katsayıları gibi temel istatistiksel ölçümlerin hesaplanmasını içerecektir. Verilerin dağılım normalliği bu ölçütler aracılığıyla değerlendirilecektir. Eğer veriler normal bir dağılım sergilemiyorsa, logaritmik bir dönüşüm uygulanacaktır. Bu adım, sağlam ve güvenilir parametrik analizler için verilerin normal dağılıma uygun olmasını sağlayacaktır. Bu sayede, çalışmada istatistiksel olarak geçerli ve tutarlı sonuçlar elde edilebilecektir.

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Tablo 1’de yer alan terimlere ilişkin belge sonuçlarının ve patentlerin zaman serisini elde etmek için ana araç olarak Scopus (2022) platformundaki "Belge Ara" aracı kullanılmaktadır. Yukarıda belirtilen analizler, bu zaman serisi verilerine dayandırılacaktır.

Araştırma alanı/teknolojisi i için t zamanındaki eğilimler, aşağıdaki model ile görselleştirilecektir:

$$\log_{10} y_{i,t} = a + b \cdot \text{time} + u_{i,t}$$

Burada:

- $y_{i,t}$: Bilimsel ürünler veya patentler,
- t : Zaman,
- a : Sabit bir değer,
- b : Regresyon katsayısı,
- $u_{i,t}$: Hata terimi,
- \log_{10} : Doğal logaritma (taban $e=2.7182818e = 2.7182818e=2.7182818$).

Bu model, sürdürülebilir teknolojilerin zaman içindeki evrimini açıklayan dinamiklere ışık tutmaktadır. Teknolojinin yayılımına dair bu model, Sahal (1981) tarafından önerilen kavramsal çalışmadan esinlenmiştir.

Log-Log Modeli ve Evrimsel Koşullar

$$\log Y = \log A + B \cdot \log X$$

Burada:

- A : Modele özgü sabit bir değer,
- B : Evrim katsayısı olup, teknoloji Y ’nin bilimsel üretime kıyasla nasıl evrildiğini ölçmektedir.

Log-log modelindeki B değerinin farklı durumları şu şekilde yorumlanabilir:

- $B < 1$: Teknolojik sistemin genel evriminde zamanla kademeli bir yavaşlama olduğunu gösterir.
- $B = 1$: Sistemdeki tüm unsurların düzenli ve eşit bir hızda evrimleştiğini ifade eder.
- $B > 1$: Teknoloji Y ’nin bilimsel üretime kıyasla hızla ilerlediğini ve orantısız bir gelişme sergilediğini belirtir.

Model, parametre tahmini için En Küçük Kareler Yöntemi (OLS) kullanılmaktadır. Bu analizlerin gerçekleştirilmesinde IBM SPSS Statistics 26 gibi yazılımlar kullanılabilir.

3. Sonuçlar ve Tartışma

Analizden önce, veriler logaritmik bir ölçeğe dönüştürülecektir. Bu dönüşüm, değişkenlerin normal bir dağılım göstermesini sağlamak ve uygun parametrik analizlerin gerçekleştirilmesi için gereklidir. Ayrıca, logaritmik dönüşüm, eğilimlerin daha net bir şekilde görselleştirilmesine olanak tanır.

3.1. Model Uygulamaları

Model [1]: Bu model, çalışmada ele alınan sürdürülebilir teknolojilere ilişkin yayınlar ve patentlerdeki eğilimleri görselleştirmek için kullanılacaktır.

- **Şekil 1:** Bu figürde, sürdürülebilir teknolojilerin bilimsel gelişimi, yayın verilerine dayalı olarak gösterilecektir.
- **Şekil 2:** Bu figürde ise, sürdürülebilir teknolojilerin patent verilerine dayanarak nasıl evrimleştiği ortaya konacaktır.

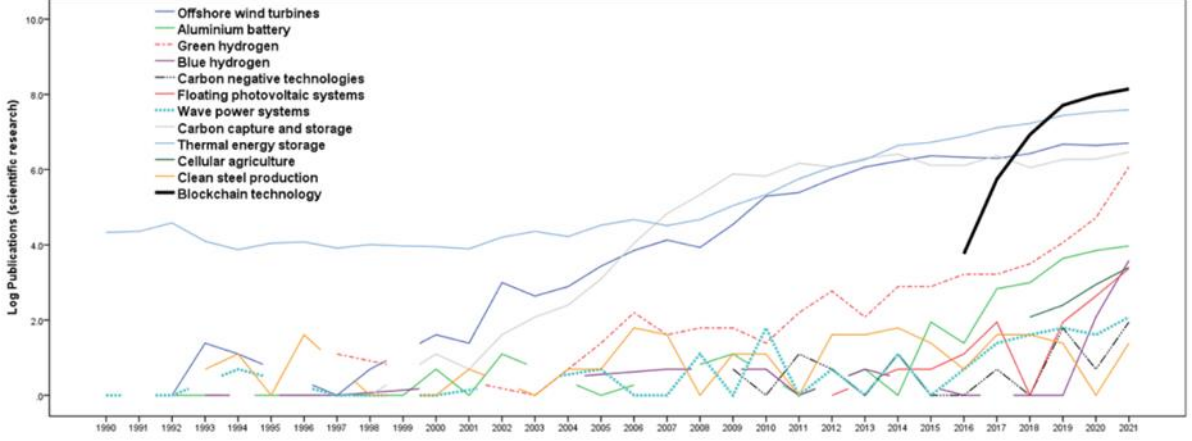
Model [2]: Şekil 1 ve 2’deki eğilimlerin analizi sonrasında, Model [2] ile elde edilen veriler birleştirilip daha ileri analizler yapılacaktır.

- Bu model, zaman içindeki göreceli büyüme hızını değerlendirecektir.

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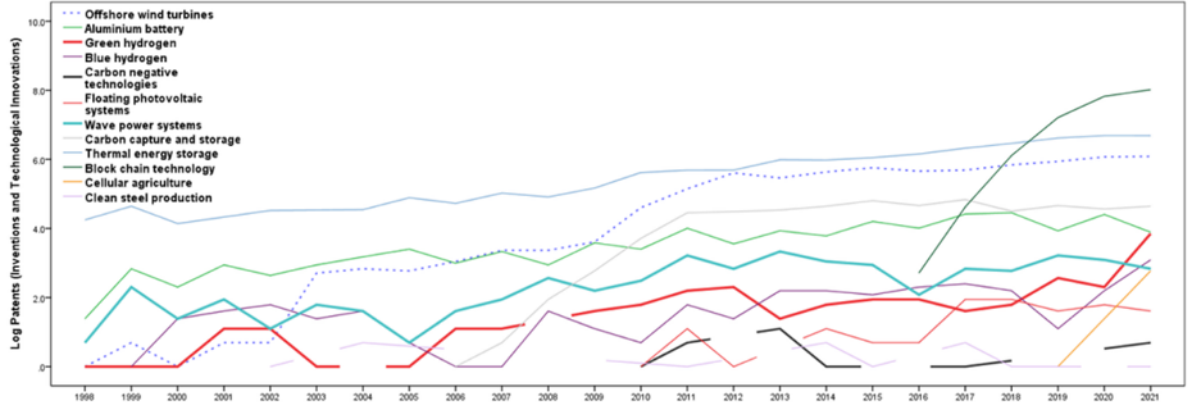
- Göreceli büyüme hızı, her bir sürdürülebilir teknolojinin ne kadar hızlı geliştiğine dair değerli bilgiler sağlayacaktır.

Şekil 1. Sürdürülebilir Geleceğe Yönelik Teknoloji Araştırma Çıktılarındaki Eğilimler



Not: Eğilimlerin daha iyi görselleştirilebilmesi için dönem 1990 yılında başlamaktadır.

Şekil 2. Sürdürülebilir Bir Patent Sistemine Yönelik Teknolojik Yollar



Not: Eğilimlerin daha iyi görselleştirilebilmesi için dönem 1998 yılında başlamaktadır.

3.2. Genel Yaklaşım

Bu yaklaşım, veri dönüşümü ve iki farklı modelden yararlanarak aşağıdaki hedeflere ulaşmayı amaçlamaktadır:

- **Eğilimleri Görselleştirme:** Her bir sürdürülebilir teknoloji için bilimsel gelişimi ve patent faaliyetlerini zaman içerisinde net bir şekilde ortaya koymak (Şekil 1 ve 2).
- **Büyüme Oranlarını Analiz Etme:** Model [2] kullanılarak her bir teknolojinin göreceli büyüme oranını niceliksel olarak değerlendirmek. Bu analiz, en hızlı ilerleyen sürdürülebilir teknolojileri belirleyecektir.

Sustainable technologies	Coefficient b_1	Constant a	F	R ²
Offshore wind turbines	1.062***	-0.968**	391.65***	.949
Floating photovoltaic systems	.309	.840*	2.75	.282
Wave power systems	.840**	1.16***	7.68**	.22
Green hydrogen	.584***	.101	45.84***	.741
Blue hydrogen	.542*	.956***	6.33*	.297
Carbon negative technologies	.039	.383	.015	.004
Clean steel production	-.063	.379	.046	.005
Aluminum battery	.600***	2.295***	19.71***	.461
Carbon Capture storage	2.28***	-9.73***	165.09***	.92
Thermal energy storage	.935**	.036	319.33***	.87
Cellular agriculture	2.76*	-6.65*	374.61*	.99
Blockchain technology	1.22***	-2.100**	317.03***	.99

Tablo 2, Model [2]'den regresyon katsayılarına dayanarak, önemli büyüme potansiyeline sahip birkaç sürdürülebilir teknolojiyi ortaya koymaktadır ($B > 1$). Bu teknolojiler, sürdürülebilirlik zorluklarını ele alan teknolojik evrim için hızlandırılmış bir yolu temsil eder. Bunlar şunları içerir:

- Açık Deniz Rüzgar Türbinleri: Bu teknoloji, denizdeki rüzgar enerjisini kullanarak güçlü ve potansiyel olarak ölçeklenebilir bir yenilenebilir enerji kaynağı sunar.
- Karbon Yakalama ve Depolama (CCS): CCS teknolojileri, enerji santralleri gibi kaynaklardan gelen karbon emisyonlarını yakalar ve bunları yeraltında depolayarak atmosfere salınmasını önler.
- Hüresel Tarım: Bu yeni alan, kontrollü ortamlarda hayvan hücrelerinden et, deniz ürünleri ve diğer hayvansal ürünleri yetiştirmeye odaklanır. Daha sürdürülebilir ve etik gıda üretimi için potansiyel sunar.
- Blok Zinciri Teknolojisi: Kripto para birimindeki uygulamalarıyla bilinen blok zinciri teknolojisi, çeşitli tedarik zincirlerinde şeffaflığı ve izlenebilirliği iyileştirmek ve potansiyel olarak sürdürülebilirlik uygulamalarını teşvik etmek için de kullanılabilir.

Bunun aksine, Tablo 2 ayrıca daha yavaş bir büyüme oranına sahip teknolojileri de tanımlamaktadır ($B < 1$): Dalga Güç Sistemleri; Yeşil Hidrojen; Mavi Hidrojen; Alüminyum Pil; Termal Enerji Depolama. Bu teknolojiler gelecekte hala bir rol oynayabilir, ancak gelişimleri daha yavaş bir hızda ilerliyor gibi görünüyor. Tablo 2'de listelenen teknolojilerin hızlandırılmış büyümesi ($B > 1$), gelecekteki sürdürülebilirliği önemli ölçüde etkileme potansiyellerini göstermektedir. Bu teknolojiler sosyoekonomik sistemlerde devrim niteliğinde değişimlere yol açabilir. Aşağıdaki bölüm, bu umut verici teknolojileri daha ayrıntılı olarak açıklayacak, potansiyel uygulamalarını ve getirebilecekleri potansiyel ekonomik ve sosyal değişiklikleri vurgulayacaktır.

* Açık deniz rüzgar türbinleri. Rüzgar çiftlikleri iki ana türe ayrılabilir: karada (kara tabanlı) ve açık denizde (deniz tabanlı). Her ikisi de yenilenebilir enerji üretimine katkıda bulunurken, açık deniz rüzgar çiftlikleri birkaç farklı avantaj sunar. Gonzalo et al., (2022) tarafından yapılan çalışmalar, daha fazla güç üretme potansiyeli, daha düşük çevresel etkiye sahip olma ve daha büyük kurulumları barındırma gibi bu avantajları vurgulamaktadır. Bu faktörler, açık deniz rüzgar çiftliklerini yenilenebilir enerji sektöründe daha sürdürülebilir bir gelecek için umut verici bir teknoloji olarak konumlandırıyor. Rüzgar enerjisi teknolojisinin kendisi olumlu bir yörünge yaşıyor. Oh (2020) tarafından yapılan araştırma, üretim ve bakım maliyetlerinin "öğrenme etkisi" nedeniyle azaldığını göstermektedir. Bu etki, üretim hacmi arttıkça ve deneyim biriktikçe maliyetlerin azaldığı olgusuna atıfta bulunmaktadır. Ek olarak, Oh'un

10th International CEO Communication, Economics, Organization & Social Sciences Congress araştırması rüzgar türbinlerinin daha verimli ve güvenilir hale geldiğini ve rüzgar enerjisinin rekabet gücünü daha da artırdığını göstermektedir. Bu olumlu eğilim, 2005 ile 2019 yılları arasında rüzgar enerjisi teknolojisinde önemli bir gelişmeyi belgeleyen Wang et al., (2022) tarafından doğrulanmaktadır. Bu dönemde, küresel kümülatif kurulu rüzgar kapasitesi %1.100'ün üzerinde fırlayarak 2019'un sonunda yaklaşık 651 GW'a ulaştı. Bu büyümenin arkasındaki temel itici güç, sektörün açık deniz rüzgar çiftliklerine olan artan odaklanmasıdır. Açık deniz konumları belirgin avantajlar sunar - daha istikrarlı, daha güçlü rüzgarlar ve kara tabanlı seçeneklere kıyasla daha büyük, daha güçlü türbinler kurma yeteneği. Li et al., (2022) açık deniz rüzgarı ve gelgit akışı enerji üretimini birleştiren hibrit sistemlerin potansiyeli için ikna edici bir durum bile sunuyor. Bu tür sistemler kıyı topluluklarının önemli enerji tasarrufları elde etmesini sağlayabilir.

* Karbon yakalama depolaması. Balaji & Rabiei (2022) tarafından vurgulandığı gibi, iklim değişikliğiyle mücadele ve düşük karbonlu bir ekonomiye geçiş, temel stratejilerin uygulanmasını gerektirir. Bu stratejilerden biri Karbon Yakalama, Depolama ve Kullanımı'dır (CCUS). Karbondioksit boru hatları, CCUS'un güvenli ve etkili bir şekilde konuşlandırılması için kritik teknolojiler olarak hizmet eder ve bu yaklaşım için gereken altyapının temel bir bileşenini oluşturur. Elavarasan et al., (2022), iklim nötrlüğüne ulaşmanın karbonsuzlaştırma politikalarına çok yönlü bir yaklaşım gerektirdiğini savunarak özellikle Avrupa bölgelerine hitap etmektedir. Araştırmaları, biyoenerji ve jeotermal kaynaklarla beslenen bölgesel ısıtma ağlarının temiz ısı üretimi için özel bir vaat sunduğunu göstermektedir. Ek olarak, hidrojen kullanımı ve CCUS teknolojilerindeki gelişmeler, ağır sanayi veya ulaşım gibi azaltılması özellikle zor olan sektörlerin karbonsuzlaştırılmasında önemli bir rol oynayabilir. Gadikota (2021), enerji ve kaynak dönüşümüyle ilişkili karbon ayak izini en aza indiren yeni kimyasal süreçlerin geliştirilmesinin önemini vurgulamaktadır. Mevcut CO2 emisyonlarını yakalamak, yeniden kullanmak ve depolamak için tasarlanmış çeşitli müdahaleci teknolojiler alanında araştırma çalışmaları devam etmektedir. Chapman et al., (2022), küresel ısınmayı 1,5 santigrat derece ile sınırlamanın karbon nötrlüğüne ulaşmayı gerektirdiğini vurgulamaktadır. Bu iddialı hedef, aşağıdakiler de dahil olmak üzere çeşitli teknolojilerdeki ilerlemeler yoluyla elde edilebilir: Hidrojen malzemeleri; Biyomimetik katalizörler; Elektrokimyasal prosesler; Termal enerji ve emilim prosesleri; CCUS Teknolojileri; Daha düşük çevresel etkiye sahip soğutucular. Uluslararası iş birliği ve disiplinler arası politika çerçevelerinin oluşturulması, bu hedefe ulaşmak için çok önemlidir. Araştırmacılar ve yenilikçiler, uluslararası iş birliğini teşvik ederek ve destekleyici bir politika ortamı yaratarak bu kritik teknolojilerin geliştirilmesini ve dağıtımını hızlandırabilir ve daha sürdürülebilir bir geleceğe giden yolu açabilirler.

* Hücresel tarım. Tarım iki ucu keskin bir kılıçtır. İnsan toplumlarını gıda sağlayarak sürdürürken, aynı zamanda sera gazı emisyonlarına da önemli ölçüde katkıda bulunur. Cho (2022), tarımın CO2 emisyonlarının %1'inden ve metan emisyonlarının %38'inden sorumlu olduğunu, ikincisinin birincil sorumlusunun ise hayvancılık olduğunu tahmin ediyor. Tarımsal emisyonlar gezegenimizin iklim istikrarı için önemli bir tehdit oluşturuyor. Ancak sürdürülebilir çiftçilik uygulamaları bir umut ışığı sunuyor. Bu uygulamalar tarımın çevresel ayak izini önemli ölçüde azaltabilir ve daha sürdürülebilir bir geleceğe giden yolu açabilir. Sürdürülebilir çiftçilik şemsiyesi altında birkaç temel yaklaşım yer alır:

Rejeneratif Tarım: Bu yöntem toprak sağlığını iyileştirmeye öncelik verir. Sağlıklı toprak, atmosferik karbonu depolayan ve biyolojik çeşitliliği artıran güçlü bir karbon emici görevi görür. Rejeneratif uygulamalar bunu, toprak işlemeyi en aza indirerek, örtü bitkilerini teşvik ederek ve organik maddeyi toprağa geri katarak başarır.

Agroekolojik Sistemler: Bu bütünsel sistemler doğal ekosistemleri taklit ederek dengeli ve üretken bir tarım manzarasını teşvik eder. Agroekoloji, çeşitli bitki ve hayvan türlerini entegre

10th International CEO Communication, Economics, Organization & Social Sciences Congress ederek biyolojik çeşitliliği teşvik eder, kendi kendini düzenleyen ve dayanıklı bir çiftçilik sistemi yaratır.

Hücrel Tarım: Bu yeni teknoloji, laboratuvar ortamında doğrudan hayvan hücrelerinden et ürünleri yetiştirmeyi içerir. Sera gazı emisyonlarına büyük katkıda bulunan geleneksel hayvancılık üretimine göre daha sürdürülebilir bir alternatif olma potansiyeline sahiptir.

Tarımda paradigma değişimine duyulan aciliyet, öngörülen nüfus artışıyla daha da artmaktadır. Willett et al., (2019) tarafından yapılan çalışmalar, 2100 yılına kadar küresel nüfusun 10 milyara ulaşacağını tahmin etmektedir. Bu nüfus artışı, artan protein talebiyle bir araya geldiğinde, gıda üretim sistemlerinin kritik bir şekilde yeniden değerlendirilmesini gerekli kılmaktadır. Çevresel zararı en aza indirirken besleyici gıda sağlamak için gıda sistemlerimizi yeniden tasarlamalıyız. Buna ormansızlaşma, CO2 emisyonları, iklim değişikliği ve kirlilik gibi konular dahildir (Bontempi & Coccia, 2021; Bontempi et al., 2021; Coccia, 2020; Edeme et al., 2020; Pronti & Coccia, 2021). Hücrel tarımın bu çabada oyunun kurallarını değiştirme potansiyeli vardır. Hücrel tarımı geleneksel çiftçilik, dikey kentsel çiftçilik ve dijital tarım gibi mevcut uygulamalarla stratejik olarak entegre ederek, gelecek için daha dayanıklı ve sürdürülebilir bir gıda üretim sistemi geliştirebiliriz. Böyle bir sistem, gezegenin yaşamı sürdürme yeteneğini tehlikeye atmadan artan küresel gıda talebini karşılama kapasitesine sahip olacaktır (Bapat et al., 2021). Geleneksel tarımdan sürdürülebilir hücrel tarıma doğru bu sistemik değişim, et ve diğer hayvansal ürünleri daha çevre dostu bir şekilde üretmek için hücre yetiştirme teknolojilerindeki ilerlemelerden yararlanır (Cavallo et al., 2015; Pronti & Coccia, 2021). Ancak, Moritz et al., (2022) tarafından vurgulandığı gibi, geleneksel tarımdan hücrel tarıma büyük ölçekli bir geçiş hemen gerçekleştirilemeyebilir. Politika yapımcılar değişime ihtiyaç olduğunu kabul ediyor, ancak hücrel tarımın gıda sistemlerimizde gerçek anlamda devrim yaratabilmesi için düzenleyici engeller ve tüketici kabulü gibi önemli zorlukların ele alınması gerekiyor. Yine de, devam eden araştırma ve geliştirme çabaları, sürdürülebilir gıda üretiminin çevresel sorumlulukla el ele gittiği bir gelecek için muazzam bir vaat taşıyor.

* Blockchain teknolojisi. Çevresel, sosyal ve ekonomik sürdürülebilirlik zorluklarının artan aciliyeti, mevcut sosyoekonomik sistemlerimizin kritik bir şekilde yeniden değerlendirilmesini teşvik ediyor. Bu bağlamda, blok zinciri teknolojisi temel endüstriyel ve kurumsal dönüşümleri yönlendirme kapasitesine sahip potansiyel bir yıkıcı güç olarak ortaya çıkmaktadır (Howson, 2019; Hughes vd., 2019; Coccia, 2017b; 2020a; Kargı & Coccia, 2023; Kargı et al., 2023b). Blok zincirinin ardındaki temel yenilik, merkezi olmayan mimarisinde yatmaktadır. İşlemler doğrulanır ve veri bütünlüğü, merkezi bir otorite veya aracıya olan ihtiyacı ortadan kaldıran dağıtılmış bir düğüm ağı aracılığıyla sağlanır (Centobelli et al., 2021). Bilgiler, şeffaf ve kurcalanmaya dayanıklı bir kayıt oluşturarak güvenli bir şekilde bir blok zincirinde saklanır. Araştırmalar, bu teknolojinin muazzam bir vaat taşıdığını gösterse de, sağlık hizmeti gibi belirli alanlardaki uygulamaları hala başlangıç aşamasındadır (Esmailzadeh, 2022). Blok zincirinin özellikle umut verici bir uygulaması enerji üretimi alanındadır. 2050 yılına kadar sera gazı emisyonlarını azaltma gibi iddialı iklim hedeflerine ulaşmak için, enerji tedarik sistemlerimize daha yüksek oranda dağıtılmış yenilenebilir enerji kaynakları entegre etmemiz gerekiyor (Javid et al., 2021). Bu, bir paradigma değişimini gerektiriyor; büyük, merkezi enerji santrallerinin egemen olduğu geleneksel, yukarıdan aşağıya modelden uzaklaşıp, enerjinin tüketici düzeyinde üretildiği ve depolandığı merkezi olmayan bir sisteme geçiş. Bu değişim, enerji tüketicilerinin ve üreticilerinin doğrudan eşler arası bir platformda ticaret yapabilecekleri yerel enerji piyasalarının (LEM'ler) geliştirilmesinin önünü açacaktır. Önemli bir şekilde, Strepparava vd. tarafından yapılan araştırma (2022), nesnelerin interneti (IoT) uygulamaları için özel olarak tasarlanmış blok zinciri tabanlı bir LEM'in muazzam bir vaat taşıdığını göstermektedir. Bu sistem, tüketicilerin enerji tüketimleri hakkında bilinçli seçimler yapmalarını sağlayarak, yeni

10th International CEO Communication, Economics, Organization & Social Sciences Congress merkezi olmayan piyasa yapıları ve kullanıcı dostu araçlar yaratabilir. Blok zinciri teknolojisi, enerji kullanımı üzerinde daha fazla şeffaflık ve kontrol sağlayarak enerji sektöründe devrim yaratma ve daha sürdürülebilir bir geleceğe katkıda bulunma potansiyeline sahiptir.

4. Gelecek Perspektifleri

Bu alıntı, teknolojik ilerlemeler ile çevresel sürdürülebilirlik arasındaki karmaşık ilişkiyi araştırıyor. Teknoloji, endüstriyel büyüme ve seri üretim yoluyla insan ilerlemesini beslerken, aynı zamanda kaynak tükenmesine ve çevresel bozulmaya da yol açabilir (Coccia, 2021). Özünde, insan faaliyetleri ve kalkınma genellikle ekosistemler için beklenmeyen olumsuz sonuçlara sahiptir. Çevresel Kuznets eğrisi (EKC) teorisi bu ilişkiyi açıklamaya çalışır. Bu teorinin savunucuları, teknolojik değişiklikler nedeniyle ekonomik kalkınmanın erken aşamalarında kirliliğin arttığını öne süren ters U şeklinde bir eğri varsayarlar. Ancak ülkeler daha yüksek refah seviyelerine ulaştıkça sürdürülebilir teknolojilere yatırım yapabilir ve ekolojik ayak izlerini iyileştirmek için çevre politikaları uygulayabilirler (Ansuategi et al., 1998; Stern, 2004; Kargı et al., 2023, 2023a, 2023b; Coccia, 2018, 2021, 2019a; Uçkaç et al., 2023, 2023a). Mevcut kapitalist model belirli avantajlar sunmaktadır, ancak aynı zamanda aşırı kaynak tüketimini, kaynakların kötü yönetimini (hem yenilenebilir hem de yenilenemez), sosyal eşitsizliği ve çevre kirliliğini de teşvik etmektedir (Baumol et al., 2007). Meadows et al., (1972), kaynak kıtlığı ve tükenmesinden nüfus artışını (Malthus teorisi) sorumlu tutan geleneksel yaklaşıma meydan okumaktadır. Londra Kraliyet Cemiyeti, "devam eden maddi tüketim büyümesine bağlı olmayan sosyo-ekonomik sistemlere ve kurumlara" doğru temel bir değişime ihtiyaç olduğunu vurgulamaktadır (Sulston, 2012). Sermaye birikimini azaltmak, küresel çevresel bozulma tehlikelerini azaltmanın cevabıdır. Yerel, bölgesel ve küresel tüm ölçeklerde ekonomik sistemler eko-yeniliklere, sürdürülebilir teknolojilere ve dairesel ekonomilere öncelik vermelidir (Saeli et al., 2022; Magdoff, 2013; Magdoff & Bellamy Foster, 2011). Bu çok yönlü strateji, çevresel tehlikeleri azaltabilir ve herkes için sağlıklı bir biyosfer sağlayabilir. Çatışmalar, enerji güvensizliği ve iklim değişikliği sonucunda gelecekte uluslararası gerginlik ortaya çıkabilir. Bu zorlukları azaltmak için, sürdürülebilir enerji sistemlerine ve teknolojilerine hızlı bir geçiş şarttır. Kapsamlı bir yeşil politikanın parçası olarak, ülkeler sürdürülebilir teknolojinin ve alternatif yenilenebilir enerji kaynaklarının hızlı bir şekilde geliştirilmesine ve dağıtılmasına öncelik vermelidir. Bu strateji, bu değişimden kaynaklanabilecek olası politik, sosyal ve ekonomik çatışmaları azaltabilir (Calza et al., 2020; Nti et al., 2022).

Sürdürülemez enerji ve endüstriyel politikalar çok sayıda risk oluşturur. Sürdürülebilir bir dünya yaratmak için, bu uygulamalardan uzaklaşmalı ve çevre, kaynak kullanımı ve insan refahı arasında bir denge kurmaya çalışan yeni sürdürülebilir topluluklar oluşturmalıyız. Ekososyalist bir model, kaynak kısıtlamalarıyla başa çıkmada daha fazla iş birliğini teşvik edebilir (Aidnik, 2022; Adaman & Devine, 2022). Ayrıca, iyi tasarlanmış endüstriyel politikalarla desteklenen sürdürülebilir teknolojik yenilik, insan faaliyetlerinin ve ekosistemler üzerindeki çevresel risklerin olumsuz etkilerini azaltmaya yardımcı olabilir (Khan et al., 2022; Sterner & Coria, 2012).

5. Sonuç ve Öneriler

Teknolojik değişim insan gelişimi ve refahı için merkezi bir öneme sahip olsa da, ekosistemler üzerinde önemli bir olumsuz etkiye sahiptir ve antropojenik çevresel değişime neden olur. Ancak, eko-inovasyonların, çevre kirliliğini azaltmayı amaçlayan yeni sosyoekonomik yapıların, sürdürülebilir teknolojilerin ve yeşil stratejilerin yaratılması ve uygulanması sayesinde bu olumsuz etkilerden bazılarının uzun vadede hafifletilmesi mümkündür. Kısaca ifade etmek gerekirse, insan faaliyeti sürdürülebilir ekonomik ve teknik

10th International CEO Communication, Economics, Organization & Social Sciences Congress gelişmeleri içeren uzun vadeli planlara daha yüksek bir öncelik vermelidir. Bu, fosil yakıtlara bağımlı ekonomilerden uzaklaşmamızı destekleyecek ve sonunda insan faaliyetinin ekosistemlere verdiği zararı azaltarak gelecek nesillerin refahını koruyacaktır. Linstone'un (2010, s.1417) vurguladığı gibi, "Küresel gelecek, sürdürülebilir uzun vadeli bir gelecek için yakın vadede harekete geçme isteğimize büyük ölçüde bağlı olacaktır" (bkz. Rosen, 2010). Bu çalışmada, gelecekteki sürdürülebilirliğe yol açacak kritik teknik yolları belirlemek için deneysel veriler kullanılmıştır. Ancak, koşulların hızla değişebileceğini kabul etmek çok önemlidir. Teknolojik ilerleme, insan çatışmaları, devam eden üretim süreçleri ve önemli kaynak tükenmesi sonucunda çevre ve büyüyen insan nüfusu karmaşık ve sürekli değişen sonuçlara maruz kalmaktadır. Sonuç olarak, burada sunulan bulgular bu karmaşık sistemlere ve etkileşimlere geçici ve eksik bir pencere sunmaktadır. Bu dezavantajlara rağmen, araştırma, sağlık ve çevresel tehlikeleri ve kirliliği azaltabilecek sürdürülebilir büyüme için önemli teknik yollar belirlemektedir. Sürdürülebilir teknolojiye heyecan verici yeni gelişmelerin bu özetleri, fon sağlayan kuruluşların ve yasa koyucuların karar almalarına yardımcı olmak için içgörülü bilgiler sunmaktadır. Belirli araştırma alanlarına kaynak tahsisi ve sürdürülebilir sosyoekonomik sistemlerin yaratılmasını hızlandırabilecek teknoloji gelişmeleri, sağlanan bilgilerle yönlendirilebilir (Coccia, 2018d, 2019, 2021a; Kargı & Coccia, 2023; Kargı et al., 2023b). Bu sonuçların belirsiz doğasını kabul etmek çok önemlidir. Sonraki araştırmalar, erişilebilir hale geldikçe güncellenmiş bilgileri entegre etmeli ve mümkün olduğunda, burada sergilenen bulguları güçlendirmek için yenilikçi yöntemler kullanılmalıdır. Doğal ve sosyal sistemler arasındaki bağlantıları etkileyen karmaşık ve birbiriyle ilişkili yönler, bu temalar üzerinde ek araştırma yapılmasını gerektirir.

References

- Adam D. (2021). How far will global population rise? Researchers can't agree. *Nature*, 597(7877), 462-465. <https://doi.org/10.1038/d41586-021-02522-6>
- Adaman F., & Pat D. (2022). Revisiting the calculation debate: A call for a multiscale approach, *Rethinking Marxism*, 34(2), 162-192. <https://doi.org/10.1080/08935696.2022.2051374>
- Aidnik M. (2022). Envisioning a utopian ecosocialism in the darkness of the Covid-19 pandemic, *Capitalism Nature Socialism*, 33(2), 44-59. <https://doi.org/10.1080/10455752.2021.2016878>
- Ali A., Audi, M., & Roussel, Y. (2021). Natural resources depletion, renewable energy consumption and environmental degradation: A comparative analysis of developed and Developing World. *International Journal of Energy Economics and Policy*, 11(3), 251-260.
- Ansuategi A, Barbier E.B., & Perrings C.A. (1998). The environmental Kuznets curve. In J.C.J.M van den Bergh, M.W Hofkes (Eds.), *Theory and implementation of economic models for sustainable development*, Kluwer, Dordrecht.
- Ayres R.U. (1998). Towards a disequilibrium theory of endogenous economic growth. *Environmental and Resource Economics*, 11(3-4), 289-300. <https://doi.org/10.1023/A:1008239127479>
- Ayres R.U. (1990). Technological transformations and long waves. Part II. *Technological Forecasting and Social Change*, 37(2), 111-137. [https://doi.org/10.1016/0040-1625\(90\)90065-4](https://doi.org/10.1016/0040-1625(90)90065-4)
- Ayres R.U. (1990a). Technological transformations and long waves. Part I. *Technological Forecasting and Social Change*, 37(1), 1-37. [https://doi.org/10.1016/0040-1625\(90\)90057-3](https://doi.org/10.1016/0040-1625(90)90057-3)
- Balaji K., & Rabiei M. (2022). Carbon dioxide pipeline route optimization for carbon capture, utilization, and storage: A case study for North-Central USA. *Sustainable Energy Technologies and Assessments*, 51, 101900. <https://doi.org/10.1016/j.seta.2021.101900>
- Bapat S., Koranne V., Shakelly N., (...), Rajurkar K.P., & Malshe A.P. (2022). Cellular agriculture: An outlook on smart and resilient food agriculture manufacturing. *Smart and Sustainable Manufacturing Systems*, 6(1), pp. 1-11. <https://doi.org/10.1520/SSMS20210020>
- Baumol W. J., Litan R.E., & Schramm C.J. (2007). *Good Capitalism, Bad Capitalism, and the Economics of Growth and Prosperity*, Yale University Press: New Haven.
- Belpomme D., Irigaray P., Hardell L., Clapp R., Montagnier L., Epstein S., & Sasco A.J. (2007). The multitude and diversity of environmental carcinogens, *Environmental Research*, 105(3), 414-429. <https://doi.org/10.1016/j.envres.2007.07.002>

10th International CEO Communication, Economics, Organization & Social Sciences Congress

- Bontempi E., & Coccia M. (2021). International trade as critical parameter of COVID-19 spread that outclasses demographic, economic, environmental, and pollution factors, *Environmental Research*, 201, n.111514. <https://doi.org/10.1016/j.envres.2021.111514>
- Bontempi E., Coccia M., Vergalli S., & Zanoletti A. (2021). Can commercial trade represent the main indicator of the COVID-19 diffusion due to human-to-human interactions? A comparative analysis between Italy, France, and Spain, *Environmental Research*, 201, n.111529. <https://doi.org/10.1016/j.envres.2021.111529>
- Bowman D.M. et al. (2011). The human dimension of fire regimes on Earth. *Journal of Biogeography*, 38(12), 2223–2236. <https://doi.org/10.1111/j.1365-2699.2011.02595.x>
- Calza F., Parmentola A., & Tutore I. (2020). Big data and natural environment. How does different data support different green strategies? *Sustainable Futures*, 2, n.100029. <https://doi.org/10.1016/j.sfr.2020.100029>
- Campbell C.J. (2002). Petroleum and people. *Population and Environment*, 24(2), 193–207. <https://doi.org/10.1023/A:1020752205672>
- Cavallo, E., Ferrari E., & Coccia M. (2015). Likely technological trajectories in agricultural tractors by analysing innovative attitudes of farmers. *International Journal of Technology, Policy and Management*, 15(2), 158-177. <http://dx.doi.org/10.1504/IJTPM.2015.069203>
- Centobelli P., Cerchione R., Del Vecchio P., Oropallo E., & Secundo G. (2021). Blockchain technology for bridging trust, traceability and transparency in circular supply chain. *Information & Management*, 59(7), n.103508. <https://doi.org/10.1016/j.im.2021.103508>
- Chapman, A., Ertekin, E., Kubota, M., (...), Kirchheim, R., & Sofronis, P. (2022). Achieving a carbon neutral future through advanced functional materials and technologies, *Bulletin of the Chemical Society of Japan*, 95(1), 73-103. <https://doi.org/10.1246/bcsj.20210323>
- Chin A., Fu R., Harbor J., Taylor M.P., & Vanacker V. (2013) Anthropocene: Human interactions with earth systems, *Anthropocene*, 1(1-2), <https://doi.org/10.1016/j.ancene.2013.10.001>
- Cho R. (2022). What is decarbonization, and How Do We Make It Happen? Columbia Climate School, Retrieved from: <https://news.climate.columbia.edu/2022/04/22/what-is-decarbonization-and-how-do-we-make-it-happen/>
- Coccia M. (2009). Measuring the impact of sustainable technological innovation. *International Journal of Technology Intelligence and Planning*, 5(3), 276–288. <https://doi.org/10.1504/IJTIP.2009.026749>
- Coccia M. 2010. Foresight of technological determinants and primary energy resources of future economic long waves. *International Journal of Foresight and Innovation Policy*, 6(4), 225-232. <https://doi.org/10.1504/IJFIP.2010.037468>
- Coccia M. (2014). Steel market and global trends of leading geo-economic players. *International Journal of Trade and Global Markets*, 7(1), 36-52. <http://dx.doi.org/10.1504/IJTGM.2014.058714>
- Coccia M. (2017b). The Fishbone diagram to identify, systematize and analyze the sources of general purpose technologies. *Journal of Social and Administrative Sciences*, 4(4), 291-303. <http://dx.doi.org/10.1453/jsas.v4i4.1518>
- Coccia M. (2017c). New directions in measurement of economic growth, development and under development, *Journal of Economics and Political Economy*, 4(4), 382-395, <http://dx.doi.org/10.1453/jepe.v4i4.1533>
- Coccia M. (2018). An introduction to the theories of national and regional economic development, *Turkish Economic Review*, 5(4), 350-358. <http://dx.doi.org/10.1453/ter.v5i4.1794>
- Coccia M. (2018d). Motivation and theory of self-determination: Some management implications in organizations, *Journal of Economics Bibliography*, 5(4), 223-230, <http://dx.doi.org/10.1453/jeb.v5i4.1792>
- Coccia M. (2019). Intrinsic and extrinsic incentives to support motivation and performance of public organizations, *Journal of Economics Bibliography*, 6(1), 20-29, <http://dx.doi.org/10.1453/jeb.v6i1.1795>
- Coccia M. (2019a). Comparative world-systems theories. A. Farazmand (ed.), *Global Encyclopedia of Public Administration, Public Policy, and Governance*, Springer. https://doi.org/10.1007/978-3-319-31816-5_3705-1
- Coccia M. (2020). Factors determining the diffusion of COVID-19 and suggested strategy to prevent future accelerated viral infectivity similar to COVID, *Science of the Total Environment*, 729, n.138474. <https://doi.org/10.1016/j.scitotenv.2020.138474>
- Coccia M. (2020a). Fishbone diagram for technological analysis and foresight. *International Journal of Foresight and Innovation Policy*, 14(2-4), 225-247. <https://doi.org/10.1504/IJFIP.2020.111221>
- Coccia M. (2021). Effects of human progress driven by technological change on physical and mental health, *Studi di Sociologia*, 2(1), 113-132. https://doi.org/10.26350/000309_000116
- Coccia M. (2021a). Comparative critical decisions in management. In: Farazmand A. (eds), *Global Encyclopedia of Public Administration, Public Policy, and Governance*. Springer, Cham. https://doi.org/10.1007/978-3-319-31816-5_3969-1
- Coccia M., & Bellitto M. (2018). A critique of human progress: a new definition and inconsistencies in society, *Quaderni IRCrES-CNR*, 4(3), 51–67. <http://dx.doi.org/10.23760/2499-6661.2018.017>

10th International CEO Communication, Economics, Organization & Social Sciences Congress

- Coccia M., Mosleh M., & Roshani S. (2022). Evolution of quantum computing: Theoretical and innovation management implications for emerging quantum industry. *IEEE Transactions on Engineering Management*, 71, 1-11. <https://doi.org/10.1109/TEM.2022.3175633>
- Constant K., Nourry C., & Seegmuller T. (2014). Population growth in polluting industrialization, *Resource and Energy Economics*, 36(1), 229-247. <https://doi.org/10.1016/j.reseneeco.2013.05.004>
- Crutzen P.J., & Stoermer E.F. (2000). The Anthropocene, *Global IGBP Change Newsletter*, 41, 17-18.
- Edeme R.K., Nelson C.N., Janefrancis C.I., Winnie O.A. (2020). Infrastructural development, sustainable agricultural output and employment in ECOWAS Countries, *Sustainable Futures*, 2, bn.100010, <https://doi.org/10.1016/j.sfr.2020.100010>
- Elavarasan R.M., Pugazhendhi R., Irfan M., Miteht-Popa L., Khan I.A., & Campana P.E. (2022). State-of-the-art sustainable approaches for deeper decarbonization in Europe – An endowment to climate neutral vision. *Renewable and Sustainable Energy Reviews*, 159, n.112204. <https://doi.org/10.1016/j.rser.2022.112204>
- Esmailzadeh, P. (2022). Benefits and concerns associated with blockchain-based health information exchange (HIE): a qualitative study from physicians' perspectives. *BMC Medical Informatics and Decision Making*, 22(1), 80. <https://doi.org/10.1186/s12911-022-01815-8>
- Foley S.F., Gronenborn D., (...) Sirocko F., & Crutzen P.J. (2013). The Palaeoanthropocene – The beginnings of anthropogenic environmental change, *Anthropocene*, 3, 83–88. <https://doi.org/10.1016/j.ancene.2013.11.002>
- Gadikota G. (2021). Carbon mineralization pathways for carbon capture, storage and utilization. *Communications Chemistry*, 4(1), 23. <https://doi.org/10.1038%2Fs42004-021-00461-x>
- Glikson A. (2013). Fire and human evolution: The deep-time blueprints of the Anthropocene. *Anthropocene*, 3, 89-92. <https://doi.org/10.1016/j.ancene.2014.02.002>
- Global Change (2022). Population growth. A project of the University of California Museum of Paleontology. Retrieved from: <https://ugc.berkeley.edu/background-content/population-growth/>
- Gonzalo P.A., Benmessaoud, T., Entezami, M., & Márquez, F.P. (2022). Optimal maintenance management of offshore wind turbines by minimizing the costs, *Sustainable Energy Technologies and Assessments*, 52, 102230. <https://doi.org/10.1016/j.seta.2022.102230>
- Hausfather Z., & Peters G.P. (2020). Emissions - the 'business as usual' story is misleading. *Nature*, 577(7792), 618-620. <https://doi.org/10.1038/d41586-020-00177-3>
- Howson P. (2019). Tackling climate change with blockchain. *Nature Climate Change*, 9, 644-645. <https://doi.org/10.1038/s41558-019-0567-9>
- Hughes A., Park A., Kietzmann J., & Archer-Brown C. (2019). Beyond Bitcoin: what blockchain and distributed ledger technologies mean for firms. *Business Horizons*, 62(3), 273-281. <https://doi.org/10.1016/j.bushor.2019.01.002>
- IPCC (2007). *Summary for Policymakers, in Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge University Press: Cambridge.
- IPCC (2013). *Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press: Cambridge.
- Javid I., Chauhan A., Thappa S., Verma S.K., Anand Y., Sawhney A., Tyagi V.V., & Anand S. (2021). Futuristic decentralised clean energy networks in view of inclusive-economic growth and sustainable society. *Journal of Cleaner Production*, 309, n.127304. <https://doi.org/10.1016/j.jclepro.2021.127304>
- Kargı, B., & Coccia, M. (2023). Emerging innovative technologies for environmental revolution: a technological forecasting perspective. *International Journal of Innovation*, 12(3), e27000. <https://doi.org/10.5585/2024.27000>
- Kargı, B., Coccia, M., & Uçkaç, B.C. (2023). How does the wealth level of nations affect their COVID19 vaccination plans? *Economics, Management and Sustainability*, 8(2), 6-19. <https://doi.org/10.14254/jems.2023.8-2.1>
- Kargı, B., Coccia, M., & Uçkaç, B.C. (2023a). The relation between restriction policies against Covid-19, economic growth and mortality rate in society. *Migration Letters*, 20(5), 218-231. <https://doi.org/10.47059/ml.v20i5.3538>
- Kargı, B., Coccia, M., & Uçkaç, B.C. (2023b). Findings from the first wave of Covid-19 on the different impacts of lockdown on public health and economic growth. *International Journal of Economic Sciences*, 12 (2), 21-39. <https://doi.org/10.52950/ES.2023.12.2.002>
- Kargı, B., Coccia, M., & Uçkaç, B.C., & Rasyidah. (2023c). Determinants generating general purpose technologies in economic systems: A new method of analysis and economic implications. *International Journal on Informatics Visualization*, 8(3-2), 1791-1801. <https://dx.doi.org/10.62527/joiv.8.3-2.2657>

- 10th International CEO Communication, Economics, Organization & Social Sciences Congress**
- Khan M.N., Huang J., Shah A., (...), Zhang H., & Núñez-Delgado A. (2022). Mitigation of greenhouse gas emissions from a red acidic soil by using magnesium-modified wheat straw biochar. *Environmental Research*, 203, n.111879. <https://doi.org/10.1016/j.envres.2021.111879>
- La Scalia G., La Fata C.M., Certa A., & Micale R. (2022). A multifunctional plant for a sustainable reuse of marble waste toward circular economy. *Waste Management & Research*, 40(6), 806-813. <https://doi.org/10.1177/0734242X211029161>
- Li M., Cao S., Zhu X., & Xu Y. (2022). Techno-economic analysis of the transition towards the large-scale hybrid wind-tidal supported coastal zero-energy communities. *Applied Energy*, 316, no.119118. <https://doi.org/10.1016/j.apenergy.2022.119118>
- Linstone H.A. (2010). Historians and complexity: trends vs. collapses? *Technological Forecasting and Social Change*, 77(8), 1415-1428. <https://doi.org/10.21203/rs.3.rs-2323975/v1>
- Magdoff F. 2013. Global Resource Depletion: Is Population the Problem? *Monthly Review*, 64(8), 1-20. https://doi.org/10.14452/MR-064-08-2013-01_2
- Magdoff F., & Foster J.B. (2011). *What Every Environmentalist Needs to Know About Capitalism*. Monthly Review Press, New York, pp.124-131.
- Marsh G.P. (1864). *Man and Nature*. Reprinted in 1965. Harvard University Press: Cambridge.
- Meadows D., Meadows D. Randers J., & Behrens III W.W (1972). *The Limits to Growth; A Report for the Club of Rome's Project on the Predicament of Mankind*. Universe Books: New York.
- Moritz J., Tuomisto H.L., & Ryyänen T. (2022). The transformative innovation potential of cellular agriculture: Political and policy stakeholders' perceptions of cultured meat in Germany, *Journal of Rural Studies*, 89, 54-65. <https://doi.org/10.1016/j.jrurstud.2021.11.018>
- Moss, R., Edmonds, J., Hibbard, K. et al. (2010). The next generation of scenarios for climate change research and assessment. *Nature*, 463, 747-756. <https://doi.org/10.1038/nature08823>
- NASA Global Climate Change, (2022). The Effects of Climate Change. Retrieved from: <https://climate.nasa.gov/effects/> (Accessed March 2022)
- Nti K.E., Cobbina S.J., Attafuah E.E., Opoku E., & Gyan M.A., (2022). Environmental sustainability technologies in biodiversity, energy, transportation and water management using artificial intelligence: A systematic review, *Sustainable Futures*, 4, n.100068. <https://doi.org/10.1016/j.sfr.2022.100068>
- Oh H.S. (2020). Unit commitment considering the impact of deep cycling, *Sustainable Futures*, 2, n.100031. <https://doi.org/10.1016/j.sfr.2020.100031>
- Pronti A., & Coccia M. (2021). Agroecological and conventional agricultural systems: comparative analysis of coffee farms in Brazil for sustainable development, *International Journal of Sustainable Development*, 23(3-4), 223-248. <https://doi.org/10.1504/IJSD.2020.115223>
- Rosen R.A., Electric C., & Raskin P.D. (2010). *Global Scenarios for the Century Ahead*, Tellus Institute.
- Ruddiman W.F. (2003). The anthropogenic greenhouse era began thousands of years ago. *Climate Change*, 61, 261-293. <https://doi.org/10.1023/B:CLIM.0000004577.17928.fa>
- Saeli M.i, N. Capela M., Campisi T., Seabra M.P., Tobaldi D.M., & La Fata C.M. (2022). Architectural technologies for life environment: Spent coffee ground reuse in lime-based mortars. A preliminary assessment for innovative green thermo-plasters, *Construction and Building Materials*, 319, n.126079. <https://doi.org/10.1016/j.conbuildmat.2021.126079>
- Sahal D. (1981). *Patterns of Technological Innovation*, Addison-Wesley Publishing Company, Inc.: Reading, MA.
- Sanni M., & Verdolini E. (2022). Eco-innovation and openness: Mapping the growth trajectories and the knowledge structure of open eco-innovation. *Sustainable Futures*, 4, n.100067. <https://doi.org/10.1016/j.sfr.2022.100067>
- Scopus (2022). Start exploring, search documents. Retrieved from: <https://www.scopus.com/search/form.uri?display=basic#basic> (accessed "5 March 2022).
- Steffen W., Crutzen P.J., & McNeill J.R. (2007). The Anthropocene: are humans now overwhelming the great forces of nature? *AMBIO*, 36, 614-621. [https://doi.org/10.1579/0044-7447\(2007\)36\[614:taahno\]2.0.co;2](https://doi.org/10.1579/0044-7447(2007)36[614:taahno]2.0.co;2)
- Steingraber S. (1997) *Industrial pollution, pesticides, and cancer. Living Downstream. An Ecologist Looks at Cancer and the Environment*. Reading, Addison-Wesley: Massachusetts.
- Stern D.I. (2004). The rise and fall of the environmental Kuznets Curve, *World Development*, 32(8), 1419-1439. <https://doi.org/10.1016/j.worlddev.2004.03.004>
- Sterner T., & Coria J. (2012). *Policy Instruments for Environmental and Natural Resource Management*, 2nd ed. RFF Press and Routledge, New York, NY.
- Sterner T., Jeroen C.J., & Van Den Bergh M. (1998). Frontiers of environmental and resource economics, *Environmental and Resource Economics*, 11(3-4), 243-260. <https://doi.org/10.1023/A:1008236412072>
- Strepparava D., Nespoli L., Kapassa E., (...), Katelaris L., & Medici V. (2022). Deployment and analysis of a blockchain-based local energy market, *Energy Reports*, 8, 99-113. <https://doi.org/10.1016/j.egyr.2021.11.283>
- Sulston J. (2012). *People and the Planet*, The Royal Society (Britain), Retrieved from: <http://royalsociety.org>



- 10th International CEO Communication, Economics, Organization & Social Sciences Congress**
- Tollefson J. (2020). How hot will Earth get by 2100? *Nature*, 580(7804), 443-445. <https://doi.org/10.1038/d41586-020-01125-x>
- Uçkaç, B.C., Coccia, M., & Kargı, B. (2023a). Diffusion COVID-19 in polluted regions: Main role of wind energy for sustainable and health, *International Journal of Membrane Science and Technology*, 10(3), 2755-2767. <https://doi.org/10.15379/ijmst.v10i3.2286>
- Uçkaç, B.C., Coccia, M., & Kargı, B., (2023). Simultaneous encouraging effects of new technologies for socioeconomic and environmental sustainability. *Bulletin Social-Economic and Humanitarian Research*, 19(21), 100-120. https://doi.org/10.52270/26585561_2023_19_21_100
- Wang L., Kolios A., Liu X., Venetsanos D., & Rui, C. (2022). Reliability of offshore wind turbine support structures: A state-of-the-art review. *Renewable and Sustainable Energy Reviews*, 161, no.112250. <https://doi.org/10.1016/j.rser.2022.112250>
- Willett W., Rockström J., Loken B., (...) VNihtar S., Murray C.J.L. (2019). Food in the anthropocene: the EAT-Lancet Commission healthy diets from sustainable food systems, *Lancet*, 393 (10170), 447-492. [https://doi.org/10.1016/s0140-6736\(18\)31788-4](https://doi.org/10.1016/s0140-6736(18)31788-4)
- Zalasiewicz J., Williams M., Haywood A., & Ellis M. (2011). The anthropocene: A new epoch of geological time?, *Philosophical Transactions of the Royal Society A*, 369, 835-841. <https://doi.org/10.1098/rsta.2010.0339>



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**Sürdürülebilir Teknolojilerin Evrimsel Süreçleri: Yayınlar ve Patentler
Üzerine Bir İnceleme**

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ÖZET

Bu çalışmada, sürdürülebilir teknolojilerin bilimsel gelişimi ve patentleme süreçleri analiz edilmiştir. Çalışma, sürdürülebilir teknolojilerin evrimsel sürecine dair önemli veriler sunmakta ve bu teknolojilerin büyüme hızlarına dair model bazlı bir değerlendirme yapmaktadır. Çalışmanın ana hedefi, belirli sürdürülebilir teknolojilerin gelişim hızlarını belirlemek ve bu hızların çevresel ve ekonomik sürdürülebilirlik üzerindeki potansiyel etkilerini incelemektir. Veriler, bilimsel yayınlar ve patent başvuruları üzerinden analiz edilmiştir. Offshore rüzgar türbinleri, karbon yakalama ve depolama (CCS), hücresel tarım ve blockchain teknolojisi, gelişim hızı yüksek olan teknolojiler arasında yer almaktadır. Bu teknolojiler, özellikle yenilenebilir enerji üretimi, karbon emisyonlarının azaltılması ve gıda üretimi alanlarında önemli değişimler yaratma potansiyeline sahiptir. Bununla birlikte, dalga enerjisi, yeşil hidrojen ve mavi hidrojen gibi teknolojiler daha yavaş bir evrim süreci göstermektedir. Çalışma, sürdürülebilir teknolojilerin gelişim hızlarını belirleyen faktörleri ve bu teknolojilerin toplumsal ve ekonomik dönüşüm potansiyellerini tartışmaktadır. Elde edilen bulgular, sürdürülebilir teknolojilerin gelecekteki gelişim süreçlerini anlamak için önemli bir temel sunmaktadır ve bu teknolojilerin ekonomik, çevresel ve toplumsal etkileri üzerine daha fazla araştırma yapılmasının gerekliliğini ortaya koymaktadır.

Anahtar Kelimeler: Sürdürülebilir Teknolojiler, Rüzgar Enerjisi, Karbon Yakalama ve Depolama, Hücresel Tarım, Blockchain Teknolojisi, Teknolojik Gelişim, Patentler, Bilimsel Yayınlar

The Evolutionary Processes of Sustainable Technologies: A Review of Publications and Patents

ABSTRACT

This study analyzes the scientific development and patenting processes of sustainable technologies. It provides critical data on the evolutionary trajectory of these technologies and evaluates their growth rates through model-based assessment. The primary objective of the study is to determine the development speeds of specific sustainable technologies and examine their potential environmental and economic impacts. The data for this study was derived from scientific publications and patent applications. Offshore wind turbines, carbon capture and storage (CCS), cellular agriculture, and blockchain technology are identified as technologies with rapid growth rates. These technologies hold significant potential for driving changes in renewable energy production, carbon emission reduction, and food production. In contrast, wave energy, green hydrogen, and blue hydrogen show slower evolutionary processes. The study discusses the factors influencing the development rates of sustainable technologies and explores their potential for societal and economic transformation. The findings provide a valuable foundation for understanding the future trajectories of sustainable technologies and emphasize the need for further research on their economic, environmental, and social impacts.

Keywords: Sustainable Technologies, Wind Energy, Carbon Capture and Storage, Cellular Agriculture, Blockchain Technology, Technological Development, Patents, Scientific Publications.

1. Giriş

Sürdürülebilir teknoloji, çevresel etkilerin azaltılması ve doğal kaynakların korunması amacıyla geliştirilen yenilikçi çözümleri ifade etmektedir. Bu alandaki ilerlemeler, küresel iklim değişikliği, enerji güvenliği ve ekosistem sağlığı gibi acil çevresel sorunları ele almak için kritik öneme sahiptir (Chapman et al., 2022; Bontempi et al., 2021). Son yıllarda, sürdürülebilir teknolojilerin hızla gelişmesi, çevresel ve ekonomik açıdan daha verimli çözümler sunma potansiyelini artırmıştır. Bu teknolojiler, yenilenebilir enerji, karbon tutma ve depolama, hücresel tarım, blok zinciri gibi çeşitli alanları kapsamakta olup, her biri kendi içinde önemli bir evrimsel gelişim göstermektedir (Li et al., 2022; Moritz et al., 2022; Wang et al., 2022).

Bu çalışma, sürdürülebilir teknolojilerin tarihsel gelişimini inceleyerek, bilimsel araştırmalar ve patent verileri üzerinden yapılan analizleri sunmayı amaçlamaktadır. Özellikle, sürdürülebilir teknolojilerle ilgili literatür taramaları ve patent incelemeleri, bu alanlarda gerçekleşen yenilikleri ve bilimsel bulguları anlamak için kritik bilgiler sunmaktadır (Gadikota, 2021; Esmacilzadeh, 2022). Literatürde yapılan araştırmalar, teknolojik gelişmelerin genellikle bilimsel bilgi birikiminin artışıyla paralel ilerlediğini ve bu süreçlerin, gelecekteki sürdürülebilir çözümlerin gelişimine yol açtığını ortaya koymaktadır (Sahal, 1981; Bapat et al., 2022).

Bununla birlikte, sürdürülebilir teknolojilerin gelişimi, çeşitli zorluklarla karşı karşıya kalmaktadır. Bu zorluklar arasında finansal engeller, regülasyonlar, tüketici kabulü ve teknolojik olgunlaşma süreci yer almaktadır (Moritz et al., 2022; Gonzalo et al., 2022). Ayrıca, bazı teknolojiler hızla gelişirken, diğerleri daha yavaş bir evrimsel süreç izlemektedir. Örneğin, rüzgar enerjisi ve karbon yakalama gibi teknolojiler, hızla gelişen teknolojiler arasında yer alırken, mavi hidrojen ve dalga enerjisi gibi diğer teknolojiler daha yavaş bir gelişim göstermektedir (Balaji & Rabiei, 2022; Strepparava et al., 2022). Bu çalışma, bu teknolojilerin evrimsel süreçlerini daha iyi anlayabilmek için, bilimsel makaleler ve patent başvuruları arasındaki ilişkiyi incelemektedir.

Bu bağlamda, sürdürülebilir teknolojilerin gelişiminin hızını anlamak ve bu gelişmelerin potansiyel etkilerini incelemek, bilim insanları, politika yapıcılar ve sanayi liderleri için büyük bir öneme sahiptir. Gelişen teknolojilerin ekonomik ve toplumsal etkilerini değerlendirmek, daha sürdürülebilir bir geleceğe doğru atılacak adımların temelini atmak adına önemli bir araç sunmaktadır (Elavarasan et al., 2022; Coccia, 2020).

2. Literatür İncelemesi

Sürdürülebilir teknoloji, çevresel sorunları çözüme ve doğal kaynakların korunmasına yönelik geliştirilmiş yenilikçi çözümler olarak tanımlanır. Bu alandaki bilimsel çalışmalar ve patent incelemeleri, sürdürülebilir teknolojilerin evrimsel gelişimi hakkında önemli bilgiler sunmaktadır. Literatür, bu teknolojilerin gelişiminde önemli bir ilerleme kaydedildiğini ve küresel sürdürülebilirlik hedeflerine katkı sağlama potansiyellerini artırdığını göstermektedir. Ancak, bu alandaki teknolojilerin gelişim hızı, çeşitli faktörlere bağlı olarak değişiklik göstermektedir. Bu bölümde, sürdürülebilir teknolojilerin evrimsel süreci ve bu sürecin bilimsel literatüre yansımaları üzerinde durulacaktır.

Sürdürülebilir Teknolojilerin Bilimsel Gelişimi

Sürdürülebilir teknolojilerin evrimi, genellikle bilimsel yayınların artışıyla paralel ilerlemektedir. Chapman et al. (2022) ve Li et al. (2022), sürdürülebilir teknolojilerin akademik literatürdeki artışının, bu alanlardaki yenilikçi gelişmelerin temellerini oluşturduğunu belirtmektedir. Özellikle yenilenebilir enerji, karbon yakalama ve hücresel tarım gibi alanlar, son yıllarda en hızlı büyüyen araştırma alanları arasında yer almaktadır. Bu teknolojiler,

10th International CEO Communication, Economics, Organization & Social Sciences Congress çevresel etkileri azaltarak, enerji verimliliği ve gıda üretim süreçlerini daha sürdürülebilir hale getirmeyi amaçlamaktadır (Wang et al., 2022; Gonzalo et al., 2022).

Rüzgar enerjisi ve karbon yakalama teknolojilerinin hızlı gelişimi, literatürde dikkat çeken başlıca örneklerden biridir. Offshore rüzgar türbinleri, deniz üzerindeki güçlü rüzgarları kullanarak daha büyük ve verimli enerji santralleri kurma potansiyeline sahiptir. Bu teknolojinin gelişiminde, Wang et al. (2022) tarafından yapılan çalışmalar, dünya çapında kurulu rüzgar kapasitesinin 2005-2019 yılları arasında %1100 oranında arttığını ortaya koymaktadır. Bu olumlu trend, rüzgar enerjisinin gelecekte daha geniş çapta uygulanabilirliğini desteklemektedir (Gonzalo et al., 2022; Li et al., 2022; Kargı, 2024).

Patentler ve Teknolojik Yenilikler

Patentler, sürdürülebilir teknolojilerin ticari alandaki potansiyelini değerlendirmede önemli bir araçtır. Sürdürülebilir teknolojiler üzerine yapılan patent başvuruları, yeni ve yenilikçi fikirlerin ticarileşme sürecine nasıl entegre olduğunu gösteren bir gösterge olarak kabul edilir. Elavarasan et al. (2022) ve Bapat et al. (2022), patent analizlerinin teknolojilerin evrimsel süreçlerini ve hangi alanlarda daha fazla yenilik yapıldığını belirlemede kritik bir rol oynadığını ifade etmektedir.

Carbon Capture and Storage (CCS) gibi çevresel etkiyi azaltmaya yönelik teknolojiler, hızla gelişen alanlardan biridir. CCS teknolojileri, CO₂ emisyonlarını yakalayıp depolamakta ve böylece iklim değişikliğiyle mücadele etmektedir. Balaji & Rabiei (2022), karbon yakalama ve depolama teknolojilerinin özellikle ağır sanayi ve ulaşım gibi zor abone edilen sektörler için önemli bir çözüm sunduğunu vurgulamaktadır. Ancak, CCS teknolojisinin küresel ölçekte benimsenmesi, altyapı yatırımları ve politika düzenlemeleri gerektirmektedir (Elavarasan et al., 2022).

Hücresel Tarım ve Blockchain Teknolojisi

Hücresel tarım, son yıllarda gıda üretimi ve çevresel sürdürülebilirlik alanında dikkat çeken bir inovasyondur. Bu teknoloji, geleneksel hayvancılık yöntemlerinden farklı olarak, hayvan hücrelerinden et ve diğer ürünleri üretmeyi hedeflemektedir. Cho (2022), hücresel tarımın, sera gazı emisyonlarını azaltmaya ve daha verimli gıda üretimi yapmaya olanak tanıdığını belirtmektedir. Bontempi ve Coccia (2021), hücresel tarımın gelecekte gıda üretim sistemlerini dönüştürebilecek potansiyele sahip olduğunu ve bu alandaki araştırmaların hızla arttığını vurgulamaktadır.

Blockchain teknolojisi ise son yıllarda, yalnızca finansal sektörle sınırlı kalmayıp, sürdürülebilirlik uygulamalarında da potansiyel göstermektedir. Blockchain, güvenli ve şeffaf veri paylaşımı sağlar ve bu özellikleri ile sürdürülebilirlik hedeflerine ulaşmak için önemli bir araç olabilir. Strepparava et al. (2022), blockchain teknolojisinin, özellikle enerji ticareti ve izlenebilirlik konularında önemli katkılar sunduğunu savunmaktadır. Bu teknoloji, yenilenebilir enerji ticaretinde, enerji üreticileri ve tüketicileri arasında şeffaf bir sistem kurulmasına yardımcı olabilir.

Teknolojilerin Evrimsel Hızı ve Gelecek Perspektifleri

Teknolojilerin evrimsel hızını anlamak, hangi teknolojilerin daha hızlı ilerlediğini ve gelecekte hangi alanlarda önemli yeniliklerin gerçekleşebileceğini değerlendirmek için önemlidir. Örneğin, offshore rüzgar türbinleri ve CCS gibi teknolojiler, hızla gelişen ve sürdürülebilirlik adına önemli katkılar sağlayan alanlar olarak öne çıkmaktadır (Bapat et al., 2022; Strepparava et al., 2022; Kargı & Coccia, 2024a). Bununla birlikte, mavi hidrojen ve dalga enerjisi gibi teknolojiler daha yavaş bir evrim süreci izlemektedir. Bu farklı hızlar, her teknolojinin uygulanabilirliğini ve toplumsal etkisini etkileyebilir.

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Literatür, sürdürülebilir teknolojilerin gelişiminde önemli bir ilerleme kaydedildiğini, ancak bu teknolojilerin hızlarının ve gelişim süreçlerinin farklılık gösterdiğini ortaya koymaktadır. Rüzgar enerjisi, karbon yakalama ve hücrel tarım gibi alanlar hızlı bir şekilde evrimleşirken, bazı teknolojiler daha yavaş bir hızda gelişmektedir. Bu farklılıkları anlamak, sürdürülebilir teknolojilerin gelecekteki gelişim potansiyelleri hakkında önemli ipuçları sunmaktadır.

3. Gelişmekte Olan Teknolojiler: Ayrıntılı İnceleme

Offshore Rüzgar Türbinleri: Deniz bazlı rüzgar türbinleri, karasal türbinlere kıyasla birçok avantaj sunar. Daha düzenli rüzgar akımları, bu türbinlerin enerji üretiminde daha yüksek bir kapasite faktörüne ulaşmasını sağlar (Gonzalo ve ark., 2022). Ayrıca, deniz üzerindeki geniş alanlar daha büyük türbinlerin kurulmasına olanak tanır ve bu da enerji üretiminde ciddi bir artışa yol açar. Li ve ark. (2022), offshore rüzgar türbinlerini gelgit enerjisi ile birleştirerek hibrit enerji sistemlerinin geliştirilmesini önermiştir. Bu, kıyı topluluklarının enerji tasarrufu sağlamasına ve daha sürdürülebilir bir geleceğe ulaşmasına yardımcı olabilir.

Karbon Yakalama ve Depolama (CCS): CCS teknolojileri, fosil yakıt kullanımı nedeniyle oluşan karbon emisyonlarını azaltmak için önemli bir çözüm sunar. Gadikota (2021), yeni kimyasal süreçlerin karbon ayak izini minimize edebileceğini ve karbon emisyonlarını dönüştürmek için yenilikçi yöntemler geliştirdiğini vurgulamaktadır. Bu teknoloji, özellikle ulaşım ve ağır sanayi gibi dekarbonizasyonun zor olduğu sektörlerde hayati bir öneme sahiptir. Avrupa'da, CCS ile desteklenen biyokütle ve jeotermal enerji tabanlı bölgesel ısıtma ağları temiz ısı üretimi için umut vaat etmektedir (Elavarasan ve ark., 2022; Kargı et al., 2024; Kargı & Coccia, 2024; Kargı, 2024).

Hücrel Tarım: Hücrel tarım, hayvancılık kaynaklı yüksek metan emisyonlarını azaltma potansiyeline sahiptir (Cho, 2022). Regeneratif tarım teknikleriyle birlikte bu teknoloji, tarım sektörünün çevresel etkilerini en aza indirebilir. Ancak, bu teknolojinin yaygınlaşması için düzenleyici engellerin aşılması ve tüketici kabulünün artırılması gerekmektedir (Moritz ve ark., 2022).

Blockchain Teknolojisi: Blockchain, enerji sektörü başta olmak üzere birçok alanda sürdürülebilir çözümler sunabilir. Yerel enerji piyasaları (LEMs) oluşturmak için blockchain tabanlı sistemlerin geliştirilmesi, tüketicilere enerji tüketimlerini optimize etme fırsatı sunar (Strepparava ve ark., 2022). Ayrıca, blockchain teknolojisi tedarik zinciri yönetimi ve karbon kredisi takibi gibi alanlarda şeffaflığı artırabilir ve sürdürülebilirlik uygulamalarını güçlendirebilir.

4. Bulguların Politika ve Araştırma İçin Etkileri

Bu teknolojilerin hızlı gelişimi, sürdürülebilir bir gelecek için büyük bir potansiyele işaret etmektedir. Ancak, bu potansiyelin tam anlamıyla gerçekleşebilmesi için aşağıdaki unsurlar dikkate alınmalıdır:

- **Uluslararası İşbirliği:** Teknolojik yeniliklerin geliştirilmesi ve uygulanması, ülkeler arası işbirliğini ve bilgi paylaşımını gerektirir.
- **Politika Destekleri:** Yenilikçi teknolojilerin benimsenmesini hızlandırmak için düzenleyici çerçeveler ve teşvik mekanizmaları oluşturulmalıdır.
- **Ar-Ge Yatırımları:** Hızla gelişen teknolojiler için daha fazla finansman ve araştırma desteği sağlanmalıdır.

Sonuç olarak, offshore rüzgar türbinleri, CCS, hücrel tarım ve blockchain gibi teknolojiler, hem çevresel sürdürülebilirliği artırma hem de sosyoekonomik dönüşümü destekleme potansiyeline sahiptir. Bu teknolojilerin büyüme oranları ve uygulama alanları, sürdürülebilir bir geleceği şekillendirmede önemli bir rol oynayacaktır (Kargı & Coccia, 2024; Kargı et al., 2023; 2023a; 2023b; 2023c; Uçkaç et al., 2023; 2023a; Kargı et al., 2024).

5. Sonuçlar ve Gelecek Yönelimleri

Bu çalışma, sürdürülebilir teknolojilerin zaman içindeki evrimini incelemek için yayınlar ve patentler arasındaki ilişkileri analiz etmiştir. Elde edilen bulgular, belirli teknolojilerin gelişiminde hızlanan bir büyüme gösterdiğini ve bu teknolojilerin gelecekteki sürdürülebilir çözümler için potansiyel taşıdığını göstermektedir. Özellikle, offshore rüzgar türbinleri, karbon yakalama ve depolama (CCS), hücresel tarım ve blockchain teknolojisi gibi alanlarda önemli bir gelişim ivmesi gözlemlenmiştir. Bu teknolojilerin hızla büyüyen gelişim trendleri, hem çevresel hem de ekonomik açıdan dönüşüm sağlayabilecek çözümler sunmaktadır.

Teknolojik Gelişim ve Gelecekteki Perspektifler

- Offshore Rüzgar Enerjisi: Offshore rüzgar türbinlerinin büyüme oranları, deniz tabanında büyük ölçekli türbinlerin kurulmasının getirdiği yenilikçi çözümlerle ivme kazanmıştır. Bu teknolojinin daha geniş alanlara yayılması, daha büyük türbinler ve hibrit enerji sistemleriyle entegre edilmesi, özellikle kıyı bölgelerindeki enerji bağımsızlığını artırabilir.
- Karbon Yakalama ve Depolama: Karbon yakalama ve depolama (CCS) teknolojilerinin gelişmesi, büyük sanayi tesisleri ve enerji üretim tesislerinin dekarbonizasyonunda kritik bir rol oynayacaktır. Bu teknolojilerin hızla benimsenmesi için, daha etkin ve ekonomik depolama çözümleri ile birlikte altyapı yatırımları gereklidir.
- Hücresel Tarım: Bu teknoloji, geleneksel hayvancılık yöntemlerinden daha sürdürülebilir ve çevre dostu bir alternatif sunmaktadır. Ancak, bu teknolojinin yaygınlaşması için hâlâ önemli zorluklar bulunmaktadır, özellikle düzenleyici engeller ve pazar kabulü ile ilgili. Gelecekte bu alandaki araştırmalar, hücresel tarımın daha verimli ve kabul edilebilir hale gelmesine katkı sağlayabilir.
- Blockchain Teknolojisi: Blockchain teknolojisi, şeffaflık, güvenlik ve sürdürülebilirlik alanlarında devrim yaratma potansiyeline sahiptir. Özellikle enerji üretimi ve tüketimi gibi alanlarda, blockchain ile güvenli ve verimli işlemler gerçekleştirilerek, yenilenebilir enerji sistemlerinin optimizasyonu sağlanabilir.

Politikalar ve Stratejiler

Teknolojilerin hızla gelişen doğası göz önüne alındığında, bu alanda güçlü bir politika desteği gereklidir. Çeşitli stratejiler aşağıdaki gibi özetlenebilir:

- Destekleyici Yasal Düzenlemeler: Hükümetler, sürdürülebilir teknolojilerin benimsenmesini hızlandırmak için vergi indirimleri, teşvikler ve yasal düzenlemeler gibi araçları kullanabilirler. Bu tür düzenlemeler, özel sektörün sürdürülebilir inovasyonlara yatırım yapmasını teşvik edebilir.
- Uluslararası İşbirliği ve Ar-Ge Destekleri: Yenilikçi teknolojilerin daha hızlı gelişmesi ve küresel çapta uygulanabilmesi için uluslararası işbirliği kritik öneme sahiptir. Ülkeler arası bilgi paylaşımı ve ortak araştırma programları, teknolojilerin gelişimini hızlandırabilir.
- Toplumun Bilinçlendirilmesi ve Eğitim: Toplumda sürdürülebilir teknolojilere dair farkındalık yaratmak ve bu teknolojilerin faydalarını anlatmak, benimsenmelerini kolaylaştırabilir. Bu bağlamda eğitim ve kamuoyu oluşturma kampanyaları önemlidir.

Gelecekteki Araştırma Alanları

Bu çalışma, sürdürülebilir teknolojilerin gelişimiyle ilgili önemli bulgular ortaya koymuş olsa da, daha fazla araştırma yapılması gereken birçok alan bulunmaktadır:

- Yeni Sürdürülebilir Teknolojilerin Keşfi: Mevcut literatürde yer alan yenilikçi teknolojiler dışında, daha fazla potansiyel sürdürülebilir teknolojinin keşfi ve bu teknolojilerin yaygınlaştırılması için araştırmalar yapılmalıdır.

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- Teknolojik Entegrasyon ve Sistem Dönüşümü: Farklı teknolojilerin birbirleriyle nasıl entegre edilebileceği ve bu entegrasyonun genel sürdürülebilirlik hedeflerine nasıl katkı sağlayabileceği üzerine çalışmalar yapılmalıdır.
- Sosyo-ekonomik Etkiler: Sürdürülebilir teknolojilerin toplumsal ve ekonomik etkilerini inceleyen daha derinlemesine araştırmalar, bu teknolojilerin benimsenmesini hızlandırabilir ve onların toplumsal kabulünü artırabilir.

6. Genel Değerlendirme ve Politika Önerileri

Sürdürülebilir teknolojiler, küresel çevre sorunlarına karşı çözüm önerileri sunmaktadır. Bu teknolojilerin başarılı bir şekilde uygulanabilmesi için, güçlü bir politika desteği, uluslararası işbirlikleri ve toplumsal farkındalık gereklidir. Teknolojik inovasyonlar yalnızca çevresel sürdürülebilirliği değil, aynı zamanda toplumsal ve ekonomik sürdürülebilirliği de teşvik etme potansiyeline sahiptir. Gelecek araştırmaları, bu teknolojilerin uygulanabilirliğini artıracak stratejiler ve çözümler geliştirmeye odaklanmalıdır.

Bu çalışma, sürdürülebilir teknolojilerin gelişimi ve bunların gelecekteki potansiyel etkileri hakkında değerli bilgiler sunmaktadır. Ancak bu alandaki değişimin hızlanabilmesi için tüm paydaşların işbirliği içinde hareket etmesi gerekmektedir.

References

- Balaji K., & Rabiei M. (2022). Carbon dioxide pipeline route optimization for carbon capture, utilization, and storage: A case study for North-Central USA. *Sustainable Energy Technologies and Assessments*, 51, 101900. <https://doi.org/10.1016/j.seta.2021.101900>
- Bapat S., Koranne V., Shakelly N., (...), Rajurkar K.P., & Malshe A.P. (2022). Cellular agriculture: An outlook on smart and resilient food agriculture manufacturing. *Smart and Sustainable Manufacturing Systems*, 6(1), pp. 1–11. <https://doi.org/10.1520/SSMS20210020>
- Bontempi E., & Coccia M. (2021). International trade as critical parameter of COVID-19 spread that outclasses demographic, economic, environmental, and pollution factors, *Environmental Research*, 201, n.111514. <https://doi.org/10.1016/j.envres.2021.111514>
- Bontempi E., Coccia M., Vergalli S., & Zanoletti A. (2021). Can commercial trade represent the main indicator of the COVID-19 diffusion due to human-to-human interactions? A comparative analysis between Italy, France, and Spain, *Environmental Research*, 201, n.111529. <https://doi.org/10.1016/j.envres.2021.111529>
- Chapman, A., Ertekin, E., Kubota, M., (...), Kirchheim, R., & Sofronis, P. (2022). Achieving a carbon neutral future through advanced functional materials and technologies, *Bulletin of the Chemical Society of Japan*, 95(1), 73-103. <https://doi.org/10.1246/bcsj.20210323>
- Cho R. (2022). What is decarbonization, and How Do We Make It Happen? Columbia Climate School, Retrieved from: <https://news.climate.columbia.edu/2022/04/22/what-is-decarbonization-and-how-do-we-make-it-happen/>
- Coccia M. (2020). Factors determining the diffusion of COVID-19 and suggested strategy to prevent future accelerated viral infectivity similar to COVID, *Science of the Total Environment*, 729, n.138474. <https://doi.org/10.1016/j.scitotenv.2020.138474>
- Elavarasan R.M., Pugazhendhi R., Irfan M., Miteht-Popa L., Khan I.A., & Campana P.E. (2022). State-of-the-art sustainable approaches for deeper decarbonization in Europe – An endowment to climate neutral vision. *Renewable and Sustainable Energy Reviews*, 159, n.112204. <https://doi.org/10.1016/j.rser.2022.112204>
- Esmailzadeh, P. (2022). Benefits and concerns associated with blockchain-based health information exchange (HIE): a qualitative study from physicians' perspectives. *BMC Medical Informatics and Decision Making*, 22(1), 80. <https://doi.org/10.1186/s12911-022-01815-8>
- Gadikota G. (2021). Carbon mineralization pathways for carbon capture, storage and utilization. *Communications Chemistry*, 4(1), 23. <https://doi.org/10.1038%2Fs42004-021-00461-x>
- Gonzalo P.A., Benmessaoud, T., Entezami, M., & Márquez, F.P. (2022). Optimal maintenance management of offshore wind turbines by minimizing the costs, *Sustainable Energy Technologies and Assessments*, 52, 102230. <https://doi.org/10.1016/j.seta.2022.102230>
- Kargı, B. (2024). Impact of national gross public debt on COVID-19 fatality rates: A study of European Countries. *Selçuk Üniversitesi Sosyal Bilimler Meslek Yüksekokulu Dergisi*, 27(2), 787-798. <https://doi.org/10.29249/selcuksbmyd.1557087>

10th International CEO Communication, Economics, Organization & Social Sciences Congress

- Kargı, B., & Coccia, M. (2024). Emerging innovative technologies for environmental revolution: a technological forecasting perspective. *International Journal of Innovation*, 12(3), e27000. <https://doi.org/10.5585/2024.27000>
- Kargı, B., & Coccia, M. (2024a). The developmental routes followed by smartphone technology over time (2008-2018 period). *Bulletin of Economic Theory and Analysis*, 9(2), 369-395. <https://doi.org/10.25229/beta.1398832>
- Kargı, B., Coccia, M., & Uçkaç, B.C. (2023). How does the wealth level of nations affect their COVID19 vaccination plans? *Economics, Management and Sustainability*, 8(2), 6-19. <https://doi.org/10.14254/jems.2023.8-2.1>
- Kargı, B., Coccia, M., & Uçkaç, B.C. (2023a). The relation between restriction policies against Covid-19, economic growth and mortality rate in society. *Migration Letters*, 20(5), 218-231. <https://doi.org/10.47059/ml.v20i5.3538>
- Kargı, B., Coccia, M., & Uçkaç, B.C. (2023b). Findings from the first wave of Covid-19 on the different impacts of lockdown on public health and economic growth. *International Journal of Economic Sciences*, 12 (2), 21-39. <https://doi.org/10.52950/ES.2023.12.2.002>
- Kargı, B., Coccia, M., & Uçkaç, B.C. (2023c). Socioeconomic, demographic and environmental factors and COVID-19 vaccination: Interactions affecting effectiveness. *Bulletin Social-Economic and Humanitarian Research*, 19(21), 83-99. https://doi.org/10.52270/26585561_2023_19_21_83
- Kargı, B., Coccia, M., & Uçkaç, B.C., & Rasyidah. (2024). Determinants generating general purpose technologies in economic systems: A new method of analysis and economic implications. *International Journal on Informatics Visualization*, 8(3-2), 1791-1801. <https://dx.doi.org/10.62527/joiv.8.3-2.2657>
- Li M., Cao S., Zhu X., & Xu Y. (2022). Techno-economic analysis of the transition towards the large-scale hybrid wind-tidal supported coastal zero-energy communities. *Applied Energy*, 316, no.119118. <https://doi.org/10.1016/j.apenergy.2022.119118>
- Moritz J., Tuomisto H.L., & Rynänen T. (2022). The transformative innovation potential of cellular agriculture: Political and policy stakeholders' perceptions of cultured meat in Germany, *Journal of Rural Studies*, 89, 54-65. <https://doi.org/10.1016/j.jrurstud.2021.11.018>
- Sahal D. (1981). *Patterns of Technological Innovation*, Addison-Wesley Publishing Company, Inc.: Reading, MA.
- Strepparava D., Nespoli L., Kapassa E., (...), Katelaris L., & Medici V. (2022). Deployment and analysis of a blockchain-based local energy market, *Energy Reports*, 8, 99-113. <https://doi.org/10.1016/j.egy.2021.11.283>
- Uçkaç, B.C., Coccia, M., & Kargı, B. (2023). Diffusion COVID-19 in polluted regions: Main role of wind energy for sustainable and health, *International Journal of Membrane Science and Technology*, 10(3), 2755-2767. <https://doi.org/10.15379/ijmst.v10i3.2286>
- Uçkaç, B.C., Coccia, M., & Kargı, B., (2023a). Simultaneous encouraging effects of new technologies for socioeconomic and environmental sustainability. *Bulletin Social-Economic and Humanitarian Research*, 19(21), 100-120. https://doi.org/10.52270/26585561_2023_19_21_100
- Wang L., Kolios A., Liu X., Venetsanos D., & Rui, C. (2022). Reliability of offshore wind turbine support structures: A state-of-the-art review. *Renewable and Sustainable Energy Reviews*, 161, no.112250. <https://doi.org/10.1016/j.rser.2022.112250>



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**The Effect of Leadership Styles on Innovative Work Behavior: The
Mediating Role Of Intrinsic Motivation**

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ABSTRACT

The success of an organization depends on its ability to effectively manage its human resources. Today's organizations need leaders who have experience, talent and expertise to adapt to changing environments, emotional skills, sensitivity and adaptable behaviors that motivate employees to do their best. Leaders influence their employees by creating a balanced work environment where employees can work effectively and efficiently. Leaders encourage their subordinates by using motivational tools. In addition, leaders have a motivating effect on employees with their behaviors, characteristics and powers. Therefore, leadership plays an important role in employee motivation.

The purpose of this research is to examine the relationship between leadership and employee motivation. The effect of intrinsic motivation on the innovative work behavior of leadership styles was evaluated. The sample of the study consists of 150 nurses working in hospitals in the private sector who were reached by random sampling method. The data collected regarding the research model were analyzed with the help of AMOS and SPSS package programs. The findings of the study showed that supportive and authoritarian leadership had a statistically significant and positive effect on intrinsic motivation and innovative work behavior, and intrinsic motivation had a statistically significant and positive effect on innovative work behavior. Finally, intrinsic motivation has a partial mediating effect between supportive leadership and innovative work behavior, while it has a full mediating effect between authoritarian leadership and innovative work behavior. In the light of the research findings, it was determined that intrinsic motivation acts as an important bridge between leadership styles and employees' innovative work behavior.

Keywords: Leadership, Innovative Business Behavior, Motivation, Leadership Styles, Organization

In today's business world, where the digitalization process is rapidly spreading, change and transformation are seen as the key to gaining superiority in the intense competitive conditions experienced at sociological, economic and technological levels. The ability of organizations to realize the change and transformation that will enable them to survive in this environment and to provide competitive advantage requires innovative business behavior of employees. In order for innovative attitudes to be sustainable in the organizational environment, it is extremely important that employees are supported by managers.

Organization management helps to meet employees' needs for social recognition. Within the framework of the rules and values of society, the organization has a certain influence on each individual. In order to increase this impact, there is a need for leaders who offer emotional support to the individual such as belonging and respect, value employees' talents, happiness, welfare and job satisfaction, and offer individual support in work-related problems (*Adigüzel et al., 2021*). Leaders in today's health sector are expected to have a specific concept. These include implementing best practices in healthcare, ensuring quality of care, creating a healthy working environment for employees and making necessary innovations in a timely manner (*Özkan, 2021*). Today, leaders need to demonstrate a flexible attitude that can adopt leadership styles that can adapt to changing situational conditions. The most important tool for ensuring high performance and employee motivation is effective leadership practices. In a health institution, having leadership qualities of both top management and middle and lower level managers will contribute to achieving organizational goals and social goals by increasing the motivation of employees. This situation will also help employees to show their best performance. Taking all these explanations into account, our study aims to investigate the role of leadership styles and innovative work behavior in the performance of healthcare workers and the mediating role of intrinsic motivation. For this purpose, the concept of leadership and leadership types are discussed. In the study, by examining the performance of healthcare workers, the mediating role of intrinsic motivation in the relationship between leadership styles and innovative work behavior in employees and the theoretical frameworks of these concepts are given detailed information. In addition, in line with the theoretical framework, an applied research was conducted to reveal the relationship between employee characteristics, performance and intrinsic motivation levels.

The theory that intrinsic motivation plays a mediating role in the effect of leadership styles (participative leadership, supportive leadership, authoritarian leadership and achievement-oriented leadership) on employees' innovative work behavior was studied. In this direction, an applied research was conducted to reveal the relationship between employee characteristics, performance and intrinsic motivation levels. A survey was conducted with 150 nurses in the health sector. Our hypothesis is that intrinsic motivation has a mediating role in the effect of leadership styles on innovative work behaviors and the effect of this situation on employees can be significant and positive.

1. LITERATURE REVIEW

1.1. Leadership Styles

The subject of leadership is one of the only subjects on which ideas have been developed continuously from the first humans to the present day. While the first leadership practices in the organizational context were carried out in a more task-oriented, i.e. authoritarian style, over time this situation began to transform into a relationship-oriented style that attaches importance to relationships with employees. In more recent leadership practices, it is seen that the

10th International CEO Communication, Economics, Organization & Social Sciences Congress leadership style in which employees are supported and their personal development is encouraged has gained importance (*Stone & Patterson, 2023*). Therefore, it can be said that the leadership style applied is an important determinant in the effectiveness and success of the organization.

Leadership is everything and needs to be developed every day. Effective leadership is seen in the leader's ability to inspire followers to capture the leader's vision (*Vargas, 2024*). The preferred leadership style for organizational success is an important element that reflects the management approach of managers and leaders. Leadership style is recognized as a critical factor in the performance and success of the organization (*Dal, 2023*).

Leadership styles differ between leaders because each individual has different characteristics. The way a leader behaves when persuading and interacting with employees is known as leadership style. In other words, leadership style is the leader's effort to persuade subordinates through dialogue to achieve organizational goals (*Hakim et al., 2023*).

The impact of leadership can vary according to the characteristics of the employees and the environment. Leaders must first analyze and identify the individual skills, needs and motivation of the members of the organization, the task structure of subordinates, the authority system of the organization, and the norms of work groups. Then, they should determine the appropriate leadership behaviors that will enable the members of the organization to accept the actions of their leaders, achieve job satisfaction, and believe that they can perform at a high level.

This study is based on the Path-Goal Theory (*House & Mitchell, 1975*), which is based on the expectancy theory that suggests that employees' behaviors can be predicted according to what results an attitude or behavior will lead to (expectation) and how these results are interpreted (values). According to this theory, the leader should provide the necessary support and assistance to achieve the personal goals of employees as well as organizational goals (*Alanazi et al., 2013*). In the Path-Goal Theory, leadership behaviors are listed as participative leader, supportive leader, authoritarian leader and achievement-oriented leader (*Redzovic, 2024*).

Participative Leadership Style

When the literature on participative leadership is examined, it is seen that the leader involves employees in decision-making processes and management by minimizing the difference between the goals of the organization and the goals of the employees. Thanks to this democratic attitude, employees take ownership of the organization (*Wang and Hou, 2022*). Participative leaders attach importance to the personal development of employees. Such leaders, who are sensitive to ensure the welfare of employees and meet their needs, play an active role in increasing employees' commitment to the organization (*Khassawneh and Elrehail, 2022*).

There are a number of elements identified in participative leadership style. These are; taking the opinions of employees regarding workplace rules such as work efficiency, work distribution, when the work should be done and collecting their moral values. Thus, it is stated that employees' participation in the workplace can increase job satisfaction and reduce conflict (*Tunçbilek et al., 2020, p.34*).

Supportive Leadership Style

Supportive leadership style is a leadership style that helps and shows interest in employees. Supportive organizations are proud of their employees, give them what they deserve and work to meet their needs (*Adıgüzel et al., 2021*). Employees who feel loved in the face of this supportive attitude of the leader work more energetically and motivated and act more effectively in achieving organizational goals (*Oketch and Komunda, 2020*). On the other hand, this leadership style increases employees' self-esteem and work performance. Supportive leaders who enable employees to make extra effort for the organization are generally easier to communicate with and more friendly (*Samuel et al., 2018*). Supportive leaders take into account the needs of employees and establish close relationships with them. In this leadership style,

10th International CEO Communication, Economics, Organization & Social Sciences Congress leaders direct the activities of employees and support them for the organization of work (Yu, 2017). Many studies have found that supportive leadership increases employee satisfaction and motivation and leads to higher performance (Kim et al., 2021).

Authoritarian Leadership Style

Authoritarian leaders, who use the authority given by the organization to ensure that employees obey, want to be in complete control (Pizzolitto et al., 2023). This refers to task-oriented leadership where the person in the leadership position makes decisions alone and uses the authority that comes with that position. Authoritarian leaders do not involve group members in management. Leadership authority resides only with the managers who hold the leadership position. Instead of guiding employees to achieve organizational goals, authoritarian leaders try to regulate their work behaviors through punishment and obedience if necessary. Some researchers argue that authoritarian leadership decreases employees' self-esteem, increases their level of fear and stress, and thus decreases their performance. On the other hand, some researchers argue that the threat of punishment prevents negative behaviors of employees and this may increase their performance (Chen et al., 2024). At this stage, the geography of the organization, i.e. culture, may be decisive. Because the employees' accepting or rejecting attitude towards authority may enable the leader to adopt this style or display a more democratic attitude.

Achievement-oriented Leadership

Achievement-oriented leadership is a leadership style that focuses on the way individuals interact with each other and make connections that increase the motivation of both the leader and the followers. It is a universally accepted leadership style in which leaders encourage followers to transcend their own interests and influence them significantly (Çivit et al., 2024). Achievement-oriented leaders adopt their vision to the members of the organization and gain their trust. Achievement-oriented leaders expect high performance from their employees by setting challenging goals for them to achieve. By acting in this way, leaders who show that they believe that employees can achieve their goals increase their motivation and satisfaction (Mwaisaka et al., 2019). This leadership style is more effective when there are many complex tasks in the organization and there is uncertainty in job descriptions. Leaders in this style try to change the attitudes of employees by trying to increase the self-confidence of employees that they can achieve the assigned goal (Thuku et al., 2018).

1.2. Innovative Work Behavior

Innovative behavior can be defined as the desired and expected behavior of individuals within an organization (Demirer et al., 2022). Innovation is the development and implementation of new ideas by individuals who spend time interacting with others as part of organizational obligations. Organizations need new ideas from employees to generate innovations related to tasks, products or business processes through innovative work behaviors (Canbek et al., 2021). Innovation is not only an attitude that enables to see tomorrow and rebuild the future, but also a designer of change and organizations should not resist change in order to survive in the current competitive conditions (Ahmed, 1998). Innovative work behavior, which enables the discovery of new opportunities, helps to keep pace with change, bring new knowledge to the organization and increase individual performance (De Jong et al., 2008).

Employee performance is an important factor that drives innovation in the organization, but it is not enough on its own. An innovative idea initiates a process of innovative action, but innovation also involves the process of gaining support for the idea and putting it into practice. Individual innovation is the action of an individual who initiates and consciously implements a new and useful idea, process, product or method. Accordingly, innovative behavior of individuals is a multifaceted concept that contributes to the innovation processes of the

10th International CEO Communication, Economics, Organization & Social Sciences Congress organization. Research on innovative behavior shows that cognitive diversity positively affects a team's ability to generate new and innovative solutions (*Jankelova et al., 2021*).

1.3. Intrinsic Motivation

Intrinsic motivation is defined as doing something because one is naturally satisfied with it (*Aslan et al., 2020*). Intrinsic motivation differs from extrinsic motivation in that there is no expectation of reward as a result of the action (*Deci et al., 1981*). For an intrinsically motivated person, it is more important that the work is interesting and enjoyable than extrinsic rewards or pressure. An intrinsically motivated individual performs a job freely and voluntarily, without the need for any reward or pressure. If an employee performs a job because he/she finds it interesting and developing, in other words, if he/she sees the job as a kind of reward for himself/herself, this indicates intrinsic motivation (*Bayram et al., 2022*).

According to the self-determination theory, people are motivated as a result of the satisfaction of certain innate needs such as autonomy, competence and relationship (*Deci et al., 2001*). In other words, people are naturally more motivated in environments where they can develop their skills, have the chance to make decisions and establish relationships. Therefore, employees feel better and develop their capacities in environments where these needs are met. On the contrary, in environments where these needs of employees are prevented, the individual effectiveness and relationships of employees weaken (*Ryan et al., 2022*). Thus, intrinsic motivation encourages people to interact with their environment, follow their personal interests, and make the necessary effort to apply and develop their abilities. Intrinsic motivation is part of the person. Participative management, job design and empowerment should be considered as aspects of intrinsic motivation.

Intrinsic motivation is based on certain psychological states. These are a sense of self-determination and a perceived sense of control in undertaking a task. Thus, the person's sense of competence also develops. On the other hand, the motivation behind goal-oriented behaviors can also turn into feelings that come from within the person over time, that is, intrinsic motivation. The sense of satisfaction provided by completing the task can also be evaluated in this context (*Deci & Ryan, 1985*).

1.4. Relationships Between Variables

In this section, the mediating role of intrinsic motivation in the effect of leadership styles on innovative work behavior is examined.

Leadership is a process that refers to the work of leaders. In this process, the leader unites subordinates to achieve the targeted outlook and also motivates subordinates to achieve the determined goal. Subordinates are motivated to achieve their goals with the influence of the leader in the process. In short, leadership is a relationship between the leader and the people he/she aims to lead (*Kouzes et al., 1987*). Research has shown that there is no specific leadership style that is applicable in all situations. Path-goal theory suggests that each situation is unique and that a task-oriented leader will adopt an authoritarian style depending on the circumstances. On the other hand, it is seen that leaders who have a close relationship with employees adopt a supportive style, leaders who involve employees in the decision-making process adopt a participative style, and leaders who give confidence to employees that they can achieve their goals adopt a success-oriented style (*Bans-Akutey, 2021*).

A leader is a participative leader if he/she makes decisions by involving more than one employee in the decision-making process. Authoritarian leadership style refers to task-oriented leadership where the person in the leadership position makes decisions alone and uses the authority that comes with that position. Supportive leadership types are generally defined as individual-oriented and adaptive leaders.

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 Participative leaders do not hesitate to share their authority with their subordinates. They encourage their subordinates to participate in decision-making processes (*Benoliel et al., 2014*). Subordinates start to show good performance, job satisfaction and other positive outcomes due to this behavior (*Miao et al., 2014*). Authoritarian leaders do not allow subordinates to exhibit extra-role behaviors by establishing authority in the organization and strictly controlling their subordinates. This may prevent the emergence of subordinates' innovative behaviors (*Chen et al., 2014*), but authoritarian leaders can also develop subordinates' sense of organizational identity (*Xiangying et al., 2018*). Thus, it can enhance their subjective initiative and encourage employees' innovative behavior to some extent. A supportive organizational culture is the most important element that helps employees to realize their potential. Organizational support for employees has been found to have a positive effect on employees' innovative behaviors (*Uçar et al., 2023*).

Path-goal theory is based on expectancy theory, which suggests that a leader who appreciates employees' effort towards their work will motivate employees and make them feel that their work is valuable (*Hartati et al., 2024*). In this respect, in our study, it is argued that intrinsic motivation mediates the effect of path-goal leadership on employees' innovative work behavior.

2. METHODOLOGY

This section presents the purpose and model of the study, hypotheses based on the literature, population, sample, data collection tools and scales, and data analysis procedures.

2.1. Purpose and Model of the Study

The purpose of this study is to investigate the mediating effect of intrinsic motivation on the impact of leadership styles on employees' innovative work behaviors in the health sector. The model in Figure 1 was developed within the scope of the study.

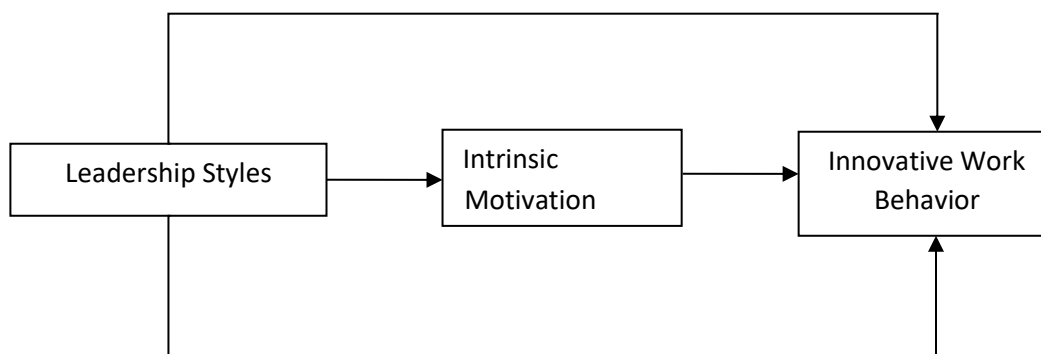


Figure 1. Research Model

2.2. Hypotheses

Based on the reviewed literature, the following hypotheses were formulated:

H1,2,3,4: Leadership styles (participative leadership, supportive leadership, authoritarian leadership, achievement-oriented leadership) have a positive effect on employees' innovative work behavior.

H5,6,7,8: Leadership styles (participative leadership, supportive leadership, authoritarian leadership, achievement-oriented leadership) have a positive effect on employee intrinsic motivation.

H9: Employees' intrinsic motivation has a positive effect on innovative work behavior.

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H10,11,12,13: Intrinsic motivation has a mediating effect on the effect of leadership styles (participative leadership, supportive leadership, authoritarian leadership, achievement-oriented leadership) on employees' innovative work behavior.

2.3. Population and Sample of the Study

The population of the study consists of private hospitals operating in the Marmara Region. The sample consists of employees working in these organizations, selected using random sampling from quantitative research methods. The results of the analysis of the survey conducted with 150 nurses are presented in tables.

2.4. Data Collection Tool and Scales

The primary data collection method used in this study is a questionnaire. In the personal information section of the questionnaire, age, gender, education, department, position in the organization and seniority were asked. The 20-item leadership scales developed by *Yang and Lim (2016)* (Authoritarian leadership 5 items, participative leadership 5 items, supportive leadership 5 items and achievement-oriented leadership 5 items) were used. Innovative work behavior was measured with 9 items (*Janssen, 2000*). Intrinsic motivation variable was measured with 4 items (*Grant, 2008*).

2.5. Data Analysis

Firstly, frequency and percentage values of the demographic characteristics of the participants such as gender, education level, age, and tenure were analyzed. Before testing the research hypotheses, confirmatory factor analysis was performed on the data collection tools. Arithmetic mean and standard deviation values of the variables were determined. In addition, correlational relationships between variables were analyzed and the study model was tested using regression analysis.

3. FINDINGS

This section presents the research findings obtained by testing the hypotheses generated during the analysis. These results are presented in tables.

3.1. Demographic Characteristics of the Sample Group

150 employees participated in this study. In terms of demographic characteristics, 98 (65.3%) were female and 52 (34.7%) were male. In addition, 114 (76%) of the participants had completed higher education, 32 (21.3%) had completed undergraduate education, and 4 (2.7%) had completed graduate education. The average age of the participants is 30 years and the average professional seniority is 5 years.

3.2. Analysis Results Regarding Factors and Reliability

Before testing the research hypotheses, confirmatory factor analysis was performed on the variables in our research model. In the factor analysis, some statements belonging to the variables were excluded from the analysis because their factor loadings were 0.50 and below. Subsequent analyses did not include these statements. In addition, the reliability coefficient of the scales used after the factor analysis was calculated using Cronbach's α . As a result of analyzing the Cronbach's alpha values of the measurement tools, it was found that all of them were above the acceptable threshold value of 0.70 determined in the literature, thus indicating

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3.3. Descriptive Statistics of Variables and Correlation Analysis Results

This study evaluates the relationship between participative leadership, supportive leadership, directive leadership, achievement-oriented leadership, intrinsic motivation and innovative work behavior through linear regression analysis. The following section presents the findings. Table 1 presents descriptive statistics, including arithmetic mean and standard deviation, and correlation analysis values for the variables.

Table 1. Descriptive Statistics of Variables

Variables	Mean	SD	α	1	2	3	4	5	6
1 Participative Leadership	4,02	,60	0,86	1					
2 Supportive Leadership	4,17	,55	0,76	,465**	1				
3 Directive Leadership	4,11	,54	0,80	,293**	,260**	1			
4 Achievement-oriented Leadership	4,01	,43	0,66	,228**	,429**	,597**	1		
5 Intrinsic motivation	3,90	,74	0,90	,197**	,241**	,657**	,243**	1	
6 Innovative Work Behaviour	3,84	,48	0,86	,339**	,461**	,319**	,277**	,446**	1

Notes: N=150., SD= Standard Deviation, α = Cronbach's alpha value, * $p < 0,05$; ** $p < 0,01$

Table 1 shows that there are significant positive relationships between participative leadership and intrinsic motivation ($r=0,197^{**}$; $p < .01$) and between participative leadership and innovative work behavior ($r=0,339^{**}$; $p < .01$). Moreover, significant positive relationships were found between supportive leadership and intrinsic motivation ($r=0,241^{**}$; $p < .01$) and between supportive leadership and innovative work behavior ($r=0,461^{**}$; $p < .01$). Moreover, significant positive relationships were found between authoritarian leadership and intrinsic motivation ($r=0,657^{**}$; $p < .01$) and between authoritarian leadership and innovative work behavior ($r=0,319^{**}$; $p < .01$). Finally, significant positive relationships were found between achievement-oriented leadership and intrinsic motivation ($r=0,243^{**}$; $p < .01$) and between achievement-oriented leadership and innovative work behavior ($r=0,277^{**}$; $p < .01$). In general, it is seen that the relationships are at a moderate level.

3.4 Findings Related to Hypothesis Testing

This study examines the effect of intrinsic motivation as a mediator in the effect of leadership styles on innovative work behavior. The hypotheses were tested using regression analysis and the results are presented below.

Table 2. Regression Analysis Results

Dependents	Model 1		Model 2		Model 3		Model 4	
	IWB		Intrinsic Motivation		IWB		IWB	
Independents	β	t	β	t	β	t	β	t

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Participative Leadership	,115	1,392	-,058	-,841	,138	1,767	
Supportive Leadership	,368**	4,228	,190**	2,622	,291**	3,460	
Directive Leadership	,210*	2,309	,809**	10,694	-,117	-1,017	
Achievement-oriented Leadership	-,033	-,346	-,309**	-3,890	,092	,968	
Intrinsic Motivation				,446**	6,069	,404**	4,282
F		13,172**		35,020**		42,447**	27,438**
R ²		,26.7		,49.1		,19.9	,43.9
Adjusted R ²		,24.6		,47.7		,19.4	,42.3

** Coefficient is significant at 0.01 * Coefficient is significant at 0.05

Research results show that participative leadership has no effect on innovative work behavior. Similarly, no relationship was found between achievement-oriented leadership and innovative work behavior. Therefore, the conditions for the mediating effect of intrinsic motivation were not met. On the other hand, intrinsic motivation has a partial mediating effect on the relationship between supportive leadership and innovative work behavior. In addition, it is seen that intrinsic motivation has a full mediating effect on the effect of authoritarian leadership on innovative work behavior. This result constitutes the main contribution of this study to the related literature.

4. CONCLUSION

The health sector, which has an important place in today's dynamic and competitive business world, has a structure based on highly qualified manpower and constantly developing technologies. The performance of employees in this sector is a direct determining factor for the success of the organization. Effective leadership is needed to achieve challenging goals such as increasing the quality of health services, reducing costs and maximizing patient satisfaction (Atilla et al., 2024). Leaders who can adapt to changing conditions, generate innovative ideas and motivate their employees play a key role in the development of healthcare organizations. In this way, the health sector has a sustainable structure that meets the expectations of both employees and patients and constantly renews itself (Keklik, 2012). For these reasons, leadership styles, innovative work behavior and intrinsic motivation are very important factors in the health sector. By accepting limitations and mistakes, recognizing the strengths and contributions of followers, and modeling teachability, leaders can create an environment where followers can act without fear.

This study explains the mediating effect of intrinsic motivation on the effect of leadership styles on innovative work behavior. As a result of the research, it was seen that intrinsic motivation fully mediates the effect of authoritarian leadership on innovative work behavior in the health sector, while it has a partial mediating effect in supportive leadership style. In other leadership styles, it was concluded that the conditions for the mediating effect of intrinsic motivation did not occur. The fact that intrinsic motivation mediates the effect of authoritarian leadership on innovative work behavior indicates that the power previously held in the organization is used (Önen et al., 2015). There is weak evidence that the relationship between supportive leadership style and intrinsic motivation is stronger when employees' tasks are difficult to monitor. This suggests that it is more valuable to focus on supportive leadership style when employee behavior is more difficult to monitor (Honig, 2021). The data collected is cross-sectional,

10th International CEO Communication, Economics, Organization & Social Sciences Congress meaning that causality cannot be inferred from the findings. We can adopt a longitudinal approach to test our hypotheses by observing changes over time.

REFERANSLAR

Adıgüzel, Z., Sönmez Çakır, F. ve Atalay, A., 2021, *The Mediation Role of Perceived Organizational Support in the Effect of Workplace Spirituality on Job Control and Organizational Citizenship*, *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 35 (1), s. 125-149.

Ahmed, P. K. (1998). *Culture and climate for innovation*. *European journal of innovation management*, 1(1), 30-43.

Ahmed, S. N., Rehman, A., & Amjad, M. (2013). *Job Satisfaction and Intrapreneurship: The moderating effect of Personality Trait*. *Journal of International Studies*, 6(1), s. 87-95.

Atilla, G., & Günal, Ö. (2024). *Sağlık Hizmetinde Liderlik ve Yöneticilik*. *Süleyman Demirel Üniversitesi İnsan Kaynakları Yönetimi Dergisi*, 3(1), 57-67.

Benoliel, P., & Somech, A. (2014). *The health and performance effects of participative leadership: Exploring the moderating role of the Big Five personality dimensions*. *European Journal of Work and Organizational Psychology*, 23(2), 277-294.

Canbek, M. ve İpek, M.A., 2021, *Psikolojik Güçlendirme'nin Yenilikçi İş Davranışı Üzerindeki Etkisinde İşle Bütünleşmenin Aracı Etkisi: Öğretmenler Üzerinde Ampirik Bir Araştırma*, *İşletme Araştırmaları Dergisi*, 13 (4), s. 3417-3427.

Chen, X. P., Eberly, M. B., Chiang, T. J., Farh, J. L., and Cheng, B. S. (2014). *Affective trust in Chinese leaders: Linking paternalistic leadership to employee performance*. *J. Manage.* 40, 796–819.

Chen, L., Huang, X., Sun, J. M., Zheng, Y., Graham, L., & Jiang, J. (2024). *The virtue of a controlling leadership style: Authoritarian leadership, work stressors, and leader power distance orientation*. *Asia Pacific Journal of Management*, 41(2), 507-547.

Çivit, S. ve Göncü Köse, A., 2024, *Relationships of Transformational and Paternalistic Leadership Styles With Follower Needs, Multidimensional Work Motivations and Organizational Commitment: A Mediated Model*, *Psychological Reports* 0 (0), s. 1-29.

Dal, O., 2023, *İşletmelerde Dönüşümsel Liderlik Tarzının Finansal Performans Üzerindeki Etkisinde Çalışan Motivasyonu ve Çalışan Bağlılığının Aracı Rolü*, *İstanbul Ticaret Üniversitesi Dış Ticaret Dergisi*, 1 (4), s. 27-50.

De Jong, J. P., & Den Hartog, D. N. (2008). *Innovative work behavior: Measurement and validation*. *EIM Business and Policy Research*, 8(1), 1-27.

Deci, E. L., Betley, G., Kahle, J., Abrams, L., & Porac, J. (1981). *When trying to win: Competition and intrinsic motivation*. *Personality and social psychology bulletin*, 7(1), 79-83.

Deci, E. L., Koestner, R., & Ryan, R. M. (2001). *Extrinsic rewards and intrinsic motivation in education: Reconsidered once again*. *Review of educational research*, 71(1), 1-27.

Döner Ç. B., Çelikkant Ş., Güngörmüş Z., 2023, *Hemşirelerin Kanıtı Dayalı Uygulama Ölçeği'nin Türkçe Geçerlik ve Güvenirliği: Metodolojik Çalışma*. *J Health Pro Res*, 5 (1):36-48.

Grant, A. M. (2008). *Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity*. *Journal of applied psychology*, 93(1), 48.

Hakim, A.L., Faizah, E.N., Mas'adah, N., Widiatmoko, F.R., 2023, *Leadership Style, Work Motivation, Work Stress, and Employee Performance: A Case Study of a Hospital*, *Journal of Leadership in Organizations*, 5 (2), s. 155-170.

10th International CEO Communication, Economics, Organization & Social Sciences Congress
Honig, D., 2021, *Supportive Management Practice and Intrinsic Motivation Go Together in the Public Service*,
Proceedings of the National Academy of Sciences, 118 (13).

Jankelova, N., Joniakova, Z. ve Misun, J., 2021, *Innovative Work Behavior - A Key Factor in Business Performance? The Role of Team Cognitive Diversity and Teamwork Climate in This Relationship*, *Journal of Risk and Financial Management*, 14 (185), s. 1-16.

Janssen, O. (2000). *Job Demands, Perceptions Of Effort-Reward Fairness, And Innovative Work Behavior*.
Journal of Occupational and Organizational Psychology, 73, 287-302.

Keklik, B. (2012). *Sağlık Hizmetlerinde Benimsenene Liderlik Tiplerinin Belirlenmesi: Özel Bir Hastane Örneği*.
Afyon Kocatepe Üniversitesi İİBF Dergisi, 14(1), 73-93.

Khassawneh, O., & Elrehail, H. (2022). *The effect of participative leadership style on employees' performance: The contingent role of institutional theory*. *Administrative Sciences*, 12(4), 195.

Kim, K. Y., Atwater, L., Jolly, P., Ugwuanyi, I., Baik, K., & Yu, J. (2021). *Supportive leadership and job performance: Contributions of supportive climate, team-member exchange (TMX), and group-mean TMX*. *Journal of Business Research*, 134, 661-674.

Kouzes, James M. / Posner, Barry Z., *The Leadership Challenge*, Jossey –Bass Publishers, San Francisco, 1987.

Luca M.R., & Simo A. M. (2016). *Entrepreneurial traits and work satisfaction*. *Bulletin of the Transilvania University of Braşov, Special Issue Series VII, social sciences, law, Vol. 9(58) No. 1, s. 173-181*.

Miao, Q., Newman, A., & Huang, X. (2014). *The impact of participative leadership on job performance and organizational citizenship behavior: distinguishing between the mediating effects of affective and cognitive trust*.
The International Journal of Human Resource Management, 25(20), 2796-2810.

Mwaisaka, D. M., K'Aol, G., & Ouma, C. (2019). *Influence of participative and achievement oriented leadership styles on employee job satisfaction in commercial banks in Kenya*. *Eur. J. Econ. L. & Pol.*, 6, 45.

Oketch, C., & Komunda, T. R. (2020). *Supportive leadership style and staff motivation in private universities in Uganda: case of Kampala International University*. *Global Journal of Management and Business Research: Administration and Management*, 20(18), 1-9.

Önen, S.M. ve Kanayran, H.G., 2015, *Liderlik ve Motivasyon: Kuramsal Bir Değerlendirme*, *Birey ve Toplum Sosyal Bilimler Dergisi*, 5(2), 43 – 64.

Özkan, Ş. (2021). *Clinical leadership and reflections to health institutions*. *International Journal of Leadership Studies: Theory and Practice*, 4(1), 40-50.

Pizzolitto, E., Verna, I., & Venditti, M. (2023). *Authoritarian leadership styles and performance: a systematic literature review and research agenda*. *Management Review Quarterly*, 73(2), 841-871.

Redzovic, A., 2024, *Path-Goal Leadership Styles and Project Success of It Companies: A Theoretical Framework Proposition*. *International Journal of Economics, Commerce and Management United Kingdom* 12(2), 198-209.

Ryan R. M., Deci, E. L., (2022), "Self-determination theory". In: F. Maggino, Editor, "Encyclopedia of quality of life and well-being research", Springer International Publishing.

Samuel, H., Sehar, S., Afzal, M., & Gilani, S. A. (2018). *Influence of supportive leadership on nursing clinical decision making in critical care units at tertiary care hospital Lahore*. *International Journal of Nursing*, 5(2), 45-71.

Thuku, W., Kalai, J. M., & Tanui, E. K. (2018). *Relationship Between Achievement-Oriented Leadership Style and Teachers' job Satisfaction in Nakuru County, Kenya*. *European Journal of Education Studies*, 5 (2), 250-260.



10th International CEO Communication, Economics, Organization & Social Sciences Congress

Tunçbilek, M.M. ve Kaya, M., 2020, Otoriter, Demokratik ve Serbestiyetçi Liderlik ile Örgütsel Bağlılık Arasındaki İlişki Üzerine Bir Araştırma, Journal Of Politics, Economy And Management 3 (2), s. 31-52.

Uçar, Z. ve Gündoğdu, B., 2023, İşgörenler Tarafından Algılanan Açık Liderliğin Yenilikçi İş Davranışına Etkisinde Yönetici Destek Algısının Aracılık Rolü, Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 25 (2), s. 740-765.

Xiangying, S., and Guibin, M. U. (2018). The effect of paternalistic leadership on the voice behavior of employees: mediated by organizational identification. Stud. Psychol. Behav. 16, 841–846.

Vargas, R.D., 2024, Leadership Style of Academic Heads in Private Higher Education Institutions as Correlate of Work Motivation and Organizational Commitment of Faculty Members, Psych Educ, 17 (6), s. 552-565.

Wang, Q., Hou, H., & Li, Z. (2022). Participative leadership: a literature review and prospects for future research. Frontiers in psychology, 13, 924357.

Yang, L. C., & Lim, V. (2016). Empirical investigation into the path-goal leadership theory in the central bank fraternity: leadership styles and job satisfaction (No. wp14).

Yu, P. L. (2017). Innovative culture and professional skills: The use of supportive leadership and individual power distance orientation in IT industry. International journal of manpower, 38(2), 198-214.

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2024 Türkiye Ortaöğretim Coğrafya Öğretim Programına İnovatif Bir
Bakış: Bir İçerik Analizi

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ÖZET

Bu çalışmanın amacı, 2024 ortaöğretim coğrafya öğretim programının diğer programlardan hangi açılardan farklı bir program olduğunu, ne tür yenilikler getirdiğini ortaya koymaktır. Üniteler, kazanım sayıları, eklenen ve çıkarılan konular bağlamında 2018 coğrafya öğretim programı ile 2024 coğrafya öğretim programı kıyaslanmıştır. Bu kıyaslama ile; Türkiye Yüzyılı Maarif Modeli olarak bilinen programda 7 farklı üniteye yer verildiği, ünite sayılarının eskiye göre arttığı, kazanım sayılarının azaldığı, 9,10,11,12.sınıflarda bazı konuların eklendiği bazı konuların da çıkarıldığı bulgularına ulaşılmıştır. Maarif Modeli genel olarak öğrencilerin bütünsel gelişimini esas almaktadır. Program bu gelişimi gerçekleştirebilmek amacıyla; öğrencilerin öğrenme-öğretme yaşantılarında sunulan etkinlikler, ilgili çıktılar, beceriler, eğilim ve değerlerin kazandırılmasını gerçekleştirmeye yönelik hazırlanmıştır. Bu nedenle; bütüncül bir yapıda hazırlanan programın amaçlarına ulaşabilmesi, programın bileşenlerinin çok iyi analiz edilmesi, eğitim öğretim faaliyetlerinin titizlikle programın yapısına uygun olarak planlanması gerektiğinden bu çalışma önem arz etmektedir. Araştırmada nitel bir yöntem benimsenmiş, doküman analizi yöntemi kullanılarak 2018 ve 2024 yıllarına ait ortaöğretim coğrafya öğretim programları karşılaştırılmıştır. Maarif Modeli ile uygulamaya konulan coğrafya öğretim programı getirdiği yenilikler bakımından kazanımlar, temalar ve içerikler önceden belirlenmiş analiz kriterlerine göre incelenmiştir.

2018 öğretim programında ünite sayısının 4 iken 2024 programında 7 ye çıktığı, kazanım sayısının 2024 programında oldukça azaldığı, konuların sayısında her sınıf seviyesinde değişikliklerin yapıldığı 2018 programında genel bir çerçevede ele alındığı, 2024 programında ise daha somut ve uygulamalı içeriklere yer verildiği sonuçlarına ulaşılmıştır. Ayrıca; Türkiye Yüzyılı Maarif Modeli olarak bilinen programın getirdiği yeniliklerin tüm eğitim camiası tarafından analiz edilmesi, iki program arasındaki değişikliklerin ortaya konulması, disiplinler arası bakış açısının kazandırılması için; öğretmenlerin bu konuda yeterliliklerinin artırılması ve programın amacına ulaşabilmesi için yüz yüze veya çevrimiçi hizmet içi eğitim programları düzenlenmesi, öğrenme çıktılarının yalnızca teorik bilgiyle sınırlı kalmaması, uygulamalı etkinliklerle desteklenmesi, program uygulama kılavuzlarının basılması ve dağıtılması önerilmektedir.

Anahtar Kelimeler: Coğrafya Öğretim Programı, Müfredat Değişikliği, Türkiye

An Innovative Look at the 2024 Türkiye High School Geography Curriculum: A Content Analysis

ABSTRACT

The purpose of this study is to reveal in what ways the 2024 secondary school geography curriculum is different from other programs and what kind of innovations it brings. The 2018 geography curriculum and the 2024 geography curriculum were compared in terms of units, number of achievements, added and removed topics. With this comparison; It was found that 7 different units were included in the program known as the Turkey Century Education Model, the number of units increased compared to the past, the number of achievements decreased, some topics were added and some topics were removed in the 9th, 10th, 11th, 12th grades. The Education Model is generally based on the holistic development of students. In order to achieve this development, the program was prepared to ensure that the activities presented in the learning-teaching experiences of students, relevant outputs, skills, tendencies and values are acquired. For this reason; This study is important because the program prepared in a holistic structure must achieve its objectives, the components of the program must be analyzed very well, and educational activities must be planned meticulously in accordance with the structure of the program. A qualitative method was adopted in the research, and the secondary school geography curricula of 2018 and 2024 were compared using the document analysis method. The achievements, themes, and contents of the geography curriculum implemented with the Maarif Model were examined according to predetermined analysis criteria in terms of innovations it brought. It was concluded that the number of units in the 2018 curriculum increased from



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4 to 7 in the 2024 curriculum, the number of achievements decreased considerably in the 2024 curriculum, changes were made to the number of topics at each grade level, and the 2018 curriculum was addressed within a general framework, while more concrete and applied content was included in the 2024 curriculum. In addition; In order for the innovations brought by the program known as the Turkey Century Maarif Model to be analyzed by the entire education community, to reveal the changes between the two programs, and to gain an interdisciplinary perspective; In order to increase teachers' competence in this regard and to achieve the objectives of the program, it is recommended that face-to-face or online in-service training programs be organized, learning outcomes should not be limited to theoretical knowledge but should be supported by practical activities, and program implementation guides should be printed and distributed.

Keywords: Geography Curriculum, Curriculum Change, Türkiye.

Bu çalışma; Türkiye Yüzyılı Maarif Modeli olarak bilinen 2024 ortaöğretim coğrafya öğretim programının 2018 öğretim programından hangi açılardan farklı bir program olduğu, ne tür yenilikler getirdiği, üniteler, kazanım sayıları, eklenen ve çıkarılan konular, programın temel felsefesi bağlamında inovatif bir yaklaşımla kıyaslamak ve sonuçlarını ortaya koymak amacıyla hazırlanmıştır. Türkiye’de lise coğrafya öğretim programı 2005 yılından 2017 ve 2018 yılına kadar değiştirilmeden uygulanmıştır. 2017 coğrafya öğretim programı 2018 yılında güncellenmiş ve 2024 eğitim öğretim yılına kadar kullanılmıştır. Türkiye ve dünyada değişen ve çeşitlenen ihtiyaçlar, teknolojik gelişmelerin hız kazanması, bilimsel alandaki değişimler ve gelişmeler, değişen paradigmlar coğrafya öğretim programının da değişimini gerekli kılmıştır. 2018 coğrafya öğretim programının Türk milli eğitiminin amaçlarına yeterince cevap vermemesi, uygulayıcılar tarafından 2024 öğretim programının yeterince benimsenmemesi, eski ve yeni coğrafya öğretim programı arasındaki farkların öğretmenler tarafından yeterince analiz edilmemiş olması araştırmanın problemi oluşturmaktadır. Bu sebeplerle beceri temelli bir anlayış ile daha güçlü bir toplum oluşturma sürecine katkı sunmak amacıyla herkes için coğrafya yaklaşımı ile 2024 yılında coğrafya öğretim programında köklü bir değişikliğe gidilerek yeniden güncellenmiştir. Yapılan kıyaslama ile 2024 coğrafya öğretim programında 7 farklı üniteye yer verildiği, ünite sayılarının eskiye göre arttığı, kazanım sayılarının azaldığı, 9,10,11,12.sınıflarda bazı konuların eklendiği bazı konuların da çıkarıldığı bulgularına ulaşılmıştır. Bu bulguların uygulayıcılar tarafından analiz edilmesi, bütüncül bir yapıda hazırlanan programın amaçlarına ulaşabilmesi, programın bileşenlerinin çok iyi analiz edilmesi, eğitim öğretim faaliyetlerinin titizlikle programın yapısına uygun olarak planlanması gerektiğinden bu çalışma önem arz etmektedir.

Yöntem

Araştırmanın amacı doğrultusunda kazanım sayıları, eklenen ve çıkarılan konular, üniteler bağlamında incelenmiştir. 2024 ortaöğretim coğrafya öğretim programının 2018 öğretim programından hangi açılardan farklı bir program olduğu, ne tür yenilikler getirdiğini ortaya koymak amacıyla, literatür taraması yapılarak iki program kıyaslanmıştır. Kazanım sayıları, eklenen ve çıkarılan konular, üniteler önceden belirlenmiş analiz kriterlerine göre incelenmiştir. Araştırmada “nitel” bir yöntem kullanılmıştır.

Metin ve Ünal (2022) İçerik analizi tekniğini nesnel, ölçülebilir, doğrulanabilir bilgilere ulaşmak amacıyla doküman, metin ve evrak gibi pek çok farklı materyali belli kurallar dâhilinde (örnekleme, kodlama, kategori vs.) analiz etmeyi amaçlayan çalışmalardır şeklinde yorumlamışlardır. Bu nedenle doküman analizi yöntemi kullanılarak veriler elde edilmiştir. Oluşturulan veriler bilgisayar ortamında Microsoft Word-Excel programları ile analiz edilmiş ve yorumlanmıştır.

Bulgular

Araştırmanın bu bölümünde 2018 ve 2024 ortaöğretim coğrafya öğretim programlarında yer alan üniteler, kazanım sayıları, eklenen ve çıkarılan konuların kıyaslamasına yer verilerek, değişikliklerin kapsamı, etkileri ve sonuçlarına yönelik elde edilen veriler uygun istatistiksel tekniklerle analiz edilmiş, elde edilen sonuçlar tablolar halinde hazırlanarak sonuçlandırılmıştır. Bireylerde coğrafi bilinç oluşturma, coğrafyanın ezber dersi olmaktan ziyade hayatın ta kendisi olduğu gerçeğini ortaya çıkarma, öğrenciler de bütüncül bir bakış açısı oluşturarak ünite temelli yaklaşımı esas alan, kalıcı öğrenmenin gerçekleşmesine hizmet eden, farklı öğretim yöntem ve

10th International CEO Communication, Economics, Organization & Social Sciences Congress tekniklerini kullanan, günlük hayatta coğrafi bilgi ve becerilerin önemini vurgulayan, beceri temelli öğrenmeyi programın felsefesi olarak kabul eden, öğrencilerin bütünsel gelişimini esas alan bir yaklaşımla program güncellenmiştir. Güncellenen 2024 ortaöğretim coğrafya programında ciddi anlamda değişiklik yapılmıştır bunlar;

1-Program bütüncül bir yapı ile oluşturulmuş ve öğrencilerinin bütünsel gelişimini esas almıştır.

2-Ünite sayılarında ve ünite başlıklarında değişiklik yapılmıştır. 2018 programındaki ünite sayısı 5'ten 7'ye çıkarılmıştır. Ünite başlıkları; coğrafyanın doğası, mekânsal bilgi teknolojileri, doğal sistemler ve süreçler, beşeri sistemler ve süreçler, ekonomik faaliyetler ve etkileri, afetler ve sürdürülebilir çevre, bölgeler ülkeler ve küresel bağlantılar şeklinde sıralanmıştır.

3-2024 Programında kazanım kavramı yerini becerilere bırakmıştır. 2018 programı kazanım temelli iken 2024 programı beceri temelli coğrafya eğitimine yer vermiştir.

4-2024 Coğrafya öğretim programında öğrenme çıktı sayıları yani beceriler 2018 programına göre azaltılmış ve sadeleştirilmiştir. 2018 öğretim programında toplamda 130 kazanım varken ve 4 ünitelerden oluşmakta iken 2024 programı 76 öğrenme çıktısı ve 7 ünitelerden oluşmaktadır.

5-2024 Öğretim programında bazı konular ve ünitelerin yeri değiştirilmiş eklemeler ve çıkarmalar yapılmıştır. Tüm sınıf seviyelerinde ekleme ve çıkarmalar gerçekleştirilmiştir.

6- 2024 Coğrafya öğretim programı; “kökeninde bilgi, odağında beceri, hedefinde gelecek” sloganıyla hazırlanmış olup, 2018 programı ise coğrafya öğretiminde “kazanımların günlük hayatla ilişkisinin odak noktasında” olduğu programdır.

7-2018 Coğrafya öğretim programında “okul temelli planlamaya” yer verilmemişken, 2024 öğretim programında yer verilmiştir. Bu uygulama ile uygulayıcıların daha rahat ve esnek bir şekilde programı gerçekleştirmeleri düşünülmüştür. Okul temelli planlama; zümre öğretmenler kurulu tarafından ders kapsamında yapılması kararlaştırılan okul dışı öğrenme etkinlikleri, gözlem ve saha çalışması, sosyal etkinlikler, proje çalışmaları, yerel çalışmalar, okuma çalışmaları vb. çalışmalar için ayrılan süreyi ifade etmektedir. 10. sınıf düzeyinde ise planlanan eğitim öğretim faaliyetlerinin, mesleki rehberlik ve kariyer danışmanlığı şeklinde yürütülmesini ifade etmektedir.

Tüm sınıf seviyelerinde eklenen ve çıkarılan konular aşağıda verilmiştir.

9. SINIF:

Eklenen konular

- Niçin Coğrafya Öğrenmeliyiz?
- İklim Sisteminin Bileşenleri ve Bu Sistemi Etkileyen Değişkenler
- İklim Sisteminde Yaşanan Değişiklikler
- Demografik Dönüşüm Modeli
- Nüfusla İlgili Fırsat, Sorun ve Politikalar
- Tehlike, Risk ve Afet
- Bütüncül Afet Yönetimi

Çıkarılan veya Kapsamı Değişen Konular

- “Dünya'nın Şekli ve Hareketleri” konusu iklime etkileri ele alınacak.
- “Coğrafi Koordinat Sistemi” konusu harita bilgisi kapsamında ele alınacak.
- “Ekonomik Faaliyetlerin Temel Özellikleri” çıkarıldı.
- “Kırsal Yerleşme Tipleri” çıkarıldı.

10. SINIF:

Eklenen konular

- Coğrafi Bakış
- Mekânsal Verilerin Haritalara Aktarılması

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- Yeryüzü Şekilleri ile İlgili Gözlem ve Saha Çalışması
- Yeryüzü Şekilleri ile Beşerî Faaliyetler Arasındaki Etkileşim
- Afetlerle Mücadelede İyi Uygulama Örnekleri
- Afetlere Karşı Dirençli Yaşam Alanları
- Afetlerden Korunma Uygulamaları
- Afet Bilinci

Çıkarılan veya Kapsamı Değişen Konular

- “Su, Toprak ve Bitkilerin Genel Özellikleri” çıkarıldı.
- “Ekonomik Faaliyetlerin Temel Özellikleri” çıkarıldı.
- “Uluslararası Ulaşım Hatlarının Genel Özellikleri ve Etkileri” çıkarıldı.
- “Gelişmişlik Seviyesinin Belirlenmesinde Etkili Olan Faktörler” çıkarıldı.
- “Gelişmiş ve Gelişmekte Olan Ülkelerin Ekonomik Özellikleri” çıkarıldı.

11. SINIF:

Eklenen konular

- Mekânsal Sorunlar ve Coğrafya
- CBS’de Harita Oluşturma
- Yerleşmelerin Mekânsal Organizasyonları
- Türkiye’nin Kültürel Hinterlandı (Gönül Coğrafyalarımız)
- Su Stresi
- Türkiye’de Su Yönetimi ve Suyun Sürdürülebilir Kullanımı
- Ülkeler Coğrafyası (Madencilik Faaliyetleri, Enerji Ekonomisi Bağlamında)

Çıkarılan veya Kapsamı Değişen Konular

- “Biyçeşitlilik” çıkarıldı.
- “Ekosistemlerin Unsurları” çıkarıldı.
- “Enerji Akışı ve Madde Döngüleri” çıkarıldı.
- “Kırsal Yerleşme Tipleri” çıkarıldı.
- “Üretim, Dağıtım ve Tüketimi Etkileyen Faktörler” çıkarıldı.
- “Üretim, Dağıtım ve Tüketim Sektörlerinin Ekonomiye Etkileri” çıkarıldı.
- “Doğal Kaynaklar ve Ekonomi” çıkarıldı.
- “İlk Kültür Merkezleri” çıkarıldı.
- “Kültür Bölgelerinin Oluşumu ve Dağılışı” çıkarıldı.
- “Anadolu’nun Kültürel Özellikleri” çıkarıldı.
- “Madenler ve Enerji Kaynaklarına Ait Kullanımın Çevresel Etkileri” çıkarıldı.

12. SINIF:

Eklenen konular

- Mekânsal Sorunlar ve Coğrafya
- Gelecekte Coğrafya Bilimi
- WEB Tabanlı CBS’de Harita Oluşturma
- Kültür-Mekân Etkileşimi
- Kültürel Coğrafi Görünüm ve Sürdürülebilirlik
- Türkiye’de Toprağın Sürdürülebilir Kullanımı
- Ülkeler Coğrafyası (Ulaşım Sistemleri, Ticaret ve Turizm Faaliyetleri Bağlamında)

Çıkarılan veya Kapsamı Değişen Konular

- “Ekstrem Doğa Olayları ve Etkileri” çıkarıldı.
- “Ekonomik Faaliyetlerin Sosyal ve Kültürel Etkileri” çıkarıldı.
- “Şehirleşme, Sanayi ve Göç İlişkisinin Toplumsal Etkileri” çıkarıldı.
- “Gelecekte Şehir ve Ekonomi” çıkarıldı.

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- “Türkiye’nin İşlevsel Bölgeleri” çıkarıldı.
- “Türkiye’nin Bölgesel Kalkınma Projeleri” çıkarıldı.
- “Tarihî Ticaret Yolları” çıkarıldı.
- “Kıta ve Okyanusların Konumsal Önemi” çıkarıldı.
- “Ülkelerin Konumunun Küresel ve Bölgesel Etkileri” çıkarıldı.
- “Teknolojik Gelişmelerin Kültürel ve Ekonomik Etkileri” çıkarıldı.
- “Gelişmişlik Seviyesinin Belirlenmesinde Etkili Olan Faktörler” çıkarıldı.
- “Gelişmiş ve Gelişmekte Olan Ülkelerin Ekonomik Özellikleri” çıkarıldı.
- “Ülkelerin Bölgesel ve Küresel Ölçekte Doğal Kaynak Potansiyeli” çıkarıldı.

Tablo-1: Coğrafya Dersi Öğretim Programı (2018-2024) Karşılaştırma Tablosu (2 saat)

SINIF SEVİYESİ	ÜNİTE İSİMLERİ	2018 ÖĞRETİM PROGRAMI	2024 ÖĞRETİM PROGRAMI	KAZANIM SAYILARI	
				2018	2024
9. SINIF	1. ÜNİTE	Doğal Sistemler	COĞRAFYANIN DOĞASI	13	3
	KAPSAM	%65	%8		
	2. ÜNİTE	Beşerî Sistemler	MEKÂNSAL BİLGİ TEKNOLOJİLERİ	4	3
	KAPSAM	%21	%14		
	3. ÜNİTE	Küresel Ortam: Bölgeler ve Ülkeler	DOĞAL SİSTEMLER VE SÜREÇLER	3	4
	KAPSAM	%7	%27		
	4. ÜNİTE	Çevre ve Toplum	BEŞERİ SİSTEMLER VE SÜREÇLER	2	4
	KAPSAM	%7	%22		
	5. ÜNİTE	-----	EKONOMİK FAALİYETLER VE ETKİLERİ	----	1
	KAPSAM		%6		
	6. ÜNİTE	-----	AFETLER VE SÜRDÜRÜLEBİLİR ÇEVRE	----	3
	KAPSAM		%11		
	7. ÜNİTE	-----	BÖLGELER, ÜLKELER VE KÜRESEL BAĞLANTILAR	----	1
	KAPSAM		%6		
		OKUL TEMELLİ PLANLAMA (-----)	OKUL TEMELLİ PLANLAMA(%6),(4 saat)	----	----
	TOPLAM	5 ÜNİTE	7 ÜNİTE	22	19
SINIF SEVİYESİ	ÜNİTE İSİMLERİ	2018 ÖĞRETİM PROGRAMI	2024 ÖĞRETİM PROGRAMI	KAZANIM SAYILARI	
				2018	2024
	1. ÜNİTE	Doğal Sistemler	COĞRAFYANIN DOĞASI	17	1
	KAPSAM	%50	%6		
	2. ÜNİTE	Beşerî Sistemler	MEKÂNSAL BİLGİ TEKNOLOJİLERİ	12	2
	KAPSAM	%33	%8		
	3. ÜNİTE	Küresel Ortam: Bölgeler ve Ülkeler	DOĞAL SİSTEMLER VE SÜREÇLER	1	5

10. SINIF	KAPSAM	%6	%25		
	4. ÜNİTE	Çevre ve Toplum	BEŞERİ SİSTEMLER VE SÜREÇLER	4	2
	KAPSAM	%11	%11		
	5. ÜNİTE	-----	EKONOMİK FAALİYETLER VE ETKİLERİ	-----	3
	KAPSAM		%14		
	6. ÜNİTE	-----	AFETLER VE SÜRDÜRÜLEBİLİR ÇEVRE	-----	4
	KAPSAM		%22		
	7. ÜNİTE	-----	BÖLGELER, ÜLKELER VE KÜRESEL BAĞLANTILAR	-----	1
	KAPSAM		%8		
		OKUL TEMELLİ PLANLAMA (-----)	OKUL TEMELLİ PLANLAMA(%6),(4 saat)	----	----
TOPLAM	5 ÜNİTE	7 ÜNİTE	34	18	
SINIF SEVİYESİ	ÜNİTE İSİMLERİ	2018 ÖĞRETİM PROGRAMI	2024 ÖĞRETİM PROGRAMI	KAZANIM SAYILARI	
				2018	2024
11. SINIF	1. ÜNİTE	Doğal Sistemler	COĞRAFYANIN DOĞASI	4	1
	KAPSAM	%8	%4		
	2. ÜNİTE	Beşerî Sistemler	MEKÂNSAL BİLGİ TEKNOLOJİLERİ	20	1
	KAPSAM	%53	%8		
	3. ÜNİTE	Küresel Ortam: Bölgeler ve Ülkeler	DOĞAL SİSTEMLER VE SÜREÇLER	9	2
	KAPSAM	%28	%12		
	4. ÜNİTE	Çevre ve Toplum	BEŞERİ SİSTEMLER VE SÜREÇLER	7	2
	KAPSAM	%11	%8		
	5. ÜNİTE	-----	EKONOMİK FAALİYETLER VE ETKİLERİ	-----	5
	KAPSAM		%24		
	6. ÜNİTE	-----	AFETLER VE SÜRDÜRÜLEBİLİR ÇEVRE	-----	3
	KAPSAM		%15		
	7. ÜNİTE	-----	BÖLGELER, ÜLKELER VE KÜRESEL BAĞLANTILAR	-----	5
	KAPSAM		%25		
	OKUL TEMELLİ PLANLAMA (-----)	OKUL TEMELLİ PLANLAMA(%6),(4 saat)	----	----	
TOPLAM	5 ÜNİTE	7 ÜNİTE	40	19	
SINIF SEVİYESİ	ÜNİTE İSİMLERİ	2018 ÖĞRETİM PROGRAMI	2024 ÖĞRETİM PROGRAMI	KAZANIM SAYILARI	
				2018	2024
	1. ÜNİTE	Doğal Sistemler	COĞRAFYANIN DOĞASI	2	1
	KAPSAM	%8	%4		

12. SINIF	2. ÜNİTE	Beşeri Sistemler	MEKÂNSAL BİLGİ TEKNOLOJİLERİ	17	1	
	KAPSAM	%57	% 8			
	3. ÜNİTE	Küresel Ortam: Bölgeler ve Ülkeler	DOĞAL SİSTEMLER VE SÜREÇLER	11	3	
	KAPSAM	%27	%13			
	4. ÜNİTE	Çevre ve Toplum	BEŞERİ SİSTEMLER VE SÜREÇLER	4	2	
	KAPSAM	%8	%11			
	5. ÜNİTE	-----	EKONOMİK FAALİYETLER VE ETKİLERİ	-----	3	
	KAPSAM		%14			
	6. ÜNİTE	-----	AFETLER VE SÜRDÜRÜLEBİLİR ÇEVRE	-----	6	
	KAPSAM		%22			
	7. ÜNİTE	-----	BÖLGELER, ÜLKELER VE KÜRESEL BAĞLANTILAR	-----	4	
	KAPSAM		%24			
			OKUL TEMELLİ PLANLAMA (-----)	OKUL TEMELLİ PLANLAMA(%6),(4 saat)	----	----
		TOPLAM	5 ÜNİTE	7 ÜNİTE	34	20

Kaynak: <https://ttkb.meb.gov.tr/>

SONUÇ

Türkiye yüzyılın maarif modeli olarak bilinen 2024 coğrafya öğretim programı ile 2018 coğrafya öğretim programı üniteler, kazanım sayıları, eklenen ve çıkarılan konular ve genel farklılıklar noktasında kıyaslanmış inovatif bir yaklaşımla içerik analizi yapılmıştır. Bu analiz sonucunda; 2024 programının herkes için coğrafya yaklaşımı ile hazırlandığı, beceri temelli bir anlayış ile programın şekillendiği, coğrafyanın bir ders olmanın ötesinde toplumdaki tüm bireyler için “işe yarar bir ders olma” özelliğinin ön plana çıkarıldığı, programın “kökeninde bilgi odağında beceri hedefinde gelecek” temasının vurgulandığı, yetkin ve Erdemli insan yetiştirmeyi hedefleyen yenilikçi, bütüncül bir yapıda oluşturulduğu, okul öncesinden ortaöğretimimin sonuna kadar her kademededen öğrencilerin becerilerle donatılmasını hedefleyen bütüncül bir yapıda olduğu, tüm eğitim düzeyindeki coğrafya konularını esas alan dikeyde ve yatayda güçlü bağlara sahip tekrardan uzak bir yapıda hazırlandığı, programda ünitelerin çeşitlendirilmesi ile farklı konuların uygun yerlerde ele alınmasına imkan sağlandığı, Meb (2024)’e göre Türkiye coğrafyasına ait konuların bağımsız, ayrı bir ünite şeklinde verilmesi yerine her ünite içerisinde içeriklerle ilişkilendirilerek daha güçlü bir şekilde sunulduğu sonuçlarına ulaşılmıştır. Çimen (2017)’ e göre Türk Milli Eğitiminin amaçları dikkate alınarak, öğretmen ve öğrencilerin program üzerindeki rolleri üzerinde durulmalıdır. Programın ezberci sistemden uzak, öğrenci becerilerini geliştiren, etkinlik merkezli, araştırmacı ve sorgulayıcı şekilde nasıl yapılandırılması gerektiği ortaya konulmalıdır. Şeklindeki değerlendirmesi 2024 coğrafya öğretim programında hayat bulmuştur. 2018 ve 2024 coğrafya öğretim programlarının karşılaştırılması sonucunda ayrıca; ünite sayılarında değişiklik yapıldığı, 2024 programında ünite sayılarının 5’ten 7’ye çıkarıldığı, kazanımlardan çok becerilere yer verildiği ve beceri temelli öğretim programı şeklinde oluşturulduğu, kazanım ya da öğrenim çıktılarının bir önceki programa göre azaltıldığı ve sadeleştirildiği, tüm sınıflar seviyesinde kazanım sayılarının azaltıldığı, 2018 öğretim programında 9,10,11 ve 12. sınıflarda 130 olan kazanım sayısının 2024 coğrafya öğretim programında tüm sınıflar seviyesinde 76



10th International CEO Communication, Economics, Organization & Social Sciences Congress kazanım yani öğrenme çıktısı şeklinde azaltıldığı, 2024 coğrafya öğretim programında zümre Öğretmenler kurulu tarafından ders kapsamında yapılması hedeflenen çalışmaların belirlenerek uygulamaya konulabileceği “okul temelli planlamaya” yer verildiği, okul temelli planlama sayesinde uygulayıcıların programı daha esnek bir hale getirebildiği gibi önemli farklar analiz edilmiştir. Görüldüğü üzere 2024 coğrafya öğretim programında köklü değişikliklere gidilmiştir. Bu sebeple bu değişikliklerin uygulayıcı öğretmenler tarafından analiz edilmesi, benimsenmesi, 2024 öğretim programının amaçları ve vizyonunun ortaya konulması, yeni programın hedeflerine yönelik planlamaların ciddi bir şekilde yapılarak uygulamaya konulabilmesi açısından bu çalışma önem arz etmektedir. Bununla birlikte; 2024 coğrafya öğretim programı ile 2018 coğrafya öğretim programının yenilikler bakımından farklarını ortaya koyan kitapçıklar hazırlanmalıdır. Programlar arası farklar veliler öğrenciler ve öğretmenler öncelikli olmak üzere çeşitli platformlarda ele alınmalı ve açıklanmalıdır. 2024 coğrafya öğretim programı ile ilgili somut uygulama kitapçıklarına yer verilmelidir. Basın ve sosyal medya mecralarında programın vizyonu ve misyonu ile ilgili gerekli sunumlar ve paneller yapılmalıdır.

YARARLANILAN KAYNAKLAR

Metin, O. ve Ünal, Ş. (2022). “İçerik analizi tekniği: İletişim bilimlerinde ve sosyolojide doktora tezlerinde kullanımı”, **Anadolu Üniversitesi Sosyal Bilimler Dergisi**, 22(Özel Sayı 2), 273-294.

Çimen, R. (2017). 2005 ve 2017 Coğrafya Öğretim Programlarının Karşılaştırılması, **INES Kongresi**, 18,21, Ekim, 2017, Antalya.

<https://meb.gov.tr/>

<https://ogmmateryal.eba.gov.tr/>

<https://tymm.meb.gov.tr/>

<https://ttkb.meb.gov.tr/>

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**2018 ve 2024 Türkiye Ortaöğretim Coğrafya Öğretim Programlarının
Coğrafi Beceriler Açısından Karşılaştırılması**

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ÖZET

Bu çalışmanın amacı, 2018 ve 2024 ortaöğretim coğrafya öğretim programlarında yer alan coğrafi becerilerin içeriklerini karşılaştırarak, yapılan değişikliklerin kapsamını ve etkilerini değerlendirmektir. Türkiye’de son yıllarda coğrafya öğretim programlarında yer alan coğrafi beceriler, öğrencilerin gelişim sürecini etkileyen önemli unsurlardan birisi olarak görülmektedir. Bunun içindir ki; beceri temelli coğrafya eğitimine coğrafya öğretim programlarında özellikle yer verilmiştir. Beceri temelli coğrafya eğitimi ve coğrafi beceriler özellikle 2024 coğrafya öğretim programında daha da öncelikli hale getirilmiştir. Bu noktadan hareketle coğrafi beceriler 2024 coğrafya öğretim programının neredeyse ana felsefesini oluşturmaktadır. Bu durumun temel amacı; coğrafyanın ders olmanın ötesinde toplumdaki her birey için işe yarar bir bilim dalı olduğunu göstermektir. Bu nedenle 2024 coğrafya öğretim programı beceri eğitimi yönüyle çok ciddi bir şekilde ele alınmalı ve eğitim öğretim faaliyetleri titizlikle programın yapısına uygun olarak uygulayıcılar tarafından planlanmalıdır. Araştırmada nitel bir yöntem benimsenmiş, doküman analizi yöntemi kullanılarak 2018 ve 2024 yıllarına ait ortaöğretim coğrafya öğretim programları karşılaştırılmıştır. Coğrafya beceri eğitimi ile ilgili kazanımlar, temalar ve içerikler, önceden belirlenmiş analiz kriterlerine göre incelenmiştir. 2018 öğretim programında coğrafi beceri eğitimi kazanımlarının daha genel bir çerçevede ele alındığı, 2024 programında ise daha somut ve uygulamalı içeriklere yer verildiği ve bu konunun ayrı bir öğrenme alanına evrildiği tespit edilmiştir. Ayrıca yeni programda alan becerilerinin yanı sıra öğrencilere kavramsal beceriler, sosyal-duygusal beceriler, okuryazarlık becerileri, değerler, eğilimler ve disiplinler arası bakış açısının kazandırılması amaçlanmaktadır. Bu bakımdan 2024 coğrafya dersi öğretim programında kullanılan her bir becerinin diğerini destekleyebilmesi, anlamsal ve ilişkisel bütünlüğün sağlanması açısından program özellikle uygulayıcılar tarafından iyi analiz edilmesi gerekmektedir. Bu sebeple de öğretmenlerin bu konuda yeterliliklerinin artırılması ve programın amacına ulaşabilmesi için hizmet içi eğitim programları düzenlenmesi, öğrenme çıktılarının yalnızca teorik bilgiyle sınırlı kalmaması, uygulamalı etkinliklerle desteklenmesi önerilmektedir.

Anahtar Kelimeler: Coğrafi Beceriler, Coğrafya Öğretim Programı, Müfredat Değişikliği, Türkiye

Comparison of 2018 and 2024 Türkiye High School Geography Curriculums in Terms of Geographical Skills in Türkiye

ABSTRACT

The aim of this study is to compare the skill based learning contents in 2018 and 2024 secondary school geography curricula and to evaluate the scope and effects of the changes made. Geographic skill based education in Geography curricula in Türkiye in recent years is seen as one of the important elements affecting the development process of students. For this reason; skill-based geography education has been especially included in the 2018 and 2024 geography curriculum. Skill-based geography education and geographic skills have been given even more priority, especially in the 2024 geography curriculum. From this point on, geographic skills almost constitute the main philosophy of the 2024 geography curriculum. The main purpose of this situation is to show that geography is a useful branch of science for every individual in society, beyond being a subject. For this reason, the 2024 geography curriculum should be taken very seriously in terms of skill based learning and educational activities should be planned meticulously by implementers in accordance with the structure of the program. A qualitative method was adopted in the research, and the secondary school geography curriculums of 2018 and 2024 were compared using the document analysis method. The outcomes, themes and contents related to geography skills training were examined according to predetermined analysis criteria. It was determined that the 2018 curriculum



10th International CEO Communication, Economics, Organization & Social Sciences Congress addressed the geography skills based education outcomes in a more general framework, while the 2024 curriculum included more concrete and applied content and that this subject evolved into a separate learning area. In addition to field skills, the new curriculum aims to provide students with conceptual skills, social-emotional skills, literacy skills, values, tendencies and interdisciplinary perspectives. In this respect, the program should be analyzed well, especially by the implementers, in order to ensure that each skill used in the 2024 Geography Course Curriculum can support the other and to ensure semantic and relational integrity. For this reason, it is recommended that in-service training programs be organized in order to increase the competence of teachers in this regard and to achieve the purpose of the program, and that learning outcomes should not be limited to theoretical knowledge, but should be supported by practical activities.

Keywords: Skills Based Education, Geography Curriculum, Curriculum Change, Türkiye.

Türkiye ve dünyada coğrafya öğretim programları birçok etken dikkate alınarak zaman zaman güncellenmektedir. Bazen bu güncelleme küçük değişiklikler ile gerçekleşmekte bazen ise kökten değişikliğe uğramaktadır. 2024 yılında değiştirilen coğrafya öğretim programı 2018 yılı coğrafya öğretim programından bazı özellikler bakımından farklılık göstermektedir. Kökten değişikliğe gidilen 2024 programının belki de ana felsefesi diyebileceğimiz beceri temelli coğrafya öğretiminin ön plana çıkarılması bu farklılardan birisi olarak karşımıza çıkmaktadır. Bu çalışmanın amacı, 2018 ve 2024 ortaöğretim coğrafya öğretim programlarında yer alan coğrafi becerilerin içeriklerini karşılaştırarak, yapılan değişikliklerin kapsamını ve etkilerini değerlendirmektir. Öğrencilerin coğrafya dersini bir ezber dersi olarak görmesi, öğrencilerde coğrafi bilinç oluşmaması, coğrafya derslerine teknolojik gelişmelerin entegre edilememesi, öğrencilerde coğrafi becerilerin yeterince oluşmaması gibi nedenlerle coğrafya öğretim programında değişikliğe gidilmiştir. Lise coğrafya eğitiminde öğrencilerde coğrafi bilinç eksikliğinin giderilmesi ve coğrafyanın bir ders olmaktan ziyade hayatın kendisi olduğunun kavratılması, teknolojik gelişmelerin entegre edilmesi, öğrencilerde coğrafi becerilerin geliştirilmesi gibi amaçlarla değiştirilen coğrafya öğretim programında coğrafi becerilerin önemini ortaya koymak ve uygulayıcıların bu konuya dikkatini çekmek amacıyla çalışma gerçekleştirilmiştir. 2024 coğrafya öğretim programında yer alan coğrafi beceriler coğrafyanın ders olmanın ötesinde toplumdaki her birey için günlük yaşantımızda hayatımızı kolaylaştıracak bir bilim dalı olduğunu işaret etmektedir. 2018 coğrafya öğretim programında coğrafi beceri eğitimi; daha genel bir çerçevede ele alınmışken, 2024 coğrafya öğretim programında daha somut ve uygulamalı içeriklere yer verilen, ayrı bir öğrenme alanına yönelen, bütüncül bir yaklaşım ile tasarlanan şekli ile karşımıza çıkmaktadır. Bu program ile öğrencilerde alan becerisi, kavramsal beceriler, sosyal duygusal beceriler, okuryazarlık becerileri, değerler, eğilimler ve disiplinler arası bakış açısının geliştirilmesi hedeflenmektedir. Bu sayede öğrencilerin her yönü ile gelişimi desteklenmiş olacaktır. Program aynı zamanda temel eğitim düzeyindeki coğrafya konularını esas alan dikey bağlantılı, tekrardan uzak, sade ve öğrencinin derinleşebileceği bir yaklaşım felsefesi ile oluşturulmuştur. Yetkin ve erdemli insan yetiştirme, karmaşık ve soyut fikirleri eyleme dönüştürme amacı ile oluşturulan 2024 coğrafya öğretim programında yer alan beceriler; 1-Kavramsal beceriler, a) temel beceriler (okumak, yazmak, saymak, çizmek, bulmak, seçmek, işaret etmek, ölçmek, çevirmek, belirlemek vb), b) bütüncül beceriler (çelişki giderme, gözlemlene, özetleme, çözümlene, sınıflandırma, bilgi toplama, karşılaştırma, sorgulama, genelleme, çıkarım yapma, gözleme dayalı tahmin, mevcut bilgiye dayalı tahmin, yapılandırma, yorumlama, yansıtma, muhakeme, değerlendirme, tartışma, mantıksal, denetleme, sentezleme), c) üst düzey düşünme becerileri (karar verme, problem çözme, eleştirel düşünme), 2-Eğilimler (benlik, sosyal, entelektüel), 3-Alan becerileri (Türkçe, matematik, fen, sosyal bilimler) 4-Fiziksel beceriler (kol, bacak, gövde, kas) olarak sınıflandırılmıştır. 2018 programında yer alan coğrafi beceriler 2024 programındaki gibi detaylandırılmamıştır. Bu programda coğrafi beceriler; 1- coğrafi gözlem, 2-arazide çalışma, 3-coğrafi sorgulama, 4- zamanı algılama, 5-değişim ve sürekliliği algılama, 6-Harita beceriler, 7- tablo grafik ve diyagram hazırlama ve yorumlama, 8-kanıt kullanma şeklinde basit bir şekilde sınıflandırılmıştır. Görüldüğü üzere 2024 yılında yeniden hazırlanan ve köklü değişikliklere yer verilen öğretim programında beceri eğitimi konusunda da ciddi farklılıklar bulunmaktadır.

Araştırmanın amacı doğrultusunda 2018 ve 2024 yıllarına ait ortaöğretim coğrafya öğretim programları karşılaştırılmıştır. Coğrafya beceri eğitimi ile ilgili kazanımlar, temalar ve içerikler, önceden belirlenmiş analiz kriterlerine göre incelenmiştir. Araştırmada “nitel” bir yöntem benimsenmiştir. Sak, R., Şahin Sak, İ. T., Öneren Şendil, Ç., & Nas, E. (2021) araştırma verilerinin birincil kaynağı olarak çeşitli dokümanların toplanması, gözden geçirilmesi, sorgulanması ve analizi olarak tanımlanabilen bilimsel bir araştırma yöntemini doküman analizi şeklinde yorumlamışlardır. Bu nedenle doküman analizi yöntemi kullanılarak veriler elde edilmiştir. Oluşturulan veriler bilgisayar ortamında Microsoft Word-Excel programları ile analiz edilmiş ve yorumlanmıştır.

Bulgular

Araştırmanın bu bölümünde 2018 ve 2024 ortaöğretim coğrafya öğretim programlarında yer alan coğrafi becerilerin içeriklerini karşılaştırarak yapılan değişikliklerin kapsamı, etkileri ve sonuçlarına yönelik elde edilen veriler uygun istatistiksel tekniklerle analiz edilmiş, elde edilen sonuçlar tablolar halinde hazırlanarak sonuçlandırılmıştır. Lise coğrafya eğitiminde öğrencilerde coğrafi bilinç eksikliğinin giderilmesi ve coğrafyanın bir ders olmaktan ziyade hayatın kendisi olduğunun kavratılması, teknolojik gelişmelerin programa entegre edilmesi, öğrencilerde coğrafi becerilerin geliştirilmesi gibi amaçlarla coğrafya öğretim programında değişikliğe gidildiği tespit edilmiştir. 2024 coğrafya öğretim programında yer alan coğrafi becerilerin coğrafyanın ders olmanın ötesinde toplumdaki her birey için günlük yaşantımızda hayatımızı kolaylaştıracak şekilde tasarlandığı, 2018 coğrafya öğretim programında coğrafi beceri eğitiminin daha genel bir çerçevede ele alındığı, buna karşılık 2024 coğrafya öğretim programında daha somut ve uygulamalı içeriklere yer verildiği, programın bütüncül bir yaklaşım ile tasarlandığı belirlenmiştir. 2024 programı ile öğrencilerde alan becerisi, kavramsal beceriler, sosyal duyuşsal beceriler, okuryazarlık becerileri, değerler, eğilimler ve disiplinler arası bakış açısının geliştirilmesinin hedeflendiği, öğrencilerin her yönü ile gelişiminin desteklenmesine yönelik program oluşturulduğu sonucuna ulaşılmıştır. Programın aynı zamanda temel eğitim düzeyindeki coğrafya konularını esas alan dikey bağlantılı, tekrardan uzak, sade ve öğrencinin derinleşebileceği bir yaklaşım felsefesi ile oluşturulduğu, yetkin ve erdemli insan yetiştirme, karmaşık ve soyut fikirleri eyleme dönüştürmeyi amaç edindiği bulgularına ulaşılmıştır.

Tablo-1: 2018 ve 2024 Coğrafya Öğretim Programında Becerilerin Dağılımı

2018 Öğretim Programında Beceriler	2024 Öğretim Programında Beceriler	Alt beceri sayıları (2024)
1-Coğrafi Gözlem	1-Kavramsal Beceriler (KB)	3 Alt Beceri
	a) Temel Beceriler (KB1) Saymak, okumak, yazmak, çizmek, bulmak, seçmek, belirlemek, işaret etmek, ölçmek, sunmak, çevirmek, kaydet	

2-Arazide Çalışma	b) Bütünleşik Beceriler (KB2) Çelişki giderme, gözlemeleme, özetleme, çözümlleme, sınıflandırma, bilgi toplama, karşılaştırma, sorgulama, genelleme, çıkarım yapma, gözleme dayalı tahmin etme, mevcut bilgiye/veriye dayalı tahmin etme, yapılandırma, yorumlama, yansıtma, muhakeme (akıl yürütme), değerlendirme, tartışma, mantıksal denetleme ve sentezleme	Bütünleşik Beceriler 20 Alt Beceri
3-Coğrafi Sorgulama	c) Üst Düzey Düşünme Becerileri (KB3) Karar verme, problem çözüme ve eleştirel düşünme	3 Alt Beceri
4-Zamanı Algılama	2-Fiziksel Beceriler Kol, bacak, gövde ve kas gruplarının doğru ve tutarlı hareketlerini ifade etmektedir.	
5-Değişim ve Sürekliliği Algılama	3-Alan Becerileri Türkçe Alan Becerileri (TAB) Matematik Alan Becerileri (MAB) Fen Bilimleri Alan Becerileri (FBAB) Sosyal Bilimler Alan Becerileri (SBAB)	Alan Becerileri 4 alt beceri
6-Harita Becerileri	-Türkçe Alan Becerileri: Dinleme/İzleme,Okuma,Konuşma,Yazma -Matematik Alan Becerileri: Muhakeme ,Temsil,Problem Çözme,Veri ile Çalışma ve Veriye Dayalı Karar Verme, Araç ve Teknoloji İle Çalışma -Fen Bilimleri Alan Becerileri: Bilimsel Gözlem,Sınıflandırma,Bilimsel	Türkçe Alan Becerileri 4 alt beceri Matematik Alan Becerileri 5 alt beceri Fen Bilimleri Alan Becerileri 13 alt beceri Sosyal Bilimler Alan Becerileri 17 alt beceri
7-Tablo, Grafik ve Diyagram Hazırlama ve Yorumlama	Gözleme Dayalı Tahmin,Bilimsel Veriye Dayalı Tahmin,Operasyonel Tanımlama,Hipotez Oluşturma,Deney Yapma,Bilimsel Çıkarım Yapma Bilimsel Model Oluşturma,Tümevarımsal Akıl Yürütme,Tümdengelim Akıl Yürütme,Kanıt Kullanma,Bilimsel Sorgulama	
8-Kanıt Kullanma	-Sosyal Bilimler Alan Becerileri: Zamanı Algılama ve Kronolojik Düşünme, Kanıt Dayalı Sorgulama ve Araştırma, Tarihsel Empati, Değişim ve Sürekliliği Algılama, Sosyal Katılım, Girişimcilik, Mekânsal Düşünme, Coğrafi Sorgulama, Coğrafi Gözlem ve Saha Çalışması, Harita,Tablo, Grafik, Şekil ve/veya Diyagram, Mantıksal Muhakeme, Felsefi Sorgulama, Felsefi Muhakeme, Felsefi Düşünce Ortaya Koyma, Eleştirel Sosyolojik Düşünme, Tarihsel Sorun Analizi ve Karar Verme,	
	4-Eğilimler Benlik eğilimleri, sosyal eğilimler ve entelektüel eğilimler	Benlik 5 alt beceri Sosyal 5 alt beceri Entelektüel 11 alt beceri

Kaynak: <https://tkb.meb.gov.tr/>

SONUÇ

2018 ve 2024 ortaöğretim coğrafya öğretim programlarında yer alan coğrafi becerilerin içeriklerinin karşılaştırılması, yapılan değişikliklerin kapsamı ve etkilerinin değerlendirilmesine yönelik olarak; öğrencilerin coğrafya dersini bir ezber dersi olarak görmesinin önüne geçmek, öğrencilerde sağlam bir coğrafi bilinç oluşmasını sağlamak, coğrafya derslerine teknolojik gelişmelerin entegre edilmesini sağlamak, öğrencilerde coğrafi becerilerin yeterince oluşmasını sağlamak, coğrafi becerilerin önemini ortaya koymak amacıyla coğrafya öğretim programında değişikliğe gidildiği görülmüştür. Meb (2024)'e göre bütüncül bir yaklaşım ile ortaya konulan ve öğrencilerin çok yönlü gelişimini esas alan Türkiye Yüzyılı

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Maarif Modeli'nde becerilerin gelişimi; zihinsel, sosyal-duygusal, fiziksel ve ahlaki boyutları içeren bütüncül bir yapıda ele alınmıştır. Bütüncül yapıda ele alınan bu programda bireylerin coğrafi beceri açısından çok yönlü gelişimi esas alınmıştır. ABD, İngiltere ve Avustralya gibi farklı ülkelerdeki coğrafya öğretim müfredatıyla Türkiye'deki coğrafya öğretim müfredatını karşılaştıran Ertürk ve Girgin (2005) bu ülkelerde coğrafya öğretim programının bütüncül bir yapıda olduğunu, buna karşılık Türkiye'de uygulanan coğrafya öğretim programının ise standartlarının net olmadığını belirtmiştir. Ancak 2024 Türkiye coğrafya öğretim programıyla bu değerlendirme artık geçerliğini yitirmiştir. Güncellenen coğrafya öğretim programında coğrafi beceriler ve beceri temelli coğrafya öğretimi çok detaylı bir şekilde ele alınmıştır. Beceriler dört temel başlık altında toplanmış, kavramsal beceriler, fiziksel beceriler, alan becerileri, eğilimler olarak sınıflandırılmıştır. 2024 programında becerilerin bu kadar ayrıntılı bir şekilde verilmesinin temel nedeni coğrafyanın bir ders olmaktan ziyade hayatın içerisinde ve hayatı kolaylaştıran bir bilim olarak görülmesidir. Beceri temelli coğrafya öğretimi ile bireylerde coğrafi bakış açısını geliştirmek, coğrafi bilinç oluşturmak gibi amaçlar hedeflenmiştir. Dolayısıyla coğrafya öğretimi bambaşka bir boyut kazanmış ezber dersi olmaktan uzaklaştırılmış uygulamaya yönelik beceri temelli öğretimin odak noktasına alındığı ders haline getirilmiştir. Öğrencilerin her yönüyle geliştirilmeye çalışıldığı geniş bir yelpazede öğrenme programının oluşturulduğu net bir şekilde görülmektedir. Bu programda öğrencilere; kavramsal beceriler ile karmaşık ve soyut fikirleri eyleme dönüştürme sürecinde, alansal beceriler ile beceri gelişimini modellemede ve anlamlandırmada becerilerin soyutlanması ve bilgi ile birlikte yorumlanması sürecinde, fiziksel beceriler ile toplumun her bir ferдинin fiziksel aktivitelerini kendi imkân ve yeteneklerine uygun bir şekilde hayat boyu sürdürebilmeye duyduğu istek, güven, fiziksel yeterlik, bilgi ve anlayışı ileri düzeye taşıma sürecinde, eğilimler ile becerilerin öğrenme-öğretme yaşantılarında somut eylemlere dönüştürülme, işe koşma sürecinde destek sağlamak hedeflenmiştir. 2024 Beceri temelli coğrafya öğretim programında farklı beceri alanlarına yer verilmiş olup, öğrencilerin her açıdan gelişmesine katkı sağlamak üzere güncellenmiştir. Buna karşılık 2018 coğrafya öğretim programında yer alan 1- coğrafi gözlem, 2-arazide çalışma, 3-coğrafi sorgulama, 4- zamanı algılama, 5-değişim ve sürekliliği algılama, 6-harita beceriler, 7- tablo grafik ve diyagram hazırlama ve yorumlama, 8-kanıt kullanma becerileri öğrencilerin sadece sosyal bilimler alan becerilerinin geliştirilmesine yönelik basit bir şekilde sınıflandırılmıştır. Bu sınıflandırmada bireylere ne tür coğrafi becerilerin kazandırılacağı ve bu becerilerin neler olduğu konusunda programda yeterli açıklamaya yer verilmemiştir. Coğrafi becerilere daha genel geçer bir şekilde yer verilmiştir. Bunun yerine her sınıf seviyesinde (9,10,11,12) öğretim programını desteklemek amacıyla beceri temelli etkinlik kitapları oluşturulmuştur.

Görüldüğü üzere 2024 öğretim programı beceri temelli coğrafya eğitimi üzerine kurgulanmış olup uygulayıcılar tarafından bu bağlamda değerlendirilmesi gerekmektedir. Çimen (2008)' e göre de teknolojik gelişmeler ve imkânlar, bilgi beceri ve tutumlar amaç ve hedefler bir programa yansıtıldığı oranda o program değer kazanmaktadır. Bu nedenle coğrafya artık günümüzde konuların anlatılıp geçildiği ve sadece sınavlarda kullanılan ezber dersi değil öğrenilenlerin ve kazanılan becerilerin hayatın herhangi bir kesitinde kullanılabilirdiği ve uygulanabilirdiği bir bilimdir. Bu bağlamda coğrafya öğretmenlerine büyük görev düşmektedir.

Elde edilen sonuçlara göre; güçlü bir coğrafya eğitiminin gerçekleştirilmesi için beceri temelli coğrafya eğitiminin öğretmenler tarafından benimsenmesi gerekmektedir. Süreç içinde öğretmenler artık klasik ders anlatımından uzaklaşmalı ve öğrencilerin her türlü coğrafi becerisini geliştirmeye yönelik planlama yapmalıdır. 2024 öğretim programında öğrencilerin programda belirtilen beceriler doğrultusunda çok yönlü olarak yetiştirilmesi, coğrafya eğitiminde öğrencilerde coğrafi bilinç eksikliğinin giderilmesi ve coğrafyanın bir ders olmaktan



10th International CEO Communication, Economics, Organization & Social Sciences Congress ziyade hayatın kendisi olduğunun kavratılması, teknolojik gelişmelerin programa entegre edilmesi, öğrencilerde coğrafi becerilerin geliştirilmesi hedeflendiğinden öncelikle uygulayıcıların (öğretmenler) bu programı benimsemesi sağlanmalıdır. Öğretim programının kılavuz kitapları ivedilikle öğretmenlere ulaştırılmalıdır. Bunun yanı sıra kamuoyu, veliler ve öğrenciler de yeni program konusunda bilgilendirilmelidir. Günümüz gereksinimleri dikkate alınarak çok yönlü ve köklü değişikliklere yer verilerek güncellenen coğrafya öğretim programında beceri eğitiminin önemini ortaya çıkarmak ve uygulayıcıların bu konuya dikkatini çekmek amacıyla tanıtım çalışmaları yapılmalıdır.

YARARLANILAN KAYNAKLAR

- Çimen, R. (2008). **Yeni coğrafya müfredatının öğretmen ve öğrenci görüşleri açısından değerlendirilmesi** (Yayımlanmamış yüksek lisans tezi). Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Konya.
- Ertürk, M., Girgin, M. (2005). Standartları Bakımından Coğrafya Müfredat Programlarının Karşılaştırması, **Doğu Coğrafya Dergisi**, (13), 219-232.
- Sak, R., Şahin Sak, İ. T., Öneren Şendil, Ç., & Nas, E. (2021). Bir araştırma yöntemi olarak doküman analizi. **Kocaeli Üniversitesi Eğitim Dergisi**, 4(1), 227-250
- <https://meb.gov.tr/>
- <https://ogmmateryal.eba.gov.tr/>
- <https://tymm.meb.gov.tr/>
- <https://ttkb.meb.gov.tr/>



10th International CEO Communication, Economics, Organization & Social Sciences Congress
E – Ticaret ve Vergi Denetimi İlişkisi: Türkiye

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ÖZET

Teknolojinin gelişmesi ile birlikte hızlı bir gelişim gösteren bilgi teknolojileri ile yaşamımıza giren internet birçok değişime yol açmıştır. Bu değişimlerin en önemlilerinden biri de e-ticaret (elektronik ticaret) olmuştur. Küreselleşme ve iletişim imkânlarının da gelişmesi ile birlikte kullanılmakta olan geleneksel ticaret yerini gün geçtikçe hızlı bir şekilde gelişen ve gelişmeye devam eden e-ticaret kavramına bırakmıştır. E-ticaretin büyümesi ve yaygınlaşması ile birlikte, geleneksel ticaretin vergilendirilmesinde kullanılan vergilendirme koşulları, e-ticaretin vergilendirilmesi ve denetimi konusunda bazı sorunlara sebep olmuştur. Bu sorunlardan en önemlisi ticareti gerçekleştiren mal ve hizmetlerin takibi, vergilendirilmesi ve tarafların belirsizliği ile vergi denetiminin etkin bir şekilde yapılamıyor olmasıdır. Tüm bu sorunların çözümü için gerek uluslararası, gerekse Türkiye içinde bazı adımlar atılmış ve çeşitli çözüm yolları aranmıştır. Çalışmamızda öncelikle e-ticaretin gelişimi ve günümüze nasıl ulaştığı konusuna değinilecektir. Daha sonra e-ticaretin Türkiye’de vergilendirilmesi ve vergi denetiminde oluşan sorunlar ve bunların çözüm yolları için yapılan yenilikler ele alınacaktır.

Anahtar Kelimeler: Elektronik Ticaret, Vergiler, Vergi Denetimi, Türkiye

The Relationship Between E-Commerce And Tax Auditing: Turkey

ABSTRACT

With the development of technology, information technologies, which have rapidly advanced, and the internet, which has become a part of our lives, have led to many changes. One of the most significant of these changes is electronic commerce. With globalization and the development of communication opportunities, traditional commerce is gradually being replaced by the rapidly evolving and continuously developing concept of e-commerce. As e-commerce grows and spreads, the taxation conditions used for traditional commerce have caused some issues regarding the taxation and auditing of e-commerce. One of the most important of these problems is the tracking, taxation, and the uncertainty of the parties involved in the goods and services traded, which leads to ineffective tax audits. To solve these problems, some steps have been taken both internationally and within Turkey, and various solutions have been sought. In our study, we will first address the development of e-commerce and how it has reached the present day. Then, the taxation of e-commerce in Turkey, the problems arising in tax audits, and the innovations made to solve these issues will be discussed.

Keywords: Electronic Commerce, Taxes, Tax Auditing, Turkey.

Yaşanan teknolojik gelişmeler sonucu insanlara sunulan çeşitli yeniliklerin başında internet ve internet kullanımını sonucu insan hayatının kolaylaşmasını sağlayan imkânlar gelmektedir. İhtiyaçlarımızın farklılaşması ve teknolojinin de gelişmesiyle birlikte ortaya çıkan internet kavramı tüm dünyada ve insanların hayatında büyük farklılıklar yaratmıştır. İnternet kullanımının yaygınlaşması ile insanlar günlük hayatta birçok işini internet aracılığı ile gerçekleştirmektedir. Giderek yaygınlaşan internet kullanımını sonucu e-ticaret kavramı da hızla gelişmiş ve yeni bir kavram olarak hayatımıza girmiştir. Küreselleşmenin de etkisi ile coğrafi sınırların ortadan kalkması ve insanların yaşadıkları ülke dışındaki ülkelerle de ticaret yapmaları e-ticaret sayesinde mümkün olmuştur. Elektronik ortamda yapılan ticari faaliyetler yapılan işlerin performansını arttırmış, mevcut olan bilgi akışını hızlandırarak yapılan işlemlerin süresini kısaltmıştır. Tüm bunlar sayesinde elektronik ticaret hacmi gün geçtikçe artmıştır.

Ancak e-ticaret hayatımızda sağladığı kolaylıkların yanında bazı sorunları da beraberinde getirmiştir. Devletler e-ticaretten kaynaklanan sorunları çözmek ve e-ticaretin kontrolünü sağlayabilmek adına çalışmalar yapmışlardır. Böylelikle giderek yaygınlaşan e-ticarete uyum sağlama yolunda karşılaşılan sorunlara çözümler aranmıştır. Oluşan en büyük sorunlardan biri de, gerçekleşen ticari faaliyetlerin takip ve denetiminin yapılmasındaki zorluklardır. Bu durum e-ticaret faaliyetlerinde vergi denetimini olumsuz yönde etkilemiş ve vergi denetimlerinin etkin bir şekilde yapılmasına engel oluşturmuştur.

Elektronik ticaretin vergilendirilmesinde karşılaşılan bir diğer sorun ise vergi tabanının belirlenememesidir. Vergi normal şartlarda fiziki bir mağazada perakende olarak gerçekleşen satışlar üzerinden tahsil edilir ancak e-ticarette internet üzerinden gerçekleşen satışlarda vergi tabanının tanımlanabilmesi, dijital ürün ve hizmetlerin sınıflandırılması ve vergilendirilmesi uygulamada karışıklıklara sebebiyet vermektedir.

Elektronik ticaret işlemlerinin coğrafi sınırları ortadan kaldırması vergi toplama sürecini zorlaştırarak adil ve etkin bir vergi sistemi oluşturulmasını da engellemektedir. E-ticaretin vergilendirilmesinde ortaya çıkan bir başka sorun ise vergi adaletsizliğidir. Perakende olarak yapılan satışlar belli bir mağaza üzerinden gerçekleştirildiği için işletmelerin maliyetlerini arttırmaktadır ancak elektronik ticaret işlemleri internet aracılığı ile daha az maliyetlerle ticaret imkânı oluşturmaktadır bu da e-ticaret yapan kişilerin vergi avantajına sahip olmalarını sağlamaktadır. Bu durum iki taraf arasında rekabet eşitsizliğine neden olarak vergi sisteminin adil olmasını engellemektedir.

Çalışmamızda elektronik ticaretin ortaya çıkışı ile günümüze nasıl ulaştığını ve Türkiye'deki mevcut vergilendirilme durumunu açıklayarak, vergilendirmede ortaya çıkan sorunlar ve bu sorunlara yönelik geliştirilen çözüm önerilerine yer verilecektir.

1. E-TİCARET KAVRAMI VE GELİŞME SÜRECİ

E-ticaret kavramı, elektronik ve ticaret kelimelerinin birleşiminden oluşmuştur. Bu kavram internet ve bilgisayar teknolojilerinin gelişimine bağlı olarak ortaya çıkmış ve günümüzdeki ticari faaliyetleri kolaylaştıran bir yenilik haline gelmiştir.

1.1. E-Ticaret Kavramı

Elektronik ticaretin, farklı ülkelerin kurum ve kuruluşları açısından birçok tanımı yapılmıştır, genel olarak elektronik ortamda mal veya hizmet alıp satmak anlamına gelse de farklı kişi ve kuruluşlar tarafından tanımlanmaktadır.

Ekonomik İşbirliği ve Kalkınma Teşkilatı (OECD) tarafından 2009 yılında yapılan tanıma göre e-ticaret işlemi, bilgisayar ağları üzerinden gerçekleştirilen mal veya hizmetlerin, sipariş almak veya vermek amacıyla özel olarak tasarlanmış yöntemlerle satılması veya satın alınmasıdır (OECD, 2011: 72).

Elektronik ticaret, ürün ve hizmetlerin alım satımı dışında satış öncesi ve sonrası çeşitli finansal işlemleri kapsamaktadır. Dünya Ticaret Örgütü (WTO) elektronik ticareti, mal ve hizmetlerin üretim, satış, promosyon, sipariş ve dağıtım süreçlerinin iletişim ağları aracılığıyla gerçekleşmesi olarak tanımlamaktadır (World Trade Organization - <https://www.wto.org/>).

Birleşmiş Milletler Kalkınma ve Ticaret Konferansı (UNCTAD), 2010 yılında Avrupa İstatistikçiler Konferansında e-ticareti tanımlamıştır. UNCTAD tanımına göre, e-ticaret, mal veya hizmetlerin satışı veya satın alınması/tedarik edilmesidir. Elektronik veri değişimi, mobil ticaret, sipariş sisteminin müşteriler/tedarikçilerle entegrasyonu, müşteriler tarafından entegre faturalandırma ve ödeme, arka uç sistemlerle tam entegrasyon, extranet kullanımı, güvenli işlemler ve tedarikçilerin otomatik ödemesi gibi hususlar bu tanıma dahil edilmektedir (UNCTAD, 2004 - https://unctad.org/system/files/official-document/ecdr2004_en.pdf).

Türkiye’de ise e-ticaret, 6563 sayılı Elektronik Ticaretin Düzenlenmesi Hakkında Kanunda “fiziki olarak karşı karşıya gelmeksizin, elektronik ortamda gerçekleştirilen çevrimiçi iktisadi ve ticari her türlü faaliyet” olarak tanımlanmaktadır (Türkiye Ticaret Bakanlığı, 2019).

Yukarıda yer verdiğimiz tanımların ortak yönlerine baktığımızda e-ticaret, kişilerin özel ya da kamu kuruluşlarının elektronik ortamda gerçekleştirilen her türlü ticari faaliyetlere verilen isimdir. E-ticaret adı altında yapılan bu ticari faaliyetler, mal veya hizmet üretimi, reklam, anlaşma, satış, satın alma, dağıtım, elektronik banka işlemleri fon transferleri ve hisse alışverişleri gibi birçok faaliyeti kapsar. Bu faaliyetlerin süreçleri, dijital verilerin ticari taraflara elektronik olarak iletilmesine bağlıdır.

1.2.E-Ticaretin Gelişimi

E-ticaretin tarihi hakkında bilgi edinmek için, öncelikle internetin tarihine ve onun sınırlı hizmetlerden nasıl dönüştüğüne ve sadece bilim adamları ile mühendisler tarafından nasıl kullanıldığına bakılması gerekmektedir.

1.2.1.İnternetin Gelişimi

Dünyada internetin kısa tarihçesine bakılacak olursa, ilk çalışmaların (paket anahtarlamalı ağ) 1969 yılında ABD Savunma Bakanlığı'nda ARPANet'in (İleri Projeleri Araştırma Yetki Ağı - Advanced Research Projects Authority Net) kurulması ile başlamış olduğu görülür. Daha sonraki süreçte, aynı ağ üzerinde geliştirilen TCP/IP (İletim Kontrol Protokolü - Transmission Control Protocol / İnternet Protokolü Adresi - Internet Protocol) protokolü, 1983 yılından itibaren ARPANet üzerinde kullanılmaya başlanmıştır. İlk internet omurga ağının oluşturulması ise 1986 yılında NSFNet (Ulusal Bilim Vakfı - National Science Foundation) tarafından gerçekleştirilmiştir. İnternet ise 90'lı yıllardan itibaren büyük bir ivme kazanmıştır. İnternetin ticari anlamdaki gelişimi ise 1991 yılından itibaren olmuştur (Parlak, 2005: 26).

Elektronik ticaretin gelişiminde etkili olan en önemli şeylerden birisi de sunmuş olduğu geniş pazar imkânları ve internet kullanımının yaygınlaşmış olmasıdır. Bundan dolayı tüm dünyada

10th International CEO Communication, Economics, Organization & Social Sciences Congress olduğu gibi Türkiye’de de e-ticaretin gelişim süreci hakkında bilgi sahibi olmak için öncelikle internetin Türkiye’deki gelişim sürecine bakılmalıdır.

İnternetin gelişimi Türkiye’de 1991 yılı itibariyle ODTÜ (Orta Doğu Teknik Üniversitesi) ve TÜBİTAK’ın (Türkiye Bilimsel ve Teknolojik Araştırma Kurumu) çabaları sonucunda başlayarak, 12 Nisan 1993 tarihinde de kullanılmaya başlanmıştır. ODTÜ ve TÜBİTAK’ın önderliğinde bundan tam 25 yıl önce projeler başlatılmıştır. Türkiye’de kalkınma ve büyümenin temel altyapısını oluşturarak internet, sadece bir “proje” olmaktan çıkarak sosyal ve ekonomik hayatımızın hemen hemen her alanında etkisini gösterir hale gelmiştir. Popülaritesinin artmasıyla ticari hayatta da internet kendini göstermeye başlamıştır (Demirdöğmez, Gültekin ve Taş, 2018).

12 Nisan 1993 yılında TÜBİTAK-ODTÜ (TR-NET) işbirliği ile DPT (Devlet Planlama Teşkilatı) projesi çerçevesinde Türkiye global internete bağlanmıştır. Daha sonra Ege Üniversitesi (1994), Bilkent (1995), Boğaziçi (1995), İstanbul Teknik Üniversitesi (1996) bağlantıları gerçekleştirilmiştir. Türk Telekom’un 1995 yılında açtığı ihale ile bir konsorsiyum tarafından oluşturulan TURKNET 1996 Ağustos ayında çalışmaya başlamıştır. Bunun yanı sıra Haziran 1996 tarihinde TÜBİTAK bünyesinde Ulusal Akademik Ağ ve Bilgi Merkezi (ULAKBİM) adıyla yeni bir merkez kurulmuştur (Parlak, 2005: 30).

İnternetin hayatımızda çok fazla alana girmesinden ticaret de nasibini almış kısaca e-ticaret olan “Elektronik Ticaret” kavramı ortaya çıkmıştır. E-ticaret siteleri sayesinde tüketiciler ihtiyaç hissettikleri ürünleri satılan mağazalara gitmeden internet üzerinden buldukları yerlerden rahatlıkla satın alabilme imkânına sahip olmaktadır (Özdöl, 2022: 35).

1.2.2. Türkiye’de E-Ticaretin Gelişimi

Bazı kaynaklardan edindiğimiz bilgilere göre elektronik ticaretin başlangıcının 1980’li yıllardan daha eskiye dayanmakta olduğunu ve bu dönemlerde de internet kullanımının yaygınlaşmadığı için katalog satışlar, televizyon ve telefon aracılığı ile gerçekleştirilmekteydi. Bu da aslında bir elektronik ticareti ancak bu şekilde gerçekleştirilen elektronik ticaret internetin de giderek gelişmesi ve yaygınlaşması ile yetersiz ve etkisiz kalmıştır.

Elektronik ticaretin toplumda yaygınlaşması ve ülkelere uluslararası arenada rekabet avantajı sağlaması için devletin bürokrasi, hukuk, eğitim ve altyapı konularında üzerine düşen sorumlulukları yerine getirmesi gerekmektedir. Devlet destekli yapı ve uygulamaların yanı sıra özel sektör, ulusal ve uluslararası kuruluşların tümü e-ticaret ekosisteminin gelişmesinde önemli roller oynamaktadır. Diğer bir deyişle, tüketici ve işletme sahibi bilincinin artması, yasal ve altyapı engellerinin kaldırılması, e-ticaret talebinin artması ve e-ticaret pazarında geleneksel yapıların dijitale dönüştürülmesi, e-ticaret pazarında gerçekleşen planlı bir sürece işaret etmektedir (Kaya, 2023: 26).

E-ticaret kavramı ülkemizde 1992 yılında Merkez Bankası ile diğer bankalar arasında gerçekleşen Elektronik Fon Transferi ile ortaya çıkmıştır. E-ticaret, 1995 yılından sonra işletmeler tarafından yoğun bir şekilde kullanılır hale gelmiştir. Daha önce e-ticaret uygulamalarının, "intranet" olarak adlandırılan şirket içi ağlarla ya da “ekstra net” olarak adlandırılan şirketlerin müşterilerle veya kendi aralarında ilişkide buldukları, üçüncü taraflara kapalı olan uygulamalar şeklinde gerçekleştiği görülmüştür (Taşdemir, 2018: 95). BTYK 1998 yılında ise Elektronik Ticaret Koordinasyon Kurulu (ETKK)’nu oluşturmuştur. Bilim ve Teknoloji Yüksek Kurulu Türkiye’nin Avrupa’daki e-ticaret ağındaki ilerlemelerin gerisinde kalmasını önlemek için e-ticaretin geliştirilmesiyle ilgili; teknik, idari ve hukuki alt

10th International CEO Communication, Economics, Organization & Social Sciences Congress yapının kurulması, e-ticareti özendirecek önlemlerin alınması ve aynı zamanda milli politika ve uygulamaların uluslararası politika ve uygulamalara uyarlanması şeklinde görevler belirlemiştir. Daha sonra adı değiştirilen ETKK, E-Ticaret Kurulu (ETİK) olarak faaliyetlerine devam etmiştir (Akpınar, 2017: 25-26).

E-ticaret siteleri üzerinden bankacılık, giyim, yemek, kitap, ev eşyaları, elektronik eşyalar ve daha birçok ürün ve hizmet satın alımı gerçekleşmektedir. İşletmeler bu sayede pazar kapasitelerini artırmaktadırlar. Bu durum ulaşabilecekleri müşteri sayısını artırırken rakip firma sayısını da artırmaktadır. 1998 yılında kurulan hepsiburada.com adlı internet sitesi Türkiye'deki ilk e-ticaret sitesidir. Aynı zamanda sahibinden, gittigidiyor, yemeksepeti, getir ve trendyol gibi birçok e-ticaret sitesi kurulmuştur. Böylelikle e-ticaret sitelerinin benimsenmesi ile birlikte kullanım da artmıştır (Özdöl, 2022: 35-36).

1.2.3. Günümüzde E-Ticaret

Bilgi ve teknolojinin zamanla hızlı bir şekilde gelişmiş ve internet kullanımının da giderek yaygınlaşmış olması, günümüzde birçok işlemin elektronik ortamlarda gerçekleşmesine imkân oluşturmuştur. Gelişen bilgi teknolojilerinin yanında küreselleşmenin de etkisiyle, tüketiciler ikamet ettikleri ülke dışından da kolaylıkla alışveriş yapmaya başlamış ve bu sayede ülkeler arası elektronik ticaret faaliyetlerinin hızlı bir şekilde gelişmesine katkıda bulunmuşlardır. Bu durum, tüm dünyadaki e-ticaret hacminin giderek artmasını ve e-ticaretin daha da önemli bir boyuta ulaşmasını sağlamıştır. Türkiye'de elektronik ticaretin gelişmesinde rol oynayan başka faktörler de vardır. Başta Türkiye'nin bankacılık, lojistik ve güvenlik alt yapısının gelişmiş olması da elektronik ticaret üzerinde önemli bir rol oynamıştır. Bunların gelişmesi ve gelişmeye devam etmesi ülkenin refahının artması ve elektronik ticaretin Türkiye'de ekonomik ve sosyal açıdan olumlu etkiler yaratması açısından büyük bir katkısı olacaktır (Erden, 2014: 64).

E-ticaret artık neredeyse tüm sektörlerde ve ticari alanlarda uygulanmakta, sunduğu fırsatlar ve tüketicilere sağladığı ekonomik kolaylıklar nedeniyle giderek talep görür hâle gelmiştir. Elektronik ticaretin kaynağı olan internet ve internet teknolojilerinin gelişmesi ve anında erişilebilir olması talep artışlarının temelini oluşturmaktadır. Elektronik ticaret sahip olduğu nitelikler nedeniyle günümüzde ekonomik hayatın birçok farklı alanında kullanılmaktadır (Gökmen, 2019: 30).

İnternet aracılığıyla yapılan alışverişlerde şirketlerin tüketicilerin talepleri doğrultusunda yaptıkları değişim ve yenilikler e-ticaret sektörünün daha da gelişerek günümüzdeki halini almasını sağlamıştır. Alışverişlerde kullanılan ödeme seçenekleri, taksit imkânları, ürünlerde seçenek çokluğu, farklı sitelerde ve markalarda fiyat karşılaştırmalarının doğrudan ve hızlı bir şekilde yapılabilmesi ve istenilen her an etkileşimde bulunulabilmesi tüketicilere çok büyük avantaj sağlamıştır. Ayrıca tüketicilerin herhangi bir sorununda e-ticaret sitelerine bağlı kurulan çözüm amaçlı müşteri temsilciliklerinin olması, sorunların kolaylıkla ve etkili bir şekilde çözülme fırsatı sunması gibi pek çok avantaj gelişimin en büyük sebepleri olarak gösterilebilir. Özellikle son yıllarda tüketiciler tarafından e-ticaretin önceki yıllara göre daha fazla tercih edildiğini görebiliriz. Görülen bu artışa sebep olarak yukarıda açıkladığımız nedenler dışında 2019 yılında tüm dünyada yayılmaya başlayan ve sonrasında Türkiye'de de görülen Covid-19 salgınının etkisini gösterebiliriz.

Covid-19 pandemisi, dünya genelinde de birçok sektörü etkiledi ve e-ticaret de bu etkilerde önemli bir şekilde yer almıştır. Pandemi dünya çapında dijitalleşmeyi hızlandıran bir etken olmuş ve e-ticareti olumlu etkilemiştir. E-ticaretle birlikte dijital altyapılar hızla gelişmeye

10th International CEO Communication, Economics, Organization & Social Sciences Congress zorlanmış, tüketicilere hızlı, güvenilir hizmet verme anlayışı geliştiği söylenebilir (Yıldız, 2023; 71-77). Bu sürecin kaçınılmaz bir sonucu olarak e-ticaret son derece ön plana çıkmaya başlamıştır. Sokağa çıkma kısıtlamaları ile market ve benzeri AVM'lerin erken saatlerde kapanıyor olması e-ticareti adeta bir tercih olmaktan çıkarıp bir zorunluluk haline getirmiştir. Alışverişe çıkmanın en zahmetsiz yöntemi bugün ki dünyada e-ticaret ile yapılan alışverişler olarak görülebilmektedir. Geniş ürün pazarı ve bu pazarın diğer şirket ve markaların ürünlerinin özellikleri ile kıyaslayabilme seçeneği ve farklılaştırılmış ödeme imkânları ile tüketiciler artık e-ticareti, klasikleşmiş fiziksel ticarete tercih eder hale gelmiştir (Kılıç, 2024; 20).

Covid-19 pandemi süreci sonrasında Türkiye'de ve hatta tüm Dünya'da e-ticaret yükselişine devam etmektedir. Fakat en hızlı büyümeyi 2020 yılında gerçekleştiren e-ticaret değişen tüketici alışkanlıklarıyla kendisini tüketicilere benimsetmiş bir dijital araç haline gelmiştir. Mağazalar artık hem fiziksel hem de online olarak satış yapmaya başlamışlardır. Covid-19 pandemi süreci birçok dinamiğin değişine sebep olmuş e-ticaret gelişimini yüksek oranda artırmıştır (Yıldız, 2023; 77).

E-ticaret hacminin genel ticaret hacmine oranı 2019 yılında %10,1 iken yıllar içinde büyük bir artış kaydederek 2023 yılında %20,3'e ulaştı. Türkiye'de ise e-ticaret hacmi 2023 yılında bir önceki yıla göre %115,15 artarak 1,85 trilyon Türk lirasına ulaştı. Ticaret Bakanlığınca 2024 yılında e-ticaret hacminin 3,4 trilyon Türk lirası ve işlem sayısının da 6,67 milyar adet olacağı öngörülüyor (Türkiye Ticaret Bakanlığı, 2024). Bu artışlara açıklamalarımızda da yer verdiğimiz gibi hem Covid-19 pandemi etkisinin e-ticaret hacminde yaratmış olduğu artışlar hem de günden güne gelişen sosyal medya ağını sebep gösterebiliriz.

Zamanla artan e-ticaret faaliyetleri vergilemenin de konusuna dahil olmuştur. E-ticaretin ülkelerin ekonomik sınırlarını aşarak küresel bir boyutta gerçekleştirilebilmesi, küresel ticarete konu olan malların ve hizmetlerin mevcut yasal düzenlemeler karşısında nasıl vergilendirilmesi gerektiği hem ulusal hem de uluslararası alanlarda yetersiz kalmış ve bazı sorunların oluşmasına sebep olmuştur.

2.E-TİCARETİN VERGİLENDİRİLMESİ VE VERGİ DENETİMİ

Gelişen ve büyüyen hayatımızda önemli bir yere sahip olan e-ticaret, vergilendirme ve vergi denetiminin de ana konusu haline gelmiştir.

2.1.Dünyada E-Ticaretin Vergilendirilmesi

E-ticaretin küresel bir boyutlara ulaşması ile birlikte mevcut yasal düzenlemeler küresel ticaret açısından yetersiz kalmıştır. Dolayısıyla bu hususta karşılaşılan en önemli problem, e-ticaret tarafı olan ülkeler arasında e-ticaretin hangi ülkenin vergilendirme yetkisi dahilinde olduğunu sorunu olmaktadır. E-ticaret vergilendirilmesinde gelirin elde edildiği yer, işyeri kavramları, kaynak ve varış ilkesi açısından sorunlar yaşanmaktadır. Buna ek olarak, uluslararası platformlarda çeşitli çalışmalar yürütülmekte ve e-ticaret nedeniyle ortaya çıkan vergi kaybı ve kaçaklarının önüne geçmek ve adil vergi dağılımını sağlamak için uluslararası devletlerin iş birliği içerisinde olduğu bir vergilendirme prensibinin oluşturulmasına yönelik çalışmalar devam etmektedir (Şimşek ve Yay, 2023; 36).

Vergi dairelerinin teknolojik altyapılarının güçlendirilmesi ve dijital denetim yöntemlerinin kullanılması da büyük önem taşıyan bir konudur. Vergi kaçırma ve dolandırıcılık gibi risklerin minimize edilmesi için daha kapsamlı düzenlemeler ve uluslararası iş birliği kapsamlı bir şekilde ele alınması gerekmektedir. Sonuç olarak, elektronik ticaret vergilendirme reformları,

10th International CEO Communication, Economics, Organization & Social Sciences Congress uluslararası düzeyde çeşitlilik göstermektedir. Ülkeler, deneyimlerini ve yaptıkları düzenlemeleri birbirleri ile paylaşarak daha iyi ve etkin bir vergilendirme sistemi oluşturulmasını sağlayabilirler. Böylelikle elektronik ticaretin ekonomik büyüme üzerindeki katkısı devam ederken aynı zamanda uluslararası vergi adaleti de daha etkin şekilde sağlanmış olur (Varnalı, 2023: 100).

2.2.Türkiye’de E-Ticaretin Vergilendirilmesi

Elektronik alanda yaşanan değişimlerle beraber verginin konusu da genişlemiştir. Zaman ve fiziksel uzaklık kavramlarının ortadan kalkmasına neden olan e-ticaret, işletmelere ve tüketicilere sağlamış olduğu avantajların yanında, devlet açısından da önemli vergi kayıplarına sebep olmaktadır (Canbay, 2009: 175). Gelişen e-ticaretin vergilendirilmesi ve vergi kaybı oluşmasının engellenebilmesi için e-ticaretin gelişimi ile doğru orantılı olacak şekilde hızlı bir mevzuat düzenlemesi yapılması gerekmektedir.

Maliye Bakanlığı e-maliye adı altında çeşitli çalışmalar yürütmektedir. SAY2000i (Web Tabanlı Saymanlık Otomasyon Sistemi) projesi, bu alanda atılmış önemli adımlardan biridir. Bunun yanı sıra, vergi idarelerinin modernizasyonu kapsamında, Vergi Dairesi Tam Otomasyon Projesi (VEDOP) yürütülmektedir. VEDOP ile İnternet Vergi Dairesi kapsamında mükellefler ve diğer kurumlara çeşitli hizmetler sunulmaktadır. İnternet Vergi Dairesi, kamu idarelerinde saydamlık ve kaliteli hizmet sağlama konusunda devletin bireye ait tuttuğu kayıtlara anlamında ilk uygulamalardandır. 1999 yılı Mart ayında GİB’in (Gelir İdaresi Başkanlığı) mükelleflerle daha iyi iletişim kurmak, çalışmaların mükelleflere, araştırmacılara ve diğer ilgililere daha iyi anlatılması ve çalışma sonuçlarının duyurulması amacıyla internet sayfası hizmete açılarak daha saydam bir vergi idaresinin ilk adımları atılmıştır (Çetin, 2010; 82).

Gelişen teknolojinin etkisi ve vatandaşların talepleri dikkate alınarak bu projede bazı güncellemeler yapılmıştır. Yapılan ilk güncelleme ile elektronik beyanname uygulamasına geçilmiş böylelikle elektronik ortamda ticari faaliyet gerçekleştiren kişi ve kurumlar beyannamelerini sanal ortamda verebilme imkânı elde etmişlerdir. Projenin bir sonraki güncellemesi ile e-VDO (Elektronik Vergi Dairesi Otomasyonu) uygulamalarıyla vergi daireleri ve mal müdürlükleri arasındaki işlemler kolaylaştırılmış ve vergi dairelerinin otomasyon altyapısı oluşturulmuştur. Bunların yanında Gelir İdaresi Başkanlığı’nın internet sitesi üzerinden vergi beyannamelerini, tahakkuk ve ödeme işlemlerini elektronik olarak gerçekleştirilebilmesi mümkün hale getirilmiştir. Bu yenilikler sayesinde vergi mükelleflerine güncel hizmetler sunularak vergi ödemekle yükümlü kurumların ve kişilerin, işlemlerini daha etkin ve kolay bir şekilde gerçekleştirebilmeleri sağlanmıştır. Yapılan bu çalışmalar, Türkiye’de elektronik ticaretin doğru bir şekilde vergilendirilmesi ve vergi idaresinin şeffaflığının artırılması yönünde yapılan düzenlemelerin nasıl başladığını göstermektedir (GİB, 2009; 22).

Ülkemizde elektronik ticaretin hukuki altyapısını oluşturmak amacıyla 5 Kasım 2014 tarihinde Resmi Gazete’de yayımlanan 6563 sayılı Elektronik Ticaretin Düzenlenmesi Hakkında Kanun ve ikincil düzenlemeleri hayata geçirilmiştir (6563 Sayılı Kanun <https://www.resmigazete.gov.tr/eskiler/2014/11/20141105-1.htm>)

E-ticarette yaşanan sorunlar ve ortaya çıkan ihtiyaçlar ile uluslararası alanda meydana gelen gelişmeler dikkate alınarak, e-ticaret sektöründe rekabeti bozucu veya sınırlayıcı faaliyetlerin engellenmesi, e-ticarette çok oyunculu bir yapının tesis edilmesi ve e-ticaretin sağlıklı bir şekilde büyümesi amacıyla 7416 sayılı Elektronik Ticaretin Düzenlenmesi Hakkında Kanunda

10th International CEO Communication, Economics, Organization & Social Sciences Congress Değişiklik Yapılmasına Dair Kanun Teklifi 01.07.2022 tarihinde TBMM’de kabul edilmiş, 07.07.2022 tarihinde Resmi Gazete’de yayımlanmıştır (Ticaret Bakanlığı, 2024).

Anılan Kanununa istinaden; Elektronik Ticaret Aracı Hizmet Sağlayıcı ve Elektronik Ticaret Hizmet Sağlayıcılar Hakkında Yönetmelik hazırlanarak 29 Aralık 2022 tarihli ve 32058 sayılı Resmî Gazete’de yayımlanarak yürürlüğe girmiştir. Elektronik Ticarete Güven Damgası Hakkında Tebliğ 06/06/2017 tarihinde, Elektronik Ticaret Bilgi Sistemi ve Bildirim Yükümlülükleri Hakkında Tebliğ ise 11/8/2017 tarihinde yürürlüğe girmiştir. Mevzuata göre elektronik ortamda gerçekleştirilen mal veya hizmetlere ilişkin internet üzerinden yapılan sözleşme ve siparişler, ticari iletişim ve ticari elektronik iletilerde uyulması gereken kurallar ve e-ticaret işletmelerine ilişkin hususlar düzenlenmiştir (Ticaret Bakanlığı, 2024).

Tüm bu çalışmalar, Türkiye’de elektronik ticaretin vergilendirilmesi sırasında vergi kayıplarını azaltmak, vergi mükelleflerine işlem kolaylığı sunmak ve vergi idaresinin daha şeffaf bir şekilde işleyişini sağlayarak etkin bir vergi denetim ortamı oluşması amacıyla yapılan yeniliklerdir.

2.3.E-Ticaretin Vergilendirilmesinde Karşılaşılan Sorunlar

Yaşadığımız yüzyılın en büyük ekonomik gelişmelerinden birisi olarak adlandırabileceğimiz e-ticaret, özellikle vergilendirme konusunda tam bir çözüme kavuşturulamadığından bir takım sorunları da beraberinde getirmektedir. Bununla birlikte e-ticaretin niteliğinden kaynaklanan sorunlar da bulunmaktadır. Yani vergi denetiminin sağlıklı bir şekilde yapılabilmesini zora sokan öncelikli sorundur (Organ ve Çavdar, 2012: 66).

E-ticaretin vergilendirilmesi konusunda ortaya çıkan ana sorun, sınır ötesi ticarete herhangi bir işyerine ihtiyaç olmamasıdır. Maddi mallar açısından, sınırı aşan ticarete gümrük ve posta engelleri kaynak tespiti bakımından belirleyici olabilmektedir. Ayrıca sevkiyat adresi ve varış yeri de bilinmektedir. Ancak satıcının vergi cenneti bir ülkede yerleşik olması halinde, ülke topraklarında yerleşik olmayan bir şirkete milli vergi kanunlarını uygulamak zorlaşmaktadır. Böylesi hallerde, özellikle yerleşik olmayan şirkete ulaşamadığında ülkede yerleşik olan alıcı vergilendirilmektedir (Ubay, 2013: 116-117).

Türkiye’de gelir vergisi kanununa göre, ülke sınırları içerisinde yerleşik olmayan gerçek kişiler sadece ülke sınırları içerisinde yaptıkları faaliyetlerden elde ettikleri kazanç veya iratlar üzerinden vergilendirilirler. Gelir Vergisi Kanununun 7. maddesine göre; “Ticari kazançlarda: Kazanç sahibinin Türkiye’de işyerinin olması veya daimi temsilci bulundurması ve kazancın bu yerlerde veya bu temsilciler vasıtasıyla sağlanması gerekmektedir. Bu şartları haiz olsalar dahi iş merkezi Türkiye’de bulunmayanlardan, ihraç edilmek üzere Türkiye’de satın aldıkları veya imal ettikleri malları Türkiye’de satmaksızın yabancı memleketlere gönderenlerin bu işlerden doğan kazançları Türkiye’de elde edilmiş sayılmaz. Türkiye’de satmaktan maksat, alıcı veya satıcının veya her ikisinin Türkiye’de olması veya satış aktinin Türkiye’de yapılmış olmasıdır. İş merkezinden maksat ise, iş bakımından muamelelerin bilfiil toplandığı ve idare edildiği merkezdir.” (GVK, Madde 7).

Gelir Vergisi Kanun maddesinde de yer verildiği üzere, elektronik ticarete faaliyet gösteren bireyler, mal veya hizmeti sattıkları sunucunun bulunduğu yer işyeri olarak kabul edilmektedir. Bu nedenle, ticari faaliyette bulunan bireyler sunucularını vergiden kaçınmak için hem ülke sınırları dışındaki ülkelerde hem de vergi cenneti olan ada ülkelerinde tutabilmektedir. Diğer bir yöntem ise ticari faaliyette bulunan kurum veya kuruluşların birden fazla ülkede birden fazla

10th International CEO Communication, Economics, Organization & Social Sciences Congress sunucu bulundurarak istedikleri zaman istedikleri sunucuya verilerini aktararak vergiden kaçınmalarıdır (Batun, 2014, s.72).

Diğer bir sorun ise kaynak ilkesidir. Yani kaynak ilkesi kısaca gelirin hangi ülkede elde edildiye o ülke tarafından verilebilirliği olarak ifade edilebilir.

Vergilendirme yetkisi genel bir ilke olarak kabul edildiğinden, mal ve hizmetlerin vergilendirilmesi de tüketildiği ülkenin koşullarına bırakılmıştır. Ülkeler kendi ülke sınırları içerisinde elde edilen geliri vergilendirme yetkisine sahip olduğundan, iki ülkeyi ilgilendiren bir vergi işlemi her iki ülke tarafından vergilendirilmek istendiğinde bu durum çifte vergilendirme sorununu doğurmaktadır (Şimşek ve Yay, 2023: 41).

E-ticaretin vergilendirilmesinde karşılaşılan bir sorun da çifte vergilendirme sorunudur. Çifte vergilendirme; kısa dönemde devlete gelir artışı sağlar gibi görünmesine rağmen, uzun dönemde ekonomik faaliyetlerin yavaşlamasına neden olmakta ve vergilendirilebilir alanların daralmasına ve vergi gelirlerinin azalmasına yol açmaktadır (İstanbul Yeminli Mali Müşavirler Odası, 1). Çifte vergilendirme, ülkelerin vergilendirme yetkisini kendi çıkarları için kullanmak istemeleri sonucu ortaya çıkmış ve ülkeler arasında vergilendirme konusunda sorun oluşturmuştur.

Çifte vergileme, vergiye tabi bir gelirin birden fazla ülkede vergi konusu olması, aynı gelirin hem elde edildiği ülkede hem de geliri elde edenin mukim (yerleşik) olduğu ülkede vergilendirilmesidir. Ülkeler bu istenilmeyen durumu ortadan kaldırmak amacıyla aralarında vergi anlaşmaları yapmaktadırlar (GİB, Vergi Anlaşmalarına İlişkin Bilgilendirici Yayınlar).

Çifte vergilendirme sorunu genelde iki akit ülke devleti arasında yapılan çifte vergilendirmeyi önleme anlaşmaları ile çözülmeye çalışılmıştır. OECD* nin Uzlaşma Modeli esas alınarak ve Birleşmiş Milletler tarafından yapılan çifte vergilendirmenin önlenmesine yönelik çalışmalar esas alınarak sözleşmeye taraf olan ülkelerin çıkarlarının dengelenmesi amaçlanmaktadır (Pehlivanlı, 2018; 19).

Vergilendirme konusunda karşılaşılan ikamet ilkesi, bir kişinin dünya çapında elde ettiği gelirlerinin, ikametinin bulunduğu ülkede toplanarak vergilendirilmesini ifade ederken, bu ilkenin arka planında devletin egemenlik hakkının, yerleşim yeri vasıtasıyla, kullanımı yer almaktadır. Kişiler devletle, ikametgâh vasıtasıyla, şahsi bir ilişki kurduklarında kişilerin yükümlülüğünün kapsamına hem yurt içinden ve hem yurt dışından elde edilen gelirler girmektedir. İkamet ilkesine göre, gerçek bir kişinin Türkiye’de yerleşik sayılabilmesi, Gelir Vergisi Kanunu’nda bir takvim yılı içerisinde devamlı olarak altı aydan fazla kalması hükmüne bağlanmıştır. Bu kurala e-ticaret açısından bakıldığında altı ay kriterinin geçerliliğini yitirdiği görülmektedir (Organ ve Çavdar, 2012: 72). Çünkü günden güne hızla gelişen teknoloji nedeniyle bireylerin fiziksel konumları herhangi bir ticari faaliyette bulunmak açısından önemsiz bir hale gelmiştir. Bu bağlamda mali ikametgâh, vergi hukuku açısından altı ay ölçütüne dayandırılmak yerine bireylerin çoğunlukla yaşamlarını sürdürdüğü, aile çevresinin ve sosyal ilişkilerinin yoğunlaştığı yerler gibi olguların benimsenmesiyle söz konusu sorunların daha kolay çözüme ulaşmasını sağlayacaktır.

E-ticaret, tüketicilerin internet üzerinden mal ve hizmet satın alabilmeleri için bir meta yolu sağlamıştır. Böylelikle günümüz ekonomisi üzerinde giderek artan bir öneme sahip olmuştur. Gelişerek hayatımızda önemli bir yer edinen e-ticaret yöntemi, zamanla yeni ödeme yöntemlerinin de gelişmesine yol açmış ve günümüzde de çok sık kullanılmakta olduğumuz ödeme yöntemlerinden biri olan elektronik para kavramı hayatımıza girmiştir.

Elektronik para (e-para), finansal olmayan kuruluşlar aracılığıyla kara para aklamayı kolaylaştırmakta ve mevcut aklama yasalarının uygulanmasını etkisiz hale getirmektedir.

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Elektronik para kullanmanın en önemli dezavantajından biri de vergi kaybı ve vergi kaçakçılığı gibi sorunlara sebebiyet vermesidir. Vergi kaçırabilmenin altında yatan en önemli neden ise elektronik para ile yapılan ödeme işlemlerinde tarafların bir araya gelmemesidir (Şimşek ve Yay, 2023: 41). Bu sayede ödeme yapan tarafların belisiz olması vergi idarelerinin denetimini zorlaştırmaktadır.

E-ticaretin vergilendirilmesi sırasında karşılaşılan sorunlardan bir diğeri transfer fiyatlandırmasıdır. Kurumlar Vergisi Kanunu'nun (KVK) 13. maddesinde “Kurumlar, ilişkili kişilerle emsallere uygunluk ilkesine aykırı olarak tespit ettikleri bedel veya fiyat üzerinden mal veya hizmet alım ya da satımında bulunursa, kazanç tamamen veya kısmen transfer fiyatlandırması yoluyla örtülü olarak dağıtılmış sayılır” hükmü yer almaktadır. 06.12.2007 tarih ve 26722 sayılı Resmi Gazete’de yayınlanan 2007/12888 Sayılı Transfer Fiyatlandırması Yoluyla Örtülü Kazanç Dağıtım Hakkında Karar’ın 3. maddesinde transfer fiyatlandırması, ilişkili kişiler arasında yapılan mal veya hizmet alım ya da satımında uygulanan fiyat veya bedel olarak tanımlanmıştır (KVK, 2006; 5520/m.13).

Transfer fiyatlandırma ile birleşen e-ticaret bir tarafta ve öncelikli olarak işletmelerin vergisel anlamda daha fazla çıkar elde etmelerine, diğer taraftan ise devletlerin denetim faaliyetlerinin ve kamu gelirlerinin aşınmasına neden olmaktadır. Bu sorunların temelinde, e-ticaretin transfer fiyatlandırma işlemlerini daha hızlı, kolay ve karmaşık hale getirmesi yatmaktadır. Bu durum ise, çok uluslu işletmelerin vergisel anlamda avantaj sağlamalarına olanak tanırken, diğer taraftan vergi idarelerinin işi daha da zorlaşmaktadır. Bir diğer belirtilmesi gereken nokta; e-ticaretin transfer fiyatlandırma işlemlerinde kullanılması çok uluslu işletmeler açısından olumlu olarak görülürken vergi idareleri için aynı durumun olumsuz olarak görülmektedir (Eser ve Polat, 2014: 58-59).

2.4. Türkiye’de Elektronik Ticarete Vergi Denetimi

Türkiye’de e-denetim tamamen uygulayabileceğimiz bir boyutta değildir. Bu durumun geliştirilebilmesi için günümüzde çalışmalar devam etmektedir. Uluslararası alanda gelişen teknoloji ile birlikte klasik yöntemler yerini yeni sistemlere bırakmaktadır. Ancak Türkiye’de vergi denetiminin yapılmasında yeni sistemlere hala geçilememiş, mevcut klasik yöntemlerle vergi denetimi süreci devam ettirilmeye çalışılmaktadır. Her ne kadar mevcut klasik sistemler kullanılmaya devam ediliyor olsa da son yıllarda yaşanan teknolojik gelişmeler sonucunda Türkiye’de de elektronik vergi denetimi konusunda yenilikler yapılmaya başlanılmıştır.

Elektronik vergi denetiminin tam olarak gerçekleştirilebilmesi için bütün işlemlerin bilgisayar ortamına aktarılması gerekmektedir. Eğer bütün işlemler bilgisayar ortamına aktarılabilirse kayıt dışılıkla mücadelede elektronik vergi denetimi daha önemli hale gelecektir.

Gelişen ve gelişmekte olan bu sistem içerisinde uygulanan denetim tekniklerinin de değişmesi kaçınılmazdır. Bilgi teknolojisinin gelişmesine bağlı olarak kâğıt ortamından vazgeçilmesi hem vatandaşlara hem de devlete birçok faydası olmaktadır. Bu sayede aktif işgücünün daha verimli alanlara kaydırılmasına ve farklı boyutta kullanılması sağlanabilecektir. Bu sistem sayesinde çok büyük kolaylıklar oluşturulabilecektir. Bununla birlikte e-fatura sistemine geçilmesi kaçınılmaz olmaktadır. E-fatura sistemi ile birlikte KDV iadelerinde büyük kolaylık sağlanmış olur. (Çağlar, 2011: 62).

Elektronik ticaret faaliyetleri kapsamında kâğıda dayalı belgeler kullanılmayıp, işlemler sanal bir ortamda gerçekleştirilmekte olduğundan, e-ticarete ilişkin defter ve belge kayıtlarının da sanal ortam üzerinde tutulması gerekmektedir. Bu hususla ilgili olarak Hazine ve Maliye

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Bakanlığı tarafından mükelleflerin defter ve belge kayıtlarını elektronik ortamda tutup saklamaları ile ilgili olarak yasal düzenlemeler çoğunlukla yapılmıştır. Ayrıca, elektronik ticaretin gelişimine bağlı olarak değişen ve gelişen ödeme sistemleri ve işlemleri ile vergi idaresinin bu işlemleri izleyebilmesi ve tespit edebilmesi için çalışmalar da yapılmaktadır.

Türkiye’de yapılan düzenlemeler ve gelişen teknoloji ile beraber günümüzde bakıldığında vergi daireleri, yapılan işlemleri daha etkin bir hale getirmek ve belge düzeni sorununa da çözüm olması açısından internet altyapılı programlar kullanmaya başlamışlardır. Bu programlar; elektronik beyanname, pos cihazlarının denetimi, elektronik fatura, elektronik defter ve elektronik fatura kayıt sistemi gibi yeni sistemler ile hem mükelleflerin vergi kurallarına uyumunu kolaylaştırmakta hem de vergi dairelerinde zaman tasarrufu oluşturarak vergi denetimlerinin daha etkin ve adaletli olacak şekilde yürütülmesini sağlayacak uygulamalar olmuştur.

Vergi Usul Kanunu uyarınca kağıt ortamında düzenlenen, tutulan, muhafaza ve ibraz edilen defter ve belgeler yerine, aynı bilgileri içeren elektronik defter ve belgelerin oluşturulması, kaydedilmesi, iletilmesi, muhafazası ve ibrazına ilişkin usul ve esaslar belirlendiği görülmektedir. Elektronik ortama taşınan bu belgelerin tanımlarını şu şekilde yapabiliriz (Çağlar, 2011; 74-75);

Elektronik Defter (E-Defter): Şekil hükümlerinden bağımsız olarak, Vergi Usul Kanununa göre tutulması zorunlu olan defterlerde yer alan bilgileri kapsayan elektronik kayıtlar bütünüdür.

Elektronik Kayıt (E-Kayıt): Elektronik ortamda tutulan ve elektronik defter ve belgeleri oluşturan, elektronik yöntemlerle erişimi ve işlenmesi mümkün olan en küçük bilgi ögesidir.

Elektronik Belge (E-Belge): Şekil hükümlerinden bağımsız olarak, Vergi Usul Kanununa göre düzenlenmesi zorunlu olan belgelerde yer alan bilgileri içeren elektronik kayıtlar bütünüdür.

Veri Formatı: Elektronik defter ve belge sistemlerindeki verilerin Gelir İdaresi Başkanlığına gönderilmesinde birlik sağlanabilmesi için hazırlanan standart formattır.

Bunların dışında vergi denetiminde etkinliğin sağlanması amacıyla elektronik ortamlarda uygulanabilen bilgi işlem uygulamaları da vardır. Bunlar;

Elektronik Beyanname (E-Beyanname), Elektronik Fatura Kayıt Sistemi (EFKS), Elektronik Fatura (E-Fatura), Elektronik İmza (E-İmza), Elektronik Sözleşme (E-Sözleşme) şeklindedir.

Geliştirilen bu uygulamalar kısa sürede yaygın olarak kullanılmaya başlanmış olsa da günümüzde hala tam olarak etkin bir e-ticaret vergilendirilmesi ve vergi denetimi gerçekleştirilemediği gözlemlenmektedir. Bunun en büyük sebeplerinden biri olarak geniş sosyal medya ağı ve bu ağın takip edilemiyor oluşunu göstermemiz mümkündür.

2.5. E-Ticaretin Vergilendirilmesinde ve Vergi Denetiminde Karşılaşılan Sorunlara Yönelik Çözüm Önerileri

Günümüzdeki firmaların birçoğu aynı anda birden fazla ülkede faaliyet göstermektedir. Bu da elde edilen kazancın hangi ülkede elde edilmiş kabul edileceği ve vergileme yetkisinin hangi ülkede olacağı konusunda sorun oluşturmaktadır. Bu sorunun çözümü de kazanç veya iradı elde eden şirketin nerede kurulu olduğu, yani işyerinin nerede olduğu sorusunun cevabı ile mümkündür. İşyeri kavramı ise her ülkenin kanunlarında farklı tanımlandığından vergilendirme

10th International CEO Communication, Economics, Organization & Social Sciences Congress konusunda sorunlar ortaya çıkmaktadır. Bu sorun da Çifte Vergiyi Önleme Anlaşmaları ve OECD'nin Model Vergi Anlaşmaları ile çözülmeye çalışılmaktadır (Pehlivanlı, 2018: 95). Elde edilen kazancı vergileme hakkının hangi devlete ait olduğunun tespit edilmesinde Model Vergi Anlaşması'nın en önemli ve vergilendirmeyi belirlemede kriter olarak görülen maddelerinden biri olan, daimi işyerinde elde edilen kazancın diğer devletteki işyerleri arasındaki dağılımı yapmada ölçü olarak kullanılan madde hükmü dikkate alınmaktadır.

1982 Anayasa'sının 90. madde hükmüne göre: "Usulüne göre yürürlüğe konulmuş milletlerarası antlaşmalar kanun hükmündedir. Bunlar hakkında Anayasaya aykırılık iddiası ile Anayasa Mahkemesine başvurulamaz. Usulüne göre yürürlüğe konulmuş temel hak ve özgürlüklere ilişkin milletlerarası antlaşmalarla kanunların aynı konuda farklı hükümler içermesi nedeniyle çıkabilecek uyuşmazlıklarda milletlerarası antlaşma hükümleri esas alınır" ifadesi yer almaktadır (Pehlivanlı, 2018: 96)

Uluslararası antlaşmalarla kabul edilen işyeri tanımları Türk vergi kanunlarında yer alan maddelerin uygulanmasında öncelikli olacağı için bu tanımlar yapılırken herhangi bir boşluk olmayacak şekilde ve ayrıntılı olarak yapılması bu sorunun çözülmesi konusunda büyük oranda etkili olacaktır. Tüm bunların yanında çifte vergilendirmeyi önleme anlaşmalarına ve uluslararası alanda yapılan anlaşmalara da bu hükümlerin eklenmesi çözüm için gerekli olacaktır.

İkamet ve kaynak ülke vergilendirme ilkelerinin ortaya çıkardığı en önemli sorun aynı gelir unsurunun hem yerleşik hem de kaynak ülkede vergilendirilmesidir. Yani ortaya bir çifte vergilendirme sorunu çıkmaktadır. Bu sorunun çözümü de esas itibarıyla uluslar arası çifte vergilendirme anlaşmaları aracılığı ile sağlanmaktadır. Çifte vergilendirme sorunu özellikle kurumlar bakımından gidermeye çalışılırken "etkin yönetim merkezi" kavramı kullanılmaktadır (Tarakcı, 2006; 87).

E-ticaretin yapısına uygun bir biçimde mevcut vergi kurallarının düzenlenmesine yönelik olarak uluslararası alanda sürdürülen çalışmaların TVS'yi de etkilemesi kaçınılmaz bir sonuçtur. Bu nedenle, söz konusu kararların ve çalışmaların TVS'de mevcut vergileme kurallarıyla uyumlaştırılması gerekmektedir (Ceran ve Çiçek, 2007; 299-300)

Dijital ürün ve hizmetlerin Gümrük Vergisi ve Katma Değer Vergisi açısından fiziki mal olarak kabul edilip, vergilendirmesinin tüketimin yapıldığı yerde vergilendirilmesi gerekir. Bu da uluslararası alanda e-ticarette faaliyet gösteren firmaların sorumlu sıfatıyla vergiyi tahsil ederek, tüketicinin bulunduğu yer vergi dairesine yatırması ve mükellefi bulunduğu ülkede ödeyeceği vergilerden yurtdışında ödemiş olduğu vergileri mahsup edebilmesi ile mümkündür. Bir diğer çözüm önerisi ise, yurtdışında elektronik ortamda ticari faaliyette bulunan firmalara yapılan ödemeler sırasında bankalar ve aracı kurumlar tevkifat yapmakla sorumlu tutulabilir (Pehlivanlı, 2018: 100).

Yakın zamanlarda uluslararası ticaretin artması neticesinde çifte vergi konusu önem kazanmıştır. Bir vergi mükellefinin, aynı mevzu ve matrah üzerinde birden fazla devlete karşı vergi mükellefi olması ve bu devletlere vergi ödenmesi vergi adaleti prensibini zedelemektedir. Nitekim birçok ülke, kendi vergileme yetkisini sınırlandırmak suretiyle çifte vergi sorunlarını çözmeye çalışmıştır. Ancak ülkelerin bu şekilde tek taraflı olarak vergileme yetkilerini daraltmaları çifte vergi sorununu önleyememiştir. Bu sorun daha ziyade uluslararası vergi anlaşmaları yoluyla giderilmektedir (Özlu, 2019; 30).

E-ticaretin ortaya çıkmasındaki en önemli sebepler arasında, insanların zaman ve mekân fark etmeden istek ve ihtiyaçlarına erişebilme imkânı ile işletmelerin de müşterilerine mesafe önemi olmadan ulaşabilme imkânının olmasıdır. Böylelikle elektronik ticaretin yapılabilmesi için gerekli şartlar oluşturulmuş ve zaman içerisinde gelişen e-ticaret alt yapısı ile ürün ve hizmetlerin müşterilere ulaştırılmasına olanak sağlanmıştır. Küreselleşmenin de etkisiyle gelişen elektronik ticaret, hızla yaygınlaşmış ve işletmeler için yeni oluşan pazara girme fırsatı ve rekabet ortamı sağlamıştır. Ayrıca elektronik ticaret, firmaların kendi reklamlarını yapabilecekleri ortamı oluşturarak kendilerini tanıtabilmenin daha kolay, maliyeti az ve daha hızlı bir şekilde gerçekleşmesine imkân sağlamıştır.

Günümüzde e-ticaretin önem kazanmasındaki en büyük etkenlerden birisi de 2019 yılında yaşanan Covid-19 salgını olmuştur. Tüm dünya üzerinde etkili olan bu pandemi sürecinde yaşanan evlere kapanma ve sosyal hayatın kısıtlanması durumu insanların istek ve ihtiyaçlarını karşılamak amacıyla normal şartlarda olduğundan daha fazla internet aracılığı ile elektronik ticarete yönelmelerine sebep olmuştur. Bu durumu fırsata dönüştürmesini sağlayan işletmeler de daha fazla satış yapabilmek adına belirli dönemlerde belirli ürünlerde indirimler uygulamaya başlamış ve bu indirim fırsatlarını da yine internet üzerinden geniş kitlelere kolay bir şekilde ulaştırarak satışlarını arttırma yoluna gitmişlerdir. Bu dönemde elektronik ticaret fazlasıyla gelişme göstermiş ve sürekli kendini yenileme fırsatı bulmuştur. Gelişmiş ve yaygınlaşmış olan e-ticaretin olumlu etkilerinin yanında olumsuz etkileri de mevcuttur. Bu olumsuz etkilerin başında e-ticaretin yapılmasında coğrafi sınırların öneminin kalmaması, ticari faaliyette tarafların belirsizliği ve elde edilen gelirin uluslararası vergi hukuku açısından tespitinin zor olması gibi durumlar yer almaktadır. Bu olumsuzluklar uluslararası alanda olduğu gibi Türkiye’de de vergilendirmenin ve vergi denetiminin yapılmasını olumsuz etkilemiştir.

Vergilendirme ve vergi denetimlerinin yapılamamasında karşılaşılan en önemli problem, e-ticaret faaliyetinde bulunan ülkeler arasında e-ticaretin hangi ülkenin vergilendirme yetkisine tabi tutulacağı sorunu olmuştur. E-ticaretin vergilendirilmesinde gelirin elde edildiği yer, işyeri kavramları, kaynak ve varış ilkesi açısından sorunlar oluşmuştur. Bunların yanında e-ticaretin vergilendirilmesinde geleneksel ticarete ilişkin yöntemlerin kullanılamıyor olması, e-ticaret nedeniyle oluşan vergi kaybı ve kaçaklarının önüne geçmek ve adil gelir dağılımını sağlayabilmek adına devletlerin uluslararası iş birliği içerisinde olduğu bir vergilendirme sistemi oluşturulması amacıyla çalışmalar yapılmış ve çözüm yolları aranmıştır.

Elektronik ticaretin gelişmesi ile birlikte vergilendirmenin ve vergi denetiminin yapılması konusunda oluşan olumsuzlukları çözmek amaçlı bazı anlaşmalar yapılmıştır. Başta uluslararası alanda yapılmış olan Çifte Vergilendirmeyi Önleme ve OECD’nin Model Vergi Anlaşmaları yürürlüğe konulmuş olsa da zamanla e-ticarette “iş yeri” kavramının oluşmaması vergilendirmede ve vergi denetiminde oluşan eksikliği ve adaletsizliği giderilememiştir. Vergilendirmede adaletsizliğe ve vergi denetiminde etkinsizliğe yol açan sorunlardan biri olan muhatap sorunun çözümü için tevkifât sistemi uygulanmaya başlanmış böylelikle hem sorunun çözülmesi için hem de vergi kaçakçılığının önüne geçerek daha adil bir vergilendirme yapılabilmesi için bir adım atılmıştır. Bu gelişmelerin yanında en başta mal ve hizmet alım satım işlemlerinin faturalandırılmasında kaçak işlemleri minimum seviyeye çekebilmek için belirli sınır üstündeki her işlem adına e-fatura ya da e-arşiv fatura oluşturulması ve bu faturaların kayıtlarının yine elektronik ortamlarda tutulup saklanması sağlanmış, böylelikle ve adaletsiz vergilendirmenin azaltılması hem de vergi idarelerindeki evrak yoğunluğunun azaltılması ile daha etkin vergi denetimlerinin yapılabilmesi amaçlanmıştır.

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Bu yeniliklerin yanında yine vergi idareleri tarafından yapılacak olan vergi denetiminin etkin bir şekilde gerçekleştirilebilmesi için vergilendirme aşamalarının e-beyanname ve e-fatura gibi elektronik sistemler üzerinden gerçekleştirilmeye başlanmıştır. Böylelikle hem evrak depolama ve iş yoğunluğu gibi bir sorunun ortadan kaldırılması hem de memurların iş yükünün hafifletilerek daha etkin ve adil vergilendirme sistemi oluşturulmaya çalışılmıştır.

Uygulamaya koyulan yeni elektronik sistemlerin yanında katma değer vergisinde eksik vergilendirmeye sebep olan, mükellefin tespitinde ve vergiyi ödemesini sağlama hususunda mevcut yerel mevzuatımız yetersiz kalmaktadır. Bunun nedeni ise KDV'nin uygulanmaya başladığı dönemde mal teslimi ve hizmet ifasının büyük bir kısmının ülke içinde gerçekleşmiş olmasıdır. Ayrıca e-ticaretin sınır tanımıyor olması, mal ve hizmet kavramlarının geleneksel mal ve hizmet tanımlarından farklı olması sebebiyle bazı sorunlar oluşmaktadır. Bu nedenle ülkelerin öncelikle mal ve hizmet kavramları için ortak bir tanım oluşturmaları gerekmektedir. Sonrasında ise vergilendirmenin nerede yapılacağı ve mükellef tespitinin belirlenmesi konusunda uluslararası alanda uygulanabilecek ortak bir mevzuat yürürlüğe koyulması da gerekmektedir.

KAYNAKÇA

6563 Sayılı Kanun. <https://www.resmigazete.gov.tr/eskiler/2014/11/20141105-1.htm>

Akpınar, E. (2017). Türkiye'de Elektronik Dış Ticaretin Gelişimi ve İstihdam İlişkisi. Harran Eğitim Dergisi, 18-32.

Batun, M. (2014). "OECD Model Anlaşması Çerçevesinde İşyeri: İlişkili Şirketler ve Elektronik Ticaret", Vergi Dünyası Dergisi, 393/5, 65-75

Çağlar, M. (2011). Kayıtdışı Ekonominin Önlenmesinde Elektronik Vergi Denetimi. Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü, Balıkesir. https://dspace.balikesir.edu.tr/xmlui/bitstream/handle/20.500.12462/2103/Murat_%c3%87a%c4%9flar.pdf?sequence=1&isAllowed=y

Canbay, T. (2009). Dünyada Vergileme Anlayışındaki Değişim (Antikçağdan Günümüze), Dora Yayınları, Bursa.

Ceran.Y. ve Çiçek. R. (2007). Elektronik Ticaretin Vergilendirilmesine İlişkin Türk Vergi Sisteminde Katma Değer Vergisi Sisteminde Katma Değer Vergisi Açısından Bir Değerlendirme. Celal Bayar Üniversitesi. Yönetim ve Ekonomi, 14(1). <https://dergipark.org.tr/tr/download/issue-file/45209>

Çetin.G. (2010). Bilişim Teknolojilerindeki Gelişmelerin Vergilemede Kayıt Düzeni ve Denetim Uygulamalarına Etkisi. Ekonomi Bilimleri Dergisi, 2(1), 79-86.

Demirdöğmez, M., Gültekin, N. ve Taş, H. Y. (2018). Türkiye'de E-Ticaret Sektörünün Yıllara Göre Gelişimi. OPUS Uluslararası Toplum Araştırmaları Dergisi, 8(15), 2216-2236. <https://doi.org/10.26466/opus.453147>

E-Commerce and Development Report 2004. https://unctad.org/system/files/official-document/ecdr2004_en.pdf

Erden. R. S. (2014). Elektronik Ticaret ve Dış Ticarete Etkisi. Marmara Üniversitesi. Sosyal Bilimler Enstitüsü. İstanbul

Eser. L. Y. ve Polat. S. (2014). Elektronik Ticaretin Transfer Fiyatlandırmaya Etkisi. Yönetim ve Ekonomi Araştırmaları Dergisi, 23. <https://dergipark.org.tr/tr/download/article-file/203352>

GİB. (2009). Kayıtdışı Ekonomiyle Mücadele Stratejisi Eylem Planı 2008-2010 https://www.gib.gov.tr/fileadmin/beyannamerehberi/Kayit_disi_2009tr.pdf

GİB. Vergi Anlaşmalarına İlişkin Bilgilendirici Yayınlar. Cifte Vergilendirmeyi Önleme Anlaşmaları Çerçevesinde Vergilendirme Esasları. https://www.gib.gov.tr/sites/default/files/fileadmin/CifteVergilendirme/cifte_vergilendirme.htm

Gökmen, K. (2019). Bilgi Toplumunda Elektronik Ticaret ve Türkiye Örneği, İstanbul Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.

Kaya, K. (2023). Pandemi E-Ticaretin Gelişimi ve E-Ticarette Pazarlama Stratejilerinin Ülke Ekonomisine Etkisi. Maltepe Üniversitesi Lisansüstü Eğitim Enstitüsü, İstanbul.

Kılıç, B. (2024). Covid-19 Pandemi Sürecinin E-Ticaret, Haksız Rekabet ve Tekelleşme Üzerindeki Etkileri. İstanbul Gelişim Üniversitesi Lisansüstü Eğitim Enstitüsü, İstanbul.

Kurumlar Vergisi Kanunu. 5520 Nolu Kanun. Madde 13. Transfer Fiyatlandırması Yoluyla Örtülü Kazanç Dağıtımı

[https://www.resmigazete.gov.tr/eskiler/2006/06/20060621-1.htm#:~:text=MADDE%2013%2D%20\(1\)%20Kurumlar,yoluyla%20%C3%B6rt%C3%BCl%C3%BC%20olarak%20da%C4%9F%C4%B1t%C4%B1lm%C4%B1%C5%9F%20say%C4%B1%C4%B1r.](https://www.resmigazete.gov.tr/eskiler/2006/06/20060621-1.htm#:~:text=MADDE%2013%2D%20(1)%20Kurumlar,yoluyla%20%C3%B6rt%C3%BCl%C3%BC%20olarak%20da%C4%9F%C4%B1t%C4%B1lm%C4%B1%C5%9F%20say%C4%B1%C4%B1r.)

KVK, 2006; 5520/m.13 <https://www.mevzuat.gov.tr/mevzuatmetin/1.5.5520.pdf>

OECD Guide to Measuring the Information Society 2011 https://www.oecd-ilibrary.org/science-and-technology/oecd-guide-to-measuring-the-information-society-2011_9789264113541-en

Organ1, İ. ve Çavdar, F. (2012). Elektronik Ticaretin Vergilendirilmesinde Uluslararası Alanda Yaşanan Sorunlar. İnternet Uygulamaları Ve Yönetimi Dergisi, 3(1), 63-84. <https://doi.org/10.5505/iuyd.2012.09797>

Özdöl, E. (2022). Covid-19 Pandemi Sürecinde Tüketicilerin E-Ticaret Sitelerinden Satın Alma Niyeti: E-Ticaret Kullanıcıları Üzerine Bir Araştırma. Yaşar Üniversitesi Lisansüstü Eğitim Enstitüsü, İzmir.

Özlu, S. (2019). Çifte Vergilendirmeyi Önleme Anlaşmalarının Uluslararası Ticarete Etkisi. Marmara Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.

Parlak, A. (2005). İnternet ve Türkiye’de İnternetin Gelişimi. Fırat Üniversitesi. Elazığ <http://hasanbalik.com/projeler/bitirme/39.pdf>

Pehlivanlı, A. (2018). Türkiye’de Elektronik Ticaretin Vergilendirilmesi ve Mevcut Sorunlara Yönelik Bir Değerlendirme. Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü. https://dspace.balikesir.edu.tr/xmlui/bitstream/handle/20.500.12462/3474/Abdulhamit_Pehlivanli%20c4%b1.pdf?sequence=1&isAllowed=y

Şimşek, H. Z. ve Yay, S. (2023). E-Ticaretin Vergilendirilmesinde Karşılaşılan Sorunların Yapısal Eşitlik Modeli ile Analizi. Akademik Araştırmalar Ve Çalışmalar Dergisi (AKAD), 15(28), 35-60. <https://doi.org/10.20990/kilisiibfakademik.1148738>

Tarakçı, S. (2006). E-Ticaretin Vergilendirilmesi ve Getirdiği Sorunlar. Marmara Üniversitesi. Sosyal Bilimler Enstitüsü, İstanbul.

Taşdemir, N. (2018). İhracatta İnternet ve E-Ticaretten Faydalanma Yolları Ve Bir Uygulama, İstanbul Ticaret Üniversitesi, İstanbul.

<https://acikerisim.ticaret.edu.tr/server/api/core/bitstreams/c76ace33-efac-428e-803e-30d58f555378/content>

Türkiye Ticaret Bakanlığı. (2019, 29 Temmuz). Dijital Ticaret Tanım ve Kavramlar. Temmuz 2019. <https://ticaret.gov.tr/hizmet-ticareti/elektronik-ticaret/dijital-ticaret-tanim-ve-kavramlar#:~:text=%C3%9Clkemizde%20ise%20e%2Dticaret%2C%206563.her%20t%C3%BCrl%C3%BC%20faaliyet%20%80%9D%20olarak%20tan%C4%B1mlanmaktadır%C4%B1r.>

Türkiye Ticaret Bakanlığı. (2024, 27 Mayıs). Türkiye’de E-Ticaretin Görünümü Raporu. [Türkiye’de E-Ticaretin Görünümü Raporu Yayımlandı](https://ticaret.gov.tr/icerik/elektronik-ticaret/mevzuat)

Türkiye Ticaret Bakanlığı. (2024, 22 Ocak). 6563 sayılı Elektronik Ticaretin Düzenlenmesi Hakkında Kanun. <https://ticaret.gov.tr/icerik/elektronik-ticaret/mevzuat>

Ubay, B. (2013). “Elektronik Ticaretin Vergilendirilmesinde Avrupa Birliği ve OECD Yaklaşımları”, Vergi Dünyası Dergisi, 381/5, 115-123.

UNCTAD, 2004 - https://unctad.org/system/files/official-document/ecdr2004_en.pdf

Varnalı, T. (2023). Elektronik Ticaretin Vergilendirilmesi: Uluslararası Yaklaşımlar, Türkiye’deki Uygulamalar ve Çözüm Önerileri. Hakkari Review, 7(2), 87-111. <https://doi.org/10.31457/hr.1373345>



10th International CEO Communication, Economics, Organization & Social Sciences Congress
Varnalı, T. (2024). Elektronik Ticaretin Vergilendirme Zorlukları ve Çözüm Yolları. Toplum Ekonomi Ve Yönetim Dergisi, 5(1), 195-224. <https://doi.org/10.58702/teyd.1344566>

Yıldız. H. M. (2023). Covid-19 Pandemi Sürecinin E-Ticaret Üzerindeki Etkileri. Necmettin Erbakan Üniversitesi Sosyal Bilimler Enstitüsü. İstanbul.

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**Türkiye’deki Sosyal Bilgiler Dersi Öğretim Programı ile İngiltere Ortaokul
Coğrafya Programında Harita Becerisi Nasıl Ele Alınıyor?**

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ÖZET

Bu araştırmanın amacı, Türkiye’de coğrafya dersleri konularının öğretildiği ortaokul Sosyal Bilgiler Dersi Öğretim Programı ile İngiltere’deki ortaokul Coğrafya Dersi Öğretim Programı’ndaki harita becerisinin yerinin karşılaştırılmasıdır. Böylece her iki ülkedeki öğretim programlarının ortaokul öğrencilerine harita becerisini ne düzeyde derinlemesine kazandırmak istediği analiz edilmiştir. Harita becerisi, coğrafya eğitiminin temel bileşenlerinden biridir ve mekânsal düşünme, analiz yapma, yön bulma gibi kritik yetkinliklerin gelişimine katkıda bulunur. Türkiye ve İngiltere gibi farklı eğitim sistemlerinde bu becerinin kazandırılma yöntemlerinin karşılaştırılması, müfredatların güçlü ve zayıf yönlerini belirleyerek eğitimde yenilikçi yaklaşımlar geliştirilmesine olanak tanıyabilir. Bu çalışmanın sonuçlarının, öğretim programlarının güncellenmesi ve öğretmen eğitimine yönelik stratejik öneriler sunması beklenmektedir. Araştırma, doküman analizi yöntemi ile yürütülmüştür. Türkiye’de 2024 Sosyal Bilgiler Dersi Öğretim Programı ve İngiltere’de güncel ortaokul Coğrafya Dersi Müfredatı incelenmiştir. Veriler, her iki programdaki harita becerisi ile ilgili kazanımlar, etkinlikler, içerik yapısı ve öğretim yaklaşımlarına göre kategorize edilmiştir. Bulgular, her iki ülkedeki beceri düzeylerinin kapsamını karşılaştırmaya yönelik olarak analiz edilmiştir. Elde edilen bulgulara göre, Türkiye Sosyal Bilgiler Dersi Öğretim Programı’nda harita becerisinin genellikle temel düzeyde (harita okuma, yön bulma gibi) ele alındığını, ancak mekânsal analiz ve değerlendirme becerilerine yeterince vurgu yapılmadığı tespit edilmiştir. Buna karşılık, İngiltere’deki ortaokul Coğrafya Dersi Öğretim Programı harita becerisini daha kapsamlı bir şekilde işlemekte; öğrencilerin hem temel becerileri hem de mekânsal veri analizi, harita oluşturulması ve farklı ölçeklerin yorumlanması gibi ileri düzey becerileri geliştirmeye yöneliktir. Türkiye’deki Sosyal Bilgiler Dersi Öğretim Programında ileride yapılacak güncellemelerde harita becerisinin kapsamını genişletmek ve mekânsal analiz odaklı öğrenme çıktılarına yer verilmesi önerilebilir. Ayrıca, öğretmenlerin bu becerileri kazandırma konusunda desteklenmesi amacıyla mesleki gelişim programları düzenlenebilir. Ayrıca etkileşimli harita etkinlikleri ve coğrafi bilgi sistemleri (GIS) kullanımının müfredata daha fazla entegre edilmesi önerilmektedir.

Anahtar Kelimeler: Harita Becerisi, Coğrafya Eğitimi, Sosyal Bilgiler Müfredatı, Uluslararası Müfredat Karşılaştırması, Türkiye, İngiltere

How are Map Skills Addressed in the Social Studies Curriculum in Turkey and the Secondary School Geography Curriculum in England?

ABSTACT

The aim of this study is to compare the place of map skills in the secondary school Social Studies Curriculum, where geography subjects are taught in Turkey, and the secondary school Geography Curriculum in England. Thus, it was analyzed to what extent the curricula in both countries aim to provide map skills to secondary school students in depth. Map skills are one of the basic components of geography education and contribute to the development of critical competencies such as spatial thinking, analysis, and orientation. Comparing the methods of imparting this skill in different educational systems such as Turkey and England can enable the development of innovative approaches in education by determining the strengths and weaknesses of the curricula. It is expected that the results of this study will provide strategic suggestions for updating the curriculum and teacher training. The research was conducted using the document analysis method. The 2024 Social Studies Curriculum in Turkey and the current secondary school Geography Curriculum in England were examined. The data were categorized according to the achievements, activities, content structure, and teaching approaches related to map skills in both programs. The findings were analyzed to compare the scope of skill levels in both countries. According to the findings, it was determined that map skills were generally addressed at a basic level (such as map reading and navigation) in the Turkish Social Studies Curriculum, but that spatial analysis and evaluation skills were not sufficiently emphasized. In contrast, the secondary school Geography Curriculum in England covers map skills more comprehensively; it aims to develop both basic skills and advanced skills such as spatial data analysis, map creation and interpretation of different scales. It can be suggested that the scope of map skills be expanded and



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spatial analysis-focused learning outcomes be included in future updates to the Social Studies Curriculum in Turkey. In addition, professional development programs can be organized to support teachers in acquiring these skills. It is also suggested that interactive map activities and the use of geographic information systems (GIS) be integrated more into the curriculum.

Keywords: Map Skills, Geography Education, Social Studies Curriculum, International Curriculum Comparison, Türkiye, England.

Harita becerisi, coğrafya eğitiminin temel bileşenlerinden biri olarak, bireylerin mekânsal algı ve düşünme yeteneklerini geliştiren kritik bir yetkinliktir (Montello, 1993). Mekânsal düşünme, bireylerin fiziksel ve sosyo-ekonomik ortamları analiz etme ve bu ortamlara yönelik çözüm önerileri geliştirme becerilerini kapsamaktadır (National Research Council, 2006). Haritalar, bu kapsamda hem bir öğrenme aracı hem de bir iletişim aracı olarak kritik öneme sahiptir.

Eğitim sistemlerinde harita becerisi kazandırılması, öğrencilerin coğrafi bilgileri daha etkili bir şekilde anlamlandırmasını sağlarken, bireylerin mekânsal düşünme ve problem çözme gibi çok yönlü beceriler geliştirmelerine katkı sağlar (Goodchild & Janelle, 2010). Özellikle küreselleşme sürecinde mekânsal bilgiye olan ihtiyacın artması, bu becerinin eğitim programlarında daha etkin bir şekilde ele alınmasını zorunlu kılmaktadır (Catling & Willy, 2009).

Türkiye ve İngiltere gibi farklı eğitim sistemlerine sahip ülkelerde, harita becerisine dair farklı araştırmalar yer alsa da (Artvinli, Dönmez, 2020; Dönmez, 2021) harita becerisinin öğretim programlarında nasıl ele alındığını inceleyen bir araştırmaya rastlanmadığı için, bu becerinin kazandırılmasına yönelik çeşitli yaklaşımları ve uygulamaları anlamak açısından önemlidir. Bu çalışma, her iki ülkedeki öğretim programlarının karşılaştırılmasıyla eğitim stratejilerinin geliştirilmesine katkı sunmayı hedeflemektedir.

1.1.Türkiye Sosyal Bilgiler ve İngiltere Ortaokul Coğrafya Öğretim Programları

Türkiye’de Sosyal Bilgiler dersi, tarih, coğrafya, vatandaşlık bilgisi gibi birden fazla disiplinin birleştirildiği bir çerçevede sunulmaktadır. Bu yapı, öğrencilerin farklı disiplinlerden gelen bilgileri birleştirerek eleştirel düşünme becerilerini geliştirmeyi amaçlamaktadır (MEB, 2024). Ancak bu program, harita becerisi gibi spesifik alanlarda yeterli derinlik sunmakta bazen yetersiz kalabilmektedir (Demirkaya, 2013). İngiltere’deki ortaokul Coğrafya programı ise coğrafya disiplinine özel olarak odaklanmakta, mekânsal düşünme, harita okuryazarlığı ve coğrafi bilgi sistemleri (CBS) gibi alanlarda derinlemesine beceri kazandırmayı hedeflemektedir (Department for Education, 2023). Program, öğrencilere hem temel harita becerileri (harita okuma, ölçek anlama) hem de ileri düzey uygulamalar (örneğin, veri yorumlama ve çözümlenme) kazandırmaya yönelik bir pedagojik yaklaşımı benimsemektedir. (Lambert & Morgan, 2010).

1.2.Öğretim Programlarında Harita Becerileri

Türkiye’de Harita Becerileri: Türkiye’deki Sosyal Bilgiler dersi öğretim programı, harita becerilerine temel düzeyde odaklanmaktadır. Özellikle harita okuma, yön bulma ve basit ölçek hesaplamaları gibi alanlara vurgu yapılmaktadır (MEB, 2024). Ancak bu becerilerin daha ileri düzeyde (örneğin, mekânsal analiz veya coğrafi veri yorumlama) ele alınması sınırlı kalmaktadır (Demirkaya, 2013).

İngiltere’de Harita Becerileri: İngiltere’de ise harita becerileri daha çok yönlü bir yaklaşımla ele alınır. Program, öğrencilerin mekânsal veri toplama, analiz etme ve sunma becerilerini geliştirmek üzere şekillendirilmiştir. Örneğin, CBS gibi dijital araçların öğretim sürecine dahil edilmesi, bu becerilerin teknolojik altyapılarla desteklenmesine olanak tanır (Ofsted, 2023). İngiltere’de harita becerilerinin öğretiminde öğretim programında teknolojinin yoğun bir şekilde kullanılması önerilmektedir. Özellikle CBS tabanlı uygulamalar, öğrencilerin mekânsal analiz yapma ve veri görselleştirme becerilerini geliştirmektedir.

Bu arařtırmada, nitel arařtırma desenlerinden doküman analizi yöntemi kullanılmıřtır. Doküman analizi, yazılı materyallerin sistematik bir řekilde incelenmesini ve yorumlanmasını içeren bir veri toplama yöntemidir (Bowen, 2009). Bu yöntem, özellikle eğitim programlarının içeriklerinin karşılaştırılması gibi çalıřmalarda etkili bir yaklařımdır (Yıldırım, řimřek, 2018). Arařtırma sürecinde Türkiye’deki 2024 Sosyal Bilgiler Dersi Öğretim Programı ve İngiltere ortaokul Coğrafya Dersi Öğretim Programı incelenmiř ve harita becerisi ile ilgili öğrenme çıktıları ve amaçlar analiz edilmiřtir.

2.1.Arařtırma Deseni

Doküman analizi, mevcut verilerin derinlemesine analiz edilmesini saėladıėı için bu arařtırma kapsamında tercih edilmiřtir. Eğitim programları, eğitim sistemlerinin temel taşları olarak önemli miktarda yazılı ve yapılandırılmıř bilgi içerir. Bu bağlamda, nitel bir arařtırma modeli olan doküman analizi, programların içeriklerini karşılařtırmalı olarak incelemek için uygun bir yöntemdir (Merriam, 2009). Arařtırmanın amacı doėrultusunda, her iki ülkedeki müfredatların harita becerisine yönelik yaklařımları ele alınmıř ve bu becerinin öğrencilere kazandırılma düzeyleri belirlenmiřtir.

2.2.Veri Toplama Süreci

Arařtırma verileri, Türkiye’nin Milli Eğitim Bakanlığı tarafından yayımlanan 2024 Sosyal Bilgiler Dersi Öğretim Programı ile İngiltere’deki Department for Education tarafından yayımlanan güncel Coğrafya Dersi Öğretim Programı üzerinden toplanmıřtır. Belgeler, kamuya açık kaynaklardan, internet üzerinden temin edilmiř ve güvenilir bir řekilde doėrulanmıřtır. Veri toplama sürecinde, programlardaki harita becerisi ile ilgili öğrenme çıktıları ve program amaçları kategorik olarak ayrılmıřtır.

2.3.Verilerin Analizi

Elde edilen veriler, içerik analizi yöntemi ile analiz edilmiřtir. İçerik analizi, metinlerin belirli temalar veya kategoriler altında sistematik olarak incelenmesini ve kodlanmasını içerir (Krippendorff, 2019). Arařtırmada, harita becerisi ile ilgili öğrenme çıktıları ve program amaçları, temel beceriler (örneğin, harita okuma, yön bulma) ve ileri beceriler (örneğin, mekânsal analiz, harita oluřturma) olmak üzere iki ana kategoriye ayrılmıřtır. Analiz sürecinde temaların oluřturulmasında hem ulusal hem de uluslararası literatürde yer alan harita becerisi tanımları dikkate alınmıřtır (Ünlü, 2020; Lambert & Balderstone, 2010).

2.4.Sınırlılıklar

Bu çalıřmanın sınırlılıėı, sadece mevcut yıllarda geçerli olan yazılı dokümanlara dayanmasıdır. Öğretmenlerin ve öğrencilerin harita becerisi öğrenme çıktılarına ait uygulama deneyimlerine yer verilmemiřtir. Ancak bu sınırlılık, gelecekteki arařtırmalara yol göstericidir.

3.BULGULAR

3.1. Türkiye’deki Sosyal Bilgiler Dersi Öğretim Programı

Türkiye’de, 2024 Sosyal Bilgiler Dersi Öğretim Programı’nda harita becerisi, genellikle temel düzeyde ele alınmaktadır. Bu beceriler çoėunlukla harita okuma, yön bulma, haritalarda bulunan temel unsurları tanıma gibi konularda yoėunlařmaktadır. Öğrenciler, coėrafi birimler ve harita sembollerini tanımakla sınırlı kalmakta, mekânsal analiz ve daha ileri düzey becerilere yönelik içerikler ve etkinlikler programda yeterince yer bulmamaktadır. Örneėin 2024 programında sadece “SB.4.2.1. Konum ve yön bulurken haritaları kullanabilme (MEB, 2024)”

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3.1.1. Harita Okuma ve Yön Bulma

Sosyal Bilgiler dersi programında, harita okuma ve yön bulma gibi temel beceriler ön plandadır. Öğrenciler, çeşitli harita türlerini ve bunların özelliklerini öğrenir. Ayrıca, yön bulma becerisi, öğrencilerin harita üzerinde doğru yön tayini yapabilmesi için gerekli olan temel yeteneklerden biridir. Ancak bu beceriler genellikle yüzeysel bir seviyede bırakılmaktadır.

3.1.2. Mekânsal Analiz ve Değerlendirme Eksiklikleri

Bununla birlikte, Türkiye’nin öğretim programında mekânsal analiz ve değerlendirme gibi daha karmaşık beceriler, sınırlı bir şekilde ele alınmaktadır. Öğrencilerin harita üzerinde mekânsal ilişkileri analiz etme, verileri karşılaştırma veya haritalar aracılığıyla sosyo-ekonomik verileri yorumlama gibi ileri düzey beceriler programda yeterince vurgulanmamaktadır.

Tablo-1: Türkiye Sosyal Bilgiler Dersi Öğretim Programı’nda Harita Becerisinin Yeri

Beceriler	Uygulama Düzeyi
Harita Okuma ve Yön Bulma	Temel Düzey
Mekânsal Analiz ve Değerlendirme	Yetersiz, sınırlı düzeyde

3.2. İngiltere Ortaokul Coğrafya Programı

İngiltere’nin ortaokul Coğrafya öğretim programı ise harita becerisini daha kapsamlı bir şekilde ele almaktadır. Öğrenciler, yalnızca harita okuma ve yön bulma becerilerini geliştirmekle kalmaz, aynı zamanda mekânsal analiz, harita yapımı, verilerin harita üzerinde sunulması ve farklı ölçeklerde harita yorumlama gibi daha karmaşık becerileri de öğrenirler.

İngiltere öğretim programında harita becerilerine odaklanan başlıca kazanımlar şunlardır:

- Fiziksel haritalarda yükseklik, arazi şekilleri ve topografya analizi yapabilme.
- Coğrafi Bilgi Sistemleri (CBS) kullanarak haritalar hazırlama.
- Doğal ve beşerî unsurların harita üzerinde konumlarını analiz etme.
- Dijital ve interaktif haritalardan veri çıkarma.

Bu konuda tavsiye edilen öğretim yöntemleri ise;

- Dijital haritalar üzerinden analiz yapma.
- Topografya haritalarında yükseklik ve arazi şekillerini modelleme.
- Proje tabanlı öğrenme kapsamında harita oluşturma ve veri analiz etme.

Tablo-2: Türkiye ve İngiltere Ortaokullarında Harita Becerisine Yaklaşım

Kriterler	Türkiye	İngiltere
Kullanılan Teknolojiler	Fiziksel haritalar, atlaslar	GIS, dijital haritalar, interaktif araçlar
Yöntem Odaklılık	Geleneksel (öğretmen merkezli)	Teknoloji destekli (öğrenci merkezli)
Aktiviteler	Harita okuma ve yön bulma	Veri analizi, proje tabanlı harita yapımı

3.2.1. Temel Harita Becerileri

İngiltere programında, harita okuma ve yön bulma gibi temel beceriler, öğrencilerin coğrafi verileri anlamalarını sağlamak için başlangıç seviyesinde ele alınmaktadır. Bununla birlikte, bu beceriler, harita üzerindeki verilerin daha derinlemesine analiz edilmesi ve harita okuma tekniklerinin uygulamalı bir şekilde gösterilmesiyle pekiştirilmektedir.

3.2.2. Mekânsal Veri Analizi ve Harita Yapımı

İngiltere’de harita becerisinin bir diğer önemli yönü, mekânsal veri analizine odaklanmaktır. Öğrenciler, harita üzerinden mekânsal verileri analiz etme, farklı harita türlerini karşılaştırma ve harita yapım süreçlerine katılma fırsatına sahiptir. Harita tasarımı ve oluşturulması, öğrencilerin harita becerilerinin gelişmesine olanak tanırken, aynı zamanda mekânsal düşünme becerilerini de güçlendirmektedir.

Tablo-3: İngiltere Sosyal Bilgiler Dersi Öğretim Programı’nda Harita Becerisinin Yeri

Beceriler	Uygulama Düzeyi
Harita Okuma ve Yön Bulma	Temel Düzey, derinlemesine uygulama
Mekânsal Analiz ve Veri Analizi	İleri Düzey, uygulamalı ve analiz odaklı
Harita Yapımı ve Tasarımı	İleri Düzey, pratik ve proje tabanlı

Her iki ülkede öğretim programlarının öğrenme çıktıları, harita becerilerinin kazandırılmasında farklı yöntemlerin kullanılmasına yol açmaktadır. Bu yöntemler Türkiye’de daha öğretmen merkezli, teorik ve sınırlı düzeyde iken, İngiltere’de etkinlikler ve öğrenci merkezli projeler üzerinden teknoloji yardımıyla işlenmesi önerilmektedir.

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Tablo-4: Türkiye ve İngiltere Öğretim Programlarının Harita Becerisinin Kazandırılmasındaki Yaklaşımlar

Öğretim Yöntemi	Türkiye Programında Uygulama Yaklaşımı	İngiltere Programında Uygulama Yaklaşımı
Öğretmen Odaklı	Yaygın, geleneksel	Sınırlı, daha az kullanılıyor
Etkileşimli Öğrenme ve Proje Bazlı	Sınırlı, yüzeysel	Yaygın, etkinlikler ve projeler
Coğrafi Bilgi Sistemleri (CBS)	Programda yer almıyor	Entegre edilmiş ve yaygın kullanılıyor

4. SONUÇ VE ÖNERİLER

Elde edilen bulgulara göre, Türkiye'nin Sosyal Bilgiler Dersi Öğretim Programı, harita becerisine daha sınırlı yaklaşmakta ve öğrencilerin sadece temel beceriler kazanmalarını sağlamaktadır. Buna karşın, İngiltere'de harita becerisi, mekânsal veri analizi, harita yapımı ve farklı harita türlerinin karşılaştırılması gibi ileri düzey becerileri de içeren daha kapsamlı bir biçimde ele alınmaktadır. Coğrafi Bilgi Sistemleri (CBS) gibi dijital araçların müfredata entegre edilmesi, öğrencilerin analiz ve problem çözme becerilerini geliştirebilir.

Bu amaçla Türkiye'deki okullarda dijital harita yazılımlarının kullanımı teşvik edilmelidir. Ayrıca harita becerilerinin geliştirilmesi için gerçek yaşam problemlerine dayalı projeler tasarlanmalıdır. Öğrenciler, çevrelerindeki coğrafi unsurları haritalama ve analiz etme süreçlerine dahil edilmelidir. Bu bağlamda, Türkiye'deki öğretim programının güncellenmesi, harita becerisinin kapsamının genişletilmesi ve mekânsal analiz odaklı etkinliklerin artırılması önerilmektedir. Ayrıca, öğretmenlerin harita becerisi konusunda mesleki gelişim programlarına dahil edilmesi ve etkileşimli harita etkinliklerinin müfredata entegre edilmesi önerilmektedir.

KAYNAKLAR

- Artvinli, E. , Dönmez, L. (2020). How Do Geography Textbooks Deal with Map Skills? A Comparison of Turkey and England. *Romanian Review of Geographical Education*, 9(2), 23-45. DOI:10.24193/RRGE220202
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40. <https://doi.org/10.3316/QRJ0902027>
- Catling, S., & Willy, T. (2009). *Teaching primary geography*. Routledge.
- Demirkaya, H. (2013). Türkiye'de coğrafya eğitiminin sorunları ve çözüm önerileri. *Eğitim ve Bilim*, 38(170), 290-302.
- Department for Education. (2023). *National curriculum in England: geography programmes of study*. Retrieved from <https://www.gov.uk>
- Dönmez, L. (2021). Map literacy skill in social sciences curriculum in Turkey: The Gap between theory and practice. *Review of International Geographical Education (RIGEO)*, 11(2), 449-460. doi: 10.33403rigeo.899631
- Goodchild, M. F., & Janelle, D. G. (2010). *Spatial thinking and geographic information science*. Springer.
- Krippendorff, K. (2019). *Content analysis: An introduction to its methodology* (4th ed.). Thousand Oaks, CA: SAGE Publications.
- Lambert, D., & Balderstone, D. (2010). *Learning to teach geography in the secondary school: A companion to school experience*. Routledge.
- Lambert, D., & Morgan, J. (2010). *Teaching geography 11-18: A conceptual approach*. Open University Press.
- MEB (Millî Eğitim Bakanlığı). (2024). *Sosyal bilgiler dersi öğretim programı*. Ankara: Talim ve Terbiye Kurulu.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.



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Montello, D. R. (1993). Scale and multiple psychologies of space. In A. U. Frank & I. Campari (Eds.), *Spatial Information Theory* (pp. 312-321). Springer.

National Research Council. (2006). *Learning to think spatially: GIS as a support system in the K-12 curriculum*. National Academies Press.

Ofsted. (2023). *Geography subject report*. Retrieved from <https://www.gov.uk>

Ünlü, M. (2020). Türkiye'deki coğrafya eğitimi programları üzerine bir değerlendirme. *Eğitim ve Bilim Dergisi*, 45(202), 75–88.

Yıldırım, A., & Şimşek, H. (2018). *Sosyal bilimlerde nitel araştırma yöntemleri*. Seçkin Yayıncılık.



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2018 ve 2024 Türkiye Ortaöğretim Coğrafya Öğretim Programlarında Afet
Risklerini Azaltma Eğitimi: Ne Değişti?

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ÖZET

Bu çalışmanın amacı, 2018 ve 2024 ortaöğretim coğrafya öğretim programlarında afet eğitimi içeriklerini karşılaştırarak, yapılan değişikliklerin kapsamını ve etkilerini değerlendirmektir. Türkiye, deprem, sel, heyelan ve orman yangınları gibi çeşitli doğal afetlere sıklıkla maruz kalan bir ülkedir. Bu nedenle, afet farkındalığını ve dayanıklılığını artırmak için okul müfredatlarında afet eğitiminin kapsamlı bir şekilde ele alınması kritik öneme sahiptir. Araştırmada nitel bir yöntem benimsenmiş, doküman analizi yöntemi kullanılarak 2018 ve 2024 yıllarına ait ortaöğretim coğrafya öğretim programları karşılaştırılmıştır. Afet eğitimi ile ilgili kazanımlar, temalar ve içerikler, önceden belirlenmiş analiz kriterlerine göre incelenmiştir. 2018 öğretim programında afet eğitimi kazanımlarının daha genel bir çerçevede ele alındığı, 2024 programında ise daha somut ve uygulamalı içeriklere yer verildiği ve bu konunun ayrı bir öğrenme alanına evrildiği tespit edilmiştir. Ayrıca, yeni programda iklim değişikliği, sürdürülebilirlik ve yerel afet riskleri gibi konulara daha fazla vurgu yapılmıştır. Afet eğitimi konusundaki öğrenme çıktılarının yalnızca teorik bilgiyle sınırlı kalmaması, uygulamalı etkinliklerle desteklenmesi önerilmektedir. Ayrıca, öğretmenlerin bu konuda yeterliliklerinin artırılması için hizmet içi eğitim programları düzenlenmesi ve yerel afet risklerini içeren materyaller geliştirilmesi önerilmektedir.

Anahtar Kelimeler: Afet Risklerini Azaltma Eğitimi, Coğrafya Öğretim Programı, Müfredat Değişikliği, Türkiye

Disaster Risk Reduction Education in 2018 and 2024 Turkey Secondary School Geography Curricula: What Has Changed?

ABSTRACT

The aim of this study is to compare the disaster risk reduction education content in the 2018 and 2024 high school geography curricula and evaluate the scope and effects of the changes made. Turkey is a country that is frequently exposed to various natural disasters such as earthquakes, floods, landslides and forest fires. Therefore, it is critical to comprehensively address disaster education in school curricula to increase disaster awareness and resilience. A qualitative method was adopted in the study, and the secondary school geography curricula of 2018 and 2024 were compared using the document analysis method. The outcomes, themes and contents related to disaster education were examined according to predetermined analysis criteria. It was determined that disaster education outcomes were addressed in a more general framework in the 2018 curriculum, while more concrete and applied content was included in the 2024 curriculum and this topic evolved into a separate learning area. In addition, the new program has placed more emphasis on issues such as climate change, sustainability and local disaster risks. It is recommended that learning outcomes on disaster education should not be limited to theoretical knowledge but should be supported by practical activities. In addition, it is recommended that in-service training programs be organized to increase teachers' competence in this regard and that materials that include local disaster risks be developed.

Keywords: Disaster Risk Reduction Education, Geography Curriculum, Curriculum Change, Türkiye.

Türkiye, coğrafi konumu nedeniyle sıklıkla doğa kaynaklı afetlerle karşı karşıya kalan bir ülkedir. Depremler, sel, heyelan, çığ ve orman yangınları gibi afetler, Türkiye'nin hem sosyal hem de ekonomik yapısını etkileyen önemli tehditler arasındadır (Afet ve Acil Durum Yönetimi Başkanlığı [AFAD], 2021). Örneğin, 1999 Marmara Depremi, afet eğitiminin toplumsal farkındalık oluşturmadaki rolünü bir kez daha ortaya koymuştur (Kaplan, 2000).

Afetlerin sıklığı ve etkisi göz önüne alındığında, afet eğitimi, bireylerin ve toplumların afetlere karşı dirençli hale gelmesinde önemli bir araçtır (Wisner ve diğ., 2004). Öğretim programlarında afet eğitiminin yer alması, genç nesillerin afet risklerini azaltmada risk farkındalığı kazanmalarını, afet krizi anlarında doğru davranış sergilemelerini ve uzun vadede toplumda dayanıklılık kültürü oluşturulmasını sağlar (UNESCO, 2015). Bu noktada afet bilincinin artırılmasında, okullarda çocuklara verilen eğitimin önemli olduğu ve çocukların öğrenmiş oldukları bilgileri başta aileleri olmak üzere kademeli bir şekilde toplumun tamamına kazandırmada önemli bir role sahip oldukları düşünülmektedir (Değirmenci, Kuzey ve Yetişensoy, 2019; Karaca, 2022). Bu noktada doğal afet okuryazarlığı bağlamında öğretim programlarındaki afetlerle ilişkili kazanımların incelenmesi (Sözcü, Aydınöz, 2019; Sözcü, 2019), farklı eğitim kademelerine göre afet kavramı (Dikmenli, Gafa, 2017) gibi çalışmalar önem taşımaktadır.

Türkiye'de afet eğitiminin öğretim programlarına entegrasyonu, 2000'li yılların başından itibaren, özellikle 1999 Marmara Depremi sonrasında önem kazanmaya başlamıştır. Özellikle ortaöğretim düzeyinde coğrafya dersleri, doğa kaynaklı afetlerin mekânsal ve sosyal etkilerini ele almak için ideal bir ders özelliğine ve içeriğine sahiptir. Bu bağlamda, coğrafya öğretim programlarındaki değişikliklerin incelenmesi, afet eğitiminin kapsamını ve etkisini anlamak açısından gereklidir (Doğan, Kılıç, 2020).

1.1. 2018 ve 2024 Ortaöğretim Coğrafya Öğretim Programları

2018 ve 2024 yıllarına ait coğrafya öğretim programları, afet eğitimi içeriklerini ele alış biçimleri açısından belirgin farklılıklar göstermektedir. 2018 programı, afet eğitimi daha genel bir çerçevede ele alarak, doğal afetlerin nedenleri ve sonuçları üzerine teorik bilgi sağlamayı amaçlamıştır (Milli Eğitim Bakanlığı [MEB], 2018). Bu programda afet eğitimi, diğer coğrafya konuları arasında dağınık bir şekilde ele alınmış ve uygulamalı etkinliklere sınırlı yer verilmiştir (Yıldırım, 2019).

2024 öğretim programında ise afet eğitimi, daha sistematik ve kapsamlı bir yapıya kavuşmuştur. Bu programda, afet eğitimi "Doğal Afetler ve Risk Yönetimi" başlıklı ayrı bir öğrenme alanı olarak tanımlanmış, öğrenme çıktıları ise daha somut ve uygulamalı şekilde yapılandırılmıştır (MEB, 2024). Örneğin, 2024 programında öğrencilere "yerel afet risklerini belirleme" ve "afet risk haritası oluşturma" gibi etkinlikler sunulması önerilmektedir (Erdoğan, 2023). Ayrıca, 2024 programında sürdürülebilirlik ve iklim değişikliği gibi güncel konulara daha fazla vurgu yapılmıştır.

1.2. Afet Eğitiminde Uygulamalı Yaklaşımın Artan Rolü

Günümüz eğitim sistemlerinde, uygulamalı öğrenme yöntemleri, öğrencilerin teorik bilgiyi pratiğe dönüştürmelerini sağlamada etkili bir araç olarak kabul edilmektedir (Kolb, 1984). 2024 coğrafya öğretim programında, bu yaklaşımın belirgin bir şekilde benimsendiği görülmektedir. Örneğin, "Afet Hazırlık Tatbikatı" gibi uygulamalı etkinlikler, öğrencilerin afet risklerine yönelik bilgi ve becerilerini artırmayı hedeflemektedir (MEB, 2024).

Ayrıca, yerel afet risklerinin ele alınması, öğrencilerin yaşadıkları bölgedeki tehlikeleri tanımalarını ve bu tehlikelere karşı önlem almalarını teşvik etmektedir (Doğan, 2022). Bu

10th International CEO Communication, Economics, Organization & Social Sciences Congress bağlamda, coğrafya derslerinde afet eğitiminin yerel bağlama uygun şekilde işlenmesi, öğrencilerin yaşadıkları çevreye daha duyarlı bireyler olmalarını sağlamaktadır (Wisner et al., 2004).

Afet eğitiminin uygulamalı yöntemlerle desteklenmesi, öğrencilerin afet farkındalığını artırmakla kalmaz, aynı zamanda onları afet sonrası toplumsal dayanıklılığın birer parçası haline getirir (Erdoğan, 2023). Ancak, bu sürecin başarılı bir şekilde uygulanabilmesi için öğretmenlerin yeterli bilgi ve beceriye sahip olmaları gerekmektedir.

2.YÖNTEM

2.1.Araştırma Deseni

Bu çalışma, nitel bir araştırma yöntemi kullanılarak gerçekleştirilmiştir. Nitel araştırmalar, incelenen olguların derinlemesine anlaşılmasını ve yorumlanmasını sağlayan bir yöntemdir (Creswell, 2014). Araştırmada doküman analizi yöntemi benimsenmiştir. Doküman analizi, mevcut belgelerin sistematik bir şekilde incelenmesini ve yorumlanmasını içeren bir veri toplama tekniğidir (Bowen, 2009). Bu yöntem, özellikle eğitim programlarının incelenmesi ve karşılaştırılması için etkili bir araç olarak kabul edilmektedir (Yıldırım & Şimşek, 2018). Çalışmada, 2018 ve 2024 yıllarına ait ortaöğretim coğrafya öğretim programları temel veri kaynağı olarak kullanılmıştır. Bu programlar, afet eğitimi ile ilgili kazanımlar, içerikler, amaçlar ve temalar açısından karşılaştırılmış ve önceden belirlenmiş analiz kriterlerine göre incelenmiştir.

2.2.Veri Toplama Süreci

Araştırmanın veri toplama sürecinde, öncelikle Milli Eğitim Bakanlığı tarafından yayımlanan 2018 ve 2024 ortaöğretim coğrafya öğretim programları incelenmiştir. Programların resmi kaynaklardan temin edilmesi, veri güvenilirliğini artırmak için önemlidir (Merriam, 2009). Veri toplama süreci şu aşamalardan oluşmuştur:

- Milli Eğitim Bakanlığı [MEB] web sitesi üzerinden 2018 ve 2024 öğretim programlarının PDF formatındaki dosyaları indirilmiştir.
- İçeriklerin Kodlanması: Programlarda yer alan afet eğitimi ile ilgili kazanımlar, temalar ve içerikler belirlenmiş ve analiz için kodlanmıştır. Kodlama sürecinde, afet eğitimiyle ilgili teorik bilgiler, uygulamalı etkinlikler ve öğrenme alanları gibi kategoriler dikkate alınmıştır (Patton, 2015).
- Analiz Kriterlerinin Belirlenmesi: Çalışmada, afet eğitimiyle ilgili içeriklerin incelenmesi için şu kriterler oluşturulmuştur:
 - Öğrenme çıktılarının açık ve somut olması,
 - Uygulamalı etkinliklerin varlığı,
 - İklim değişikliği, sürdürülebilirlik ve yerel afet risklerine yapılan vurgu.

2.3.Verilerin Analizi

Verilerin analizi, içerik analizi yöntemiyle gerçekleştirilmiştir. İçerik analizi, metinlerin sistematik ve tekrarlanabilir bir şekilde incelenmesini ve bu metinlerdeki ana temaların ortaya çıkarılmasını sağlar (Krippendorff, 2013). Araştırmada şu adımlar izlenmiştir:

Verilerin Kodlanması: 2018 ve 2024 coğrafya öğretim programları, belirlenen kriterler doğrultusunda kodlanmıştır. Kodlama süreci, içeriklerin objektif bir şekilde karşılaştırılabilmesini sağlamıştır (Miles & Huberman, 1994).

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Temaların Belirlenmesi: Kodlama sürecinde, afet eğitimi kazanımları ve içeriklerine ilişkin ana temalar belirlenmiştir. Örneğin, "uygulamalı etkinlikler" ve "sürdürülebilirlik" gibi temalar, 2024 programında daha belirgin şekilde öne çıkmıştır.

Karşılaştırmalı Analiz: 2018 ve 2024 öğretim programları arasındaki farklar, belirlenen temalar doğrultusunda karşılaştırılmıştır. Bu süreçte, 2024 programının afet eğitimi öğrenme çıktılarını daha somut hale getirdiği ve uygulamalı etkinliklere daha fazla yer verdiği tespit edilmiştir. Ayrıca, 2024 programında sürdürülebilirlik ve iklim değişikliği gibi çağdaş konuların daha geniş bir yer bulduğu görülmüştür.

3.BULGULAR

Araştırmada 2018 ve 2024 ortaöğretim coğrafya öğretim programları, afet eğitimi açısından amaçlar, kazanımlar/öğrenme çıktıları ve önerilen etkinlikler temelinde karşılaştırılmıştır. Bu başlıklar altında analiz edilen bulgular aşağıda sunulmuştur.

3.1. Amaçlara Ait Bulgular

2018 programında afet eğitiminin temel amacı, öğrencilere doğal afetlerin nedenleri ve sonuçları hakkında genel bir farkındalık kazandırmak olarak belirlenmiştir. Buna karşın, 2024 programında amaçlar daha geniş bir perspektifle ele alınmış ve öğrencilerin:

- **Afetlere hazırlık** (örneğin, bireysel ve toplumsal düzeyde alınacak önlemler),
- **Yerel afet risklerini tanıma**,
- **Sürdürülebilir afet yönetimi stratejileri geliştirme** gibi beceriler kazanması hedeflenmiştir.

Tablo-1: 2018 ve 2024 Afet Eğitimi Amaçlarının Karşılaştırılması

Amaçlar	2018 Programı	2024 Programı
Doğal afetlerin nedenlerini anlama	Var	Var
Afetlerin etkilerini azaltma	Genel olarak ele alınmış	Ayrıntılı ve yerel bağlamda ele alınmış
Sürdürülebilir afet yönetimi	Yok	Var
Uygulamalı hazırlık etkinlikleri	Yok	Var

3.2. Kazanımlar/Öğrenme Çıktılarına Ait Bulgular

2018 programında afet eğitimiyle ilgili kazanımlar genellikle teorik bilgi aktarımıyla sınırlı kalmıştır. Öğrencilerin coğrafi olaylar ve doğal afetler arasındaki ilişkiyi anlamaları, bilgi seviyesinde beklenmiştir. 2024 programında ise:

- Kazanımların sayısı artırılmış,
- Uygulamalı öğrenmeye ve problem çözme becerilerine odaklanılmış,
- İklim değişikliği, sürdürülebilirlik ve yerel afet riskleri gibi konular doğrudan öğrenme çıktısı haline getirilmiştir.

Yıl	Kazanım/Öğrenme Çıktısı Sayısı	Teorik Kazanımlar (%)	Uygulamalı Kazanımlar (%)
2018	11	%80	%20
2024	16	%50	%50

2024 programı, kazanımların uygulamalı yönünü artırarak öğrencilere gerçek hayat senaryolarında afetlere hazırlık yapma becerisi kazandırmayı amaçlamaktadır.

3.3. Önerilen Etkinliklere Ait Bulgular

2018 programında önerilen etkinlikler daha çok sınıf içi tartışmalar ve vaka incelemelerine dayanırken, 2024 programı uygulamalı etkinliklere ağırlık vermiştir. Öne çıkan etkinlikler şunlardır:

- **2018 Programı:**
 - Doğal afet haritalarının incelenmesi,
 - Afet türleri üzerine grup çalışmaları.
- **2024 Programı:**
 - Okul çevresinde afet risk analizi yapma,
 - İklim değişikliğinin bölgesel etkilerini gözleme,
 - Yerel yönetimlerle iş birliği yaparak afet hazırlık tatbikatlarına katılma.

2018 ve 2024 programlarındaki önerilen etkinliklerin dağılımına bakıldığında 2018 programında önerilen etkinliklerin %70'i teorik, %30'u sınırlı uygulamalı içerikten oluşurken; 2024 programında bu oran %40 teorik, %60 uygulamalı olarak değişmiştir.

4. SONUÇ VE ÖNERİLER

Araştırma bulguları, 2024 ortaöğretim coğrafya öğretim programının afet eğitimi açısından önemli yenilikler içerdiğini göstermektedir. Bu yenilikler şu şekilde özetlenebilir:

Amaçlar, sürdürülebilir afet yönetimi ve yerel afet risklerinin farkındalığı gibi çağdaş konuları içerecek şekilde genişletilmiştir. Öğrenme çıktıları daha somut ve uygulamalı bir yapıya kavuşmuş, öğrenci merkezli etkinliklerle desteklenmiştir. Önerilen etkinliklerde uygulama ve iş birliği odaklı yaklaşımlar ön plana çıkmıştır. Bu değişikliklerin, öğrencilerin afetlere yönelik bilinç ve dayanıklılık düzeylerini artırma potansiyeline sahip olduğu değerlendirilmektedir.

Bu sonuçlara göre, yerel afet risklerini ele alan görsel ve dijital materyallerin geliştirilmesi önerilmektedir. Afet eğitimiyle ilgili içeriklerin etkili bir şekilde aktarılması için öğretmenlerin yeterliliklerinin artırılacağı öğretmen eğitimlerine yer verilmesi önerilmektedir. Öğrencilerin afet yönetimi konusunda daha geniş bir uygulama alanına kavuşması için uygulama alanlarının çeşitlendirilmesi ve artırılması önerilmektedir. Okulların yerel yönetimlerle birlikte tatbikatlar ve risk analizi projeleri organize etmeleri için teşvik edilmesi önerilmektedir.

KAYNAKLAR

- Afet ve Acil Durum Yönetimi Başkanlığı [AFAD]. (2021). *Türkiye'de doğal afetler: Riskler ve çözüm önerileri*. Ankara: AFAD Yayınları.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications.

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- Değirmenci, Y., Kuzey, M. & Yetişensoy, O. (2019). Sosyal Bilgiler Ders Kitaplarında Afet Bilinci ve Eğitimi. *E-Kafkas Journal of Educational Research*, 6 (2), 33-46. <https://doi.org/10.30900/kafkasegt.591345>
- Dikmenli Y., & Gafa, İ. (2017). Farklı eğitim kademelerine göre afet kavramı. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, 0 (44), 21- 36. <https://doi.org/10.21764/maeuefd.335007>
- Doğan, A. (2022). Yerel afet riskleri ve eğitim. *Afet Eğitim Dergisi*, 4(2), 45-60.
- Doğan, A., & Kılıç, C. (2020). Deprem sonrası toplumsal dayanıklılık ve maneviyat: Türkiye örneği. *Toplum ve Bilim Dergisi*, 45(2), 25-40.
- Erdoğan, Z. (2023). Coğrafya öğretiminde afet eğitiminin önemi. *Eğitim ve Toplum Araştırmaları Dergisi*, 10(3), 12-28.
- Kaplan, İ. (2000). Marmara Depremi ve afet eğitiminin önemi. *Afet Araştırmaları Dergisi*, 12(4), 15-30.
- Karaca, Ö. F. (2022). *Afet konularının sosyal bilgiler ders kitaplarına yansımaları*. Yayınlanmamış Yüksek Lisans Tezi, Sosyal Bilimler Enstitüsü, Aksaray Üniversitesi.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.
- Krippendorff, K. (2013). *Content analysis: An introduction to its methodology* (3rd ed.). Sage Publications.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Sage Publications.
- Milli Eğitim Bakanlığı [MEB]. (2018). *Ortaöğretim coğrafya dersi öğretim programı*. Ankara: MEB Yayınları.
- Milli Eğitim Bakanlığı [MEB]. (2024). *Ortaöğretim coğrafya dersi öğretim programı*. Ankara: MEB Yayınları.
- Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Sage Publications.
- Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Sage Publications.
- Sözcü, U. (2019). Doğal afetler ve doğal afet okuryazarlığı. Pegem Akademi: Ankara.
- Sözcü, U., & Aydınöz, D. (2019). Doğal afet okuryazarlığı bağlamında öğretim programlarındaki afetlerle ilişkili kazanımların incelenmesi. *Turkish Studies - Educational Sciences*, 14(5), 2639 - 2652. <https://doi.org/10.29228/TurkishStudies.32675>
- UNESCO. (2015). *Education for disaster risk reduction: Building resilient communities*. Paris: UNESCO Publishing.
- Wisner, B., Blaikie, P., Cannon, T., & Davis, I. (2004). *At risk: Natural hazards, people's vulnerability and disasters* (2nd ed.). Routledge.
- Yıldırım, A., & Şimşek, H. (2018). *Sosyal bilimlerde nitel araştırma yöntemleri* (11. baskı). Seçkin Yayıncılık.
- Yıldırım, M. (2019). 2018 coğrafya öğretim programında doğal afetlerin yeri. *Eğitim ve Coğrafya Dergisi*, 3(1), 65-79.



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**Bitcoin ve Altın Fiyatları ile VIX Korku Endeksinin Volatilite Modelleriyle
Karşılaştırmalı İncelenmesi**

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ÖZET

Çalışmada finansal kriz dönemlerinde Bitcoin fiyatı, altın fiyatı ve VIX volatilite endeksinde ait getiri serileri arasındaki ilişkiler volatilite modelleri aracılığıyla incelenmiştir. Kripto para birimlerinin ilki ve en dominant olan Bitcoin'in modern finansal sistemdeki rolü giderek artmıştır. Bununla birlikte yatırım portföylerinde geleneksel güvenli liman olarak altın kabul görmeye devam etmektedir. VIX volatilite endeksi halen piyasa göstergelerini temsilen en yaygın kullanılan endeksler arasındadır. Çalışmada VIX volatilite endeksinin altın ve Bitcoin'e etkisinin anlaşılması amaçlanmıştır. Analizde VIX volatilite endeksinin piyasa kapanış değeri ile Bitcoin ve altının piyasa kapanış fiyatlarından elde edilen getiri serileri kullanılmıştır. Böylece finansal piyasalardaki volatilite dinamiklerinin ve kısa vadeli değişimlerin daha net bir şekilde analiz edilmesi sağlanmıştır. Çalışma Bitcoin ve altına ilişkin volatilite yapısının COVID-19 pandemisinin etkisiyle belirsizliklerin yaşandığı dönemde ve sonrasında analiz edilmesini amaçlamıştır. Bu amaç doğrultusunda 27 Aralık 2019 ile 10 Nisan 2024 aralığında haftalık frekansta veri setleri elde edilmiştir. Analizde öncelikle veri setlerine ilişkin grafikler incelenmiştir. COVID-19'un dünyaya yayılmaya başladığı birinci üç aylık dönemden ikinci üç aylık döneme geçilirken VIX volatilite endeksi oldukça yükselmiş, daha sonra gerileyerek dalgalı olmakla birlikte belirli bir aralıkta seyretmiştir. Bitcoin ve altın fiyatlarının dalgalı seyrete de yıllar içinde değerlerinin yükseldiği gözlenmiştir. Analizin ilk aşamasında değişkenlere ilişkin zaman serilerindeki yapısal değişimlerin tahminini kolaylaştırmak amacıyla Fourier ADF birim kök testleri kullanılmıştır. Ardından ARCH ve GARCH modelleri kullanılarak değişkenlerin volatilite seviyeleri incelenmiştir. Volatilite modeli belirlemeden önce değişen varyans ve otokorelasyon sorunlarının varlığı incelenmiştir. ARCH-LM testi sonuçlarına göre varyansın değişkenlik gösterdiği tespit edilmiştir. Breusch-Godfrey otokorelasyon testine göre modelde otokorelasyon sorununun olduğu tespit edilmiştir. Elde edilen bulgular doğrultusunda modeldeki volatilitenin doğru bir şekilde modellenebilmesi için ARCH/GARCH modellerinin kullanılmasının gerekli olduğu görülmüştür. Kurulan modelde doğrusal olmayan unsurların varlığı Brock, Dechert, Scheinkman ve LaBaron (BDS) testi ile incelenmiştir. BDS testi sonuçlarına göre modelde doğrusal olmayan unsurlar mevcuttur. ARCH ve GARCH modellerine ilişkin sonuçlar değerlendirildiğinde, GARCH modelinin volatilite tahminlerinde veri için daha uygun bir modeldir. Elde edilen bulgular, VIX volatilite endeksinin Bitcoin ve altın fiyat değişimlerine etkisini ortaya koyarak, kriz dönemlerinde risk yönetimi stratejileri için değerli bilgiler sunmaktadır. Bu bağlamda, çalışma hem yatırımcılar hem de politika yapıcılar için önemli çıkarımlar sunmaktadır.

Anahtar Kelimeler: Bitcoin, altın, VIX volatilite endeksi, ARCH, GARCH.

Comparative Analysis of Bitcoin and Gold Prices and VIX Volatility Index with Volatility Models

ABSTRACT

In this study, the relationships between the return series of Bitcoin price, gold price, and VIX volatility index during financial crisis periods are analyzed through volatility models. The role of Bitcoin, the first and most dominant cryptocurrency, has gradually increased in the modern financial system. However, gold continues to be accepted as the traditional safe haven in investment portfolios. The VIX volatility index is still among the most widely used indices representing market indicators. This study aims to understand the impact of the VIX volatility

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index on gold and Bitcoin. In the analysis, the return series obtained from the market closing value of the VIX volatility index and the market closing prices of Bitcoin and gold are used. Thus, volatility dynamics and short-term changes in financial markets are analyzed more clearly. The study aims to analyze the volatility structure of Bitcoin and gold during and after the period of uncertainty due to the COVID-19 pandemic. For this purpose, data sets were obtained at weekly frequency between December 27, 2019 and April 10, 2024. In the analysis, firstly, the graphs of the data sets were analyzed. The VIX volatility index increased considerably from the first quarter, when COVID-19 started to spread around the world, to the second quarter, and then declined and remained within a certain range, albeit fluctuating. Although Bitcoin and gold prices have fluctuated, their values have increased over the years. In the first stage of the analysis, Fourier ADF unit root tests were used to facilitate the estimation of structural changes in the time series of the variables. Then, ARCH and GARCH models are used to analyze the volatility levels of the variables. Before determining the volatility model, the existence of variance and autocorrelation problems is examined. According to the results of the ARCH-LM test, variance is found to vary. According to the Breusch-Godfrey autocorrelation test, an autocorrelation problem is detected in the model. In line with the findings obtained, it is necessary to use ARCH/GARCH models in order to accurately model the volatility in the model. The presence of nonlinearities in the model is examined with the Brock, Dechert, Scheinkman, and LaBaron (BDS) test. According to the BDS test results, there are nonlinearities in the model. When the results of ARCH and GARCH models are evaluated, the GARCH model is a more appropriate model for the data in volatility forecasts. The findings reveal the impact of the VIX volatility index on Bitcoin and gold price changes and provide valuable information for risk management strategies during crisis periods. In this context, the study offers important implications for both investors and policymakers.

Keywords: Bitcoin, gold, VIX volatility index, ARCH, GARCH.

1. Giriş

Finansal piyasalardaki belirsizlik dönemleri, yatırımcıları volatilitiyi anlamaya ve riskten korunma araçlarını değerlendirmeye yönlendirmektedir. Altın, geleneksel bir güvenli liman olarak kabul edilirken, Bitcoin gibi dijital varlıklar ve CBOE VIX (Volatilite Endeksi) gibi piyasa belirsizliği ölçütleri, modern finansal sistemin ayrılmaz bir parçası haline gelmiştir. Bu bağlamda, Bitcoin fiyatı, altın fiyatı ve VIX arasındaki ilişkiyi analiz etmek, yatırımcıların ve politika yapıcıların kriz dönemlerinde risk yönetim stratejilerini şekillendirmeleri açısından kritik bir öneme sahiptir.

Bitcoin, başlangıçta merkezi olmayan bir ödeme aracı olarak tasarlanmış olmasına rağmen, giderek yatırımcılar arasında spekülasyon bir varlık ve potansiyel bir güvenli liman olarak değerlendirilmektedir. Kyriazis (2020), Bitcoin'in fiyat dinamiklerinin altın ve jeopolitik belirsizlik gibi faktörlerden nasıl etkilendiğini analiz ederken, Bitcoin'in volatilitesi üzerindeki önemli belirleyicilere işaret etmektedir. Benzer şekilde, Köse vd. (2024) Bitcoin fiyat oynaklığına odaklanarak, kripto para piyasalarındaki belirsizliğin etkilerini detaylı bir şekilde incelemiştir. Bu çalışmalar, Bitcoin'in altın ve VIX gibi geleneksel varlıklarla ilişkisine dair önemli ipuçları sunmaktadır.

Geçmiş literatür, kriz dönemlerinde altın ve Bitcoin'in güvenli liman özelliklerini karşılaştırırken, Shahzad vd. (2022), Bitcoin'in BRICS hisse senedi piyasalarına karşı bir koruma aracı olarak potansiyelini değerlendirmiştir. Bunun yanında, Malladi ve Dheeriyaa (2021), kripto para getirilerinin ve oynaklıklarının zaman serisi analizlerini gerçekleştirerek, piyasaların dinamik yapısını gözler önüne sermiştir. Elgammal vd. (2021) ise, COVID-19 pandemisi sırasında altın, enerji ve hisse senedi piyasaları arasındaki fiyat ve oynaklık etkilerini araştırmış ve bu varlıkların volatilitate davranışlarına ışık tutmuştur. Ayrıca, Diniz-Maganini vd. (2021), Bitcoin'in fiyat etkinliği ve güvenli liman özelliklerini COVID-19 bağlamında ele alarak kripto paraların kriz dönemlerindeki performansına dair detaylı analizler sunmuştur.

Bu çalışmada, ARCH ve GARCH modelleri kullanılarak Bitcoin fiyatı, altın fiyatı ve VIX arasındaki dinamik ilişki incelenecektir. ARCH ve GARCH modelleri, finansal verilerdeki volatilitiyi modellemek ve öngörmek için etkili araçlar olarak tanınmaktadır. Bu yöntemler, zamanla değişen volatilitenin yapısını analiz ederek, Bitcoin'in ve altının kriz dönemlerindeki davranışlarının daha iyi anlaşılmasını sağlayacaktır. Çalışma, özellikle COVID-19 pandemisi gibi yüksek belirsizlik dönemlerine odaklanacak ve bu dönemlerde Bitcoin, altın ve VIX arasındaki volatilitate etkileşimlerini ortaya koymayı hedefleyecektir.

Elde edilecek bulgular, yatırımcıların ve politika yapıcıların volatilitate riskine karşı daha bilinçli kararlar almasına yardımcı olabilecek bir rehber niteliğinde olacaktır. Ayrıca, geleneksel güvenli limanlar ile Bitcoin gibi yenilikçi dijital varlıklar arasında bir karşılaştırma yapılmasına olanak sağlayarak, kriz dönemlerinde bu varlıkların etkinliğini değerlendirmek için önemli bir çerçeve sunacaktır.

2. Literatür İncelemesi

Bu çalışmada, Bitcoin fiyatı, altın fiyatı ve VIX volatilitate endeksi arasındaki ilişkiler üzerine yapılan araştırmalar incelenmiş ve değerlendirilmiştir. Son yıllarda kripto para piyasasını temsilen Bitcoin'in yatırım portföyündeki diğer finansal varlıklarla ve piyasa göstergeleriyle olan ilişkisine yönelik yoğunlaşan ilgi, bu konunun hem teorik hem de pratik açıdan önemini arttırmaktadır. Bu bağlamda, bu literatür taramasında Bitcoin, altın ve VIX volatilitate endeksi ile ilgili son dönemdeki çalışmaların sistematik bir şekilde incelenmesi amaçlanmıştır. İncelenen literatürdeki yayınların bir kısmına Tablo 1'de yayımlanma tarihi yeniden eskiye doğru sıralı şekilde yer verilmiştir:

Tablo 1. Literatür Taraması

Araştırmacı/lar(Yıl)	Değişkenler	Yöntem	Analiz Bulguları
Gökgöz vd.(2024)	Altın, Bitcoin, altına dayalı kripto para birimlerinin fiyatları, G7 ülke hisse senetleri ve bankacılık endeksleri	Düzeltilmiş Asimetrik Dinamik Koşullu Korelasyon-Üstel Genelleştirilmiş Otoregresif Koşullu Değişen Varyans	Altın ve altına dayalı kripto para birimlerinin Bitcoin'e kıyasla optimal portföylerde ağırlıklarını korumaktadır.
Köse vd. (2024)	VIX volatilité endeksi, ABD Dolar endeksi, altın, petrol ve Bitcoin fiyat volatilitesi	SVAR	VIX volatilité endeksinin Bitcoin üzerindeki etkisi başlangıçta sınırlı iken zamanla artarak yoğunlaşmıştır. Bitcoin fiyat oynaklığı analizde en yüksek açıklayıcı paya sahiptir. VIX ile Bitcoin fiyatı arasında zıt yönlü bir ilişki olduğu gözlenmiştir. Bitcoin fiyatı daha çok kendi volatilitésinden etkilenmiştir.
Sokhanvar ve Hammoudeh (2024)	Altın, ABD Doları, Bitcoin, VIX volatilité endeksi	Dinamik çapraz kantilogram analizi	Altın ve ABD doları portföylerde güvenli limanlar olduğu gözlenmiştir. Bitcoin ise piyasa türbülansı sırasında riskli bir varlık gibi davranış sergilemiştir. VIX endeksi altın ve ABD Dolarını olumlu yönde etkilemiştir. VIX endeksi Bitcoin'i olumsuz yönde etkilemiştir. VIX endeksinin değişkenlere etkisi hemen gerçekleşse de gerçekleşen etki zamanla azalmıştır. Yazarlar yatırım portföylerinin piyasa koşullarına uygun olarak zamanında güncellenmesinin önemini vurgulamış ve VIX'in portföylerdeki varlıklar arasındaki korelasyonu etkilediğini göstermiştir.
Su vd (2023)	Altın ve Bitcoin fiyatları, VIX volatilité endeksi	TVP-SV-VAR	VIX hem altın hem de Bitcoin fiyatları üzerinde etkilidir.
Shahzad vd. (2022)	Bitcoin, altın ve ABD VIX vadeli işlemleri	Çapraz kantilogram yaklaşımı	Bitcoin ve altın zayıf korunma araçlarıdır. Bazı BRICS ülkelerinde Bitcoin, altın ve VIX vadeli işlemlerinin her biri COVID-19 salgının etkisiyle şekillenen zamanla değişen bir riskten korunma rolüne sahiptir.
Diniz-Maganini vd. (2021)	Bitcoin, altın, ABD Dolar endeksi, MSCI Dünya endeksi	DCC-GARCH	Bitcoin getirisi ABD Doları ve MSCI Dünya endeksine göre daha yüksektir. Değişkenler arasındaki net çapraz korelasyonlar zaman ölçeklerine göre değişmektedir. İki aydan fazla bir dönem için altın güvenli bir limandır. Üç ayı geçen durumlarda ise Bitcoin'in güvenli bir liman olarak tahmin edilmiştir.
Elgammal vd. (2021)	Bitcoin, altın, küresel hisse senetleri, enerji piyasası	GARCH	Hisse senedi ve altın arasında çift yönlü getiri yayılımı olduğu tahmin edilmiştir. Enerji piyasalarından hisse senedi ve altın piyasalarına çift yönlü ortalama yayılma etkileri bulunmuştur. VIX volatilité endeksinin altının geleneksel güvenli liman etkisini doğrularken, Bitcoin'in kriz dönemlerinde bu özellikten uzaklaştığını ifade etmiştir.

Malladi ve Dheeriya (2021)	Bitcoin ve Ripple fiyatı, VIX ve US Ekonomi Politikası Belirsizlik Endeksi	ARMAX, GARCH, VAR	Altın getirisinden Bitcoin getirisine doğru nedensellik olduğu tahmin edilmiştir.
Shehzad vd. (2021)	Bitcoin ve altın getirisi ile CAC40, DAX30, IBEX35, LSE, FTSEMIB gibi Avrupa, Asya ve ABD'nin ünlü hisse senedi borsa endeksleri	Morlet Wavelet Approach (Dalgacık Yaklaşımı)	Altın Bitcoin'e göre daha güçlü güvenli bir liman olarak değerlendirilmiştir.
Kyriazis (2020)	Altın, Bitcoin fiyatı, VIX volatilité ve Jeopolitik risk endeksi	ARCH ve GARCH	VIX volatilité endeksi Bitcoin getirilerindeki volatilitéyi arttırmıştır. Altın getirileri Bitcoin getirilerini pozitif yönde etkilemiştir.

Yukarıda Tablo 1'de sıralanan literatürden örnek çalışmaların detaylı özetlerine aşağıda yer verilmiştir:

Köse vd. (2024), VIX volatilité endeksi, ABD Dolar endeksi, altın, petrol ve Bitcoin fiyat volatilitésini arasındaki ilişkiyi SVAR modeliyle incelemiştir. Analiz bulgularına göre VIX'in Bitcoin üzerindeki etkisi başlangıçta sınırlı iken zamanla artarak yoğunlaştığı tespit edilmiştir. Ayrıca Bitcoin fiyat oynaklığı analizde en yüksek açıklayıcı paya sahiptir. VIX ile Bitcoin fiyatı arasında zıt yönlü bir ilişki olduğu gözlenmiştir. Bitcoin fiyatı daha çok kendi volatilitésinden etkilenmiştir. Bitcoin'e yatırım yapmanın belirli bir düzeyde risk almayı gerektirdiği belirtilmiştir. Köse vd. (2024) Bitcoin fiyat oynaklığını ele aldığı çalışmada VIX'in Bitcoin piyasalarında spekülâtif etkiler yarattığını göstermiştir.

Sokhanvar ve Hammoudeh (2024), altın, ABD doları, Bitcoin, VIX volatilité endeksi arasındaki ilişkiyi Dinamik çapraz kantilogram analizi ile incelemiştir. Yatırım portföyündeki varlıkların piyasa riskini temsilen VIX endeksine verdiği tepki incelenmiştir. Analizde değişkenler arasında statik ve dinamik çapraz nicelikogram yaklaşımı kullanılmıştır. Analize göre altın ve ABD doları güvenli limanlar olarak hareket etmiştir. Bitcoin ise piyasa türbülânsı sırasında riskli bir varlık gibi davranmıştır Altın ve ABD Doları VIX endeksine olumlu tepkiler verirken, Bitcoin ise olumsuz tepkiler vermiştir. VIX endeksindeki değişiklikler altın, ABD Doları ve Bitcoin getirilerini hemen etkilemiş ancak etki zamanla azalmıştır. Bu nedenle portföylerde yatırım stratejilerinin zamanında güncellenmesinin önemli olduğu vurgulanmıştır.

Su vd (2023), altın ve Bitcoin fiyatları, VIX volatilité endeksi arasındaki ilişkiyi TVP-SV-VAR yöntemleriyle incelemiştir. Analiz sonucunda VIX'ten altın fiyatına olumlu etkisi olarak altının ABD'deki krizlerdeki panikte alternatif bir yatırım aracı olabileceği vurgulanıyor. Bitcoin'in paniklerde güvenli liman olarak çok zayıf kaldığı belirtiliyor. VIX'in hem altın hem de Bitcoin fiyatları üzerinde etkili olduğu sonucuna ulaşılmıştır.

Shahzad vd. (2022), Bitcoin, altın ve ABD VIX vadeli işlemleri arasındaki ilişkiyi çapraz kantilogram yaklaşımı yöntemiyle incelemiştir. BRICS borsa endekslerinde aşağı yönlü hareketlerle üç alternatif varlığın (Bitcoin, altın ve ABD VIX vadeli işlemleri) zayıf veya güçlü korunma yetenekleri karşılaştırılmıştır. Analiz sonuçlarına göre Bitcoin ve altın zayıf korunma araçlarıdır. Bazı BRICS ülkelerinde Bitcoin, altın ve VIX vadeli işlemlerinin her biri COVID-19 salgınının etkisiyle şekillenen zamanla değişen bir riskten korunma rolüne sahiptir. Altının Çin'de daha yüksek ve istikrarlı bir çeşitlendirme alternatifidir. VIX vadeli işlemleri Brezilya, Rusya, Hindistan ve Güney Afrika'da daha yüksek çeşitlendirme faydaları sunmuştur. Shahzad vd.'ne göre (2022), altının kriz dönemlerinde Bitcoin'e kıyasla daha güçlü bir güvenli liman

10th International CEO Communication, Economics, Organization & Social Sciences Congress işlevi görmektedir. Ancak Bitcoin kısa vadeli riskten korunma aracı olarak rol oynayabilir. Altın ve Bitcoin'in birbiriyle olan ilişkisi ise volatilité yapılarının farklılığına dayanmaktadır. Diniz-Maganini vd. (2021), Bitcoin, altın, ABD Dolar endeksi, MSCI Dünya endeksi arasındaki ilişkiyi DCC-GARCH yöntemiyle incelemişlerdir. Analiz sonucunda COVID-19'ün küresel bir salgın ilan edilmesinden (Mart 2020) sonraki 4 aylık dönemde Bitcoin, altın, MCSI ve ABD dolar endeksi arasındaki fiyat verimliliği ve net çapraz korelasyonlar incelenmiştir. Analiz sonucuna göre Bitcoin getirisi ABD Doları ve MSCI Dünya endeksine göre daha verimlidir. Değişkenler arasındaki net çapraz korelasyonlar zaman ölçeklerine göre değişmektedir. İncelenen dönemin iki aydan fazla olması halinde MSCI Dünya ve ABD dolar endekslerine göre pozisyon alan yatırımcılar için altın güvenli bir liman iken üç ayı geçen durumlarda ise Bitcoin güvenli bir liman olarak tahmin edilmiştir. Diniz-Maganini vd. (2021) ve Elgammal vd. (2021) gibi çalışmalar, COVID-19 pandemisinin finansal piyasalar üzerindeki etkisine odaklanarak, Bitcoin ve altının güvenli liman özelliklerini kıyaslamıştır. Yazarlara göre COVID-19 döneminde Bitcoin ve altın arasındaki etkileşimlerin artan belirsizlikle birlikte değişkenlik gösterdiğini ortaya koymuştur.

Elgammal vd. (2021), Bitcoin, altın, küresel hisse senetleri, enerji piyasası arasındaki ilişkiyi GARCH modeliyle incelemişlerdir. Analiz sonucuna göre COVID-19 döneminde hisse senedi, altın arasında çift yönlü getiri yayılımı olduğu tahmin edilmiştir. Enerji piyasalarından hisse senedi ve altın piyasalarına çift yönlü ortalama yayılma etkileri bulunmuştur. Hisse senedi, enerji ve altın piyasaları arasında büyük ve karşılıklı şok yayılımlarının ve enerjiden altın piyasalarına çapraz şok yayılımlarının varlığı ortaya konmuştur. Petrol fiyatlarındaki çöküşün etkisiyle enerji piyasalarının diğer piyasalar üzerinde önemli bir çapraz volatilité yayılma etkisi olduğu tahmin edilmiştir. Elgammal vd. (2021), VIX volatilité endeksinin altının geleneksel güvenli liman etkisini doğrularken, Bitcoin'in kriz dönemlerinde bu özellikten uzaklaştığını ifade etmiştir.

Malladi ve Dheeriyaa (2021), Bitcoin ve Ripple fiyatı, VIX ve US Ekonomi Politikası Belirsizlik Endeksi arasındaki ilişkiyi ARMAX, GARCH, VAR modelleriyle incelemişlerdir. Analiz sonucuna göre altın getirisi Bitcoin getirisi üzerinde nedensel etkiye sahip değildir. Bitcoin fiyatları üzerinde Ripple getirisinin etkili olduğu tahmin edilmiştir.

Shehzad vd. (2021), Bitcoin ve altın getirisi ile CAC40, DAX30, IBEX35, LSE, FTSEMIB gibi Avrupa, Asya ve ABD'nin ünlü hisse senedi borsa endeksleri Morlet Dalgacık Yaklaşımı ile incelemişlerdir. Analizde COVID-19 sırasında Avrupa, Asya ve ABD'nin ünlü hisse senedi piyasalarının yatırımcıları için altının Bitcoin'e göre daha güçlü güvenli bir liman olduğu sonucuna ulaşmışlardır.

Kyriazis (2020), VIX'in Bitcoin fiyatlarındaki oynaklığa etkisini analiz ederek, piyasa belirsizliğinin Bitcoin'in volatilitésini artırdığını ortaya koymuştur. Kyriazis (2020) tarafından altın, hisse senedi piyasaları ve jeopolitik belirsizliklerin Bitcoin fiyatlarına etkisini ARCH ve GARCH yöntemiyle incelemişlerdir. Analiz sonucunda Mart 2012-Mart 2020 döneminde Bitcoin getirilerinin ve volatilitésinin altın getirilerinden ve VIX volatilité endeksinden pozitif yönde etkilendiği tahmin edilmiştir. Bunun yanında Caldara ve Iacoviello (2019) tarafından geliştirilen yenilikçi Jeopolitik risk endeksinin Bitcoin üzerinde olumlu etkileri saptanmıştır. Kanıtlar ARCH tahminlerinin en iyi uyumu sağlayan model olduğu sonucuna ulaşılmıştır.

Çalışmaların analiz sonuçları genel olarak altın ve ABD doları gibi geleneksel varlıkların Bitcoin'e göre daha güvenli limanlar olduklarını tahmin etmişlerdir. Bununla birlikte bazı çalışmalarda Bitcoin'in kısa vadeli riskten korunma aracı olarak kullanılabilmesi belirtilmiştir. Ayrıca COVID-19 pandemisi gibi volatilitenin yüksek olduğu kriz dönemlerinde finansal piyasaların yapısal dönüşümleri, bu varlıklar arasındaki korelasyonların ve volatilité etkileri değiştirebileceği tahmin edilmiştir. Bu bağlamda, kriz dönemlerinde altının Bitcoin'e göre daha istikrarlı bir yatırım aracı olduğu sonucuna ulaşılmıştır.

Bu çalışmalardan hareketle, mevcut literatürün VIX volatilité endeksindeki deęişiklięin Bitcoin ve altın getirilerine etkisinin volatilité modelleriyle açıklanması konusunda detaylandırılmaya ihtiyaç duyulan noktalar bulunmaktadır. Bu çalışmada Bitcoin ve altın getiri serilerinin VIX volatilité endeksine etkisine odaklanılmış ve bu çalışmayla literatüre katkı sunulması amaçlanmıştır. Bir sonraki bölümde, çalışmada kullanılan veri seti ve kullanılan yöntemle ilişkin metodolojik yaklaşımın çerçevesi detaylı bir şekilde ele alınmıştır.

3. Veri Seti ve Yöntem

Çalışmada Bitcoin fiyatı (BTC; ABD Doları), altın fiyatı (XAU; ABD Doları) ve VIX korku endeksi (VIX) arasındaki ilişkinin araştırılması amaçlanmıştır.

Çalışmada kullanılan deęişkenler ve deęişken açıklamaları Tablo 2’de yer almaktadır.

Tablo 2. Deęişkenler ve Kaynakları

Sembol	Deęişken	Frekans Aralığı
VIX	Volatilité Endeksi Kapanış Fiyatı	27/12/2019 – 10/04/2024 Haftalık
BTC	Bitcoin Kapanış Fiyatı	
XAU	Altın Kapanış Fiyatı	
Veri Kaynağı: www.investing.com		

Tablo 2’de sunulan deęişkenler arasındaki ilişkilerin incelenmesi amaçlanmıştır. Belirlenen amaç doğrultusunda, Bitcoin ve altın getiri serisindeki deęişimlerin VIX korku endeksi üzerindeki etkisi tahmin edilmiştir.

$$GVIX_t = \alpha_0 + \alpha_1 GBTC_t + \alpha_2 GXAU_t + \varepsilon_t \quad (1)$$

Modelde incelenen deęişkenlerin getiri serileri hesaplanarak modele dahil edilmiştir. Böylece finansal piyasalardaki volatilité dinamiklerinin ve kısa vadeli deęişimlerin daha net bir şekilde analiz edilmesi sağlanmıştır. Bu kapsamda deęişkenlerin getiri serileri aşağıdaki formülle hesaplanmıştır:

$$rt = 100 \times \ln \left(\frac{P_t}{P_{t-1}} \right) \quad (4)$$

P_t dönemindeki fiyat ile P_{t-1} bir önceki dönem fiyatı arasındaki logaritmik oranı temsil etmekte ve bu hesaplama getiri oranlarını yüzde cinsinden belirtmektedir.

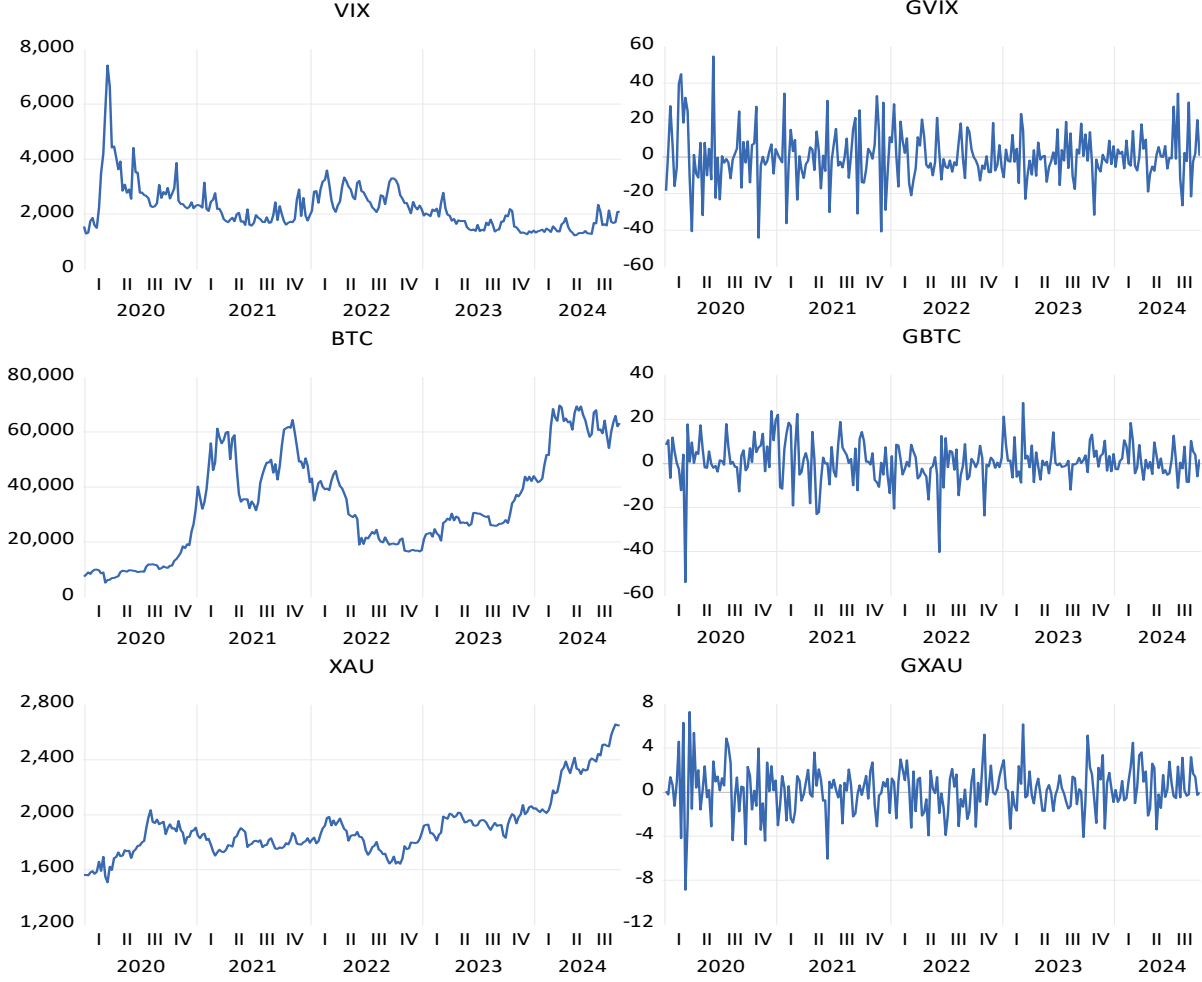
İncelenen serilere ve getiri serilerine ait tanımlayıcı istatistikler Tablo 3’te belirtilmiştir:

Tablo 3. Tanımlayıcı İstatistikler

Deęişkenler	Ortalama	Medyan	Std. Sapma	Çarpıklık	Basıklık	Jarque-Bera	Olasılık
VIX	2208.66	2075.5	829.86	2.301	12.36	1134.8	0.000
GVIX	0.12	-1.208	14.359	0.27	4.53	27.51	0.000
BTC	34023.09	30295.5	18371.44	0.29	1.95	15.16	0.000
GBTC	0.86	0.69	9.312	-1.02	8.83	397.48	0.000
XAU	1911.31	1865.31	223.49	1.34	4.79	108.56	0.000
GXAU	0.212	0.236	2.131	-0.13	4.62	28.22	0.000

Tablo 3’te verilen tanımlayıcı istatistikler, incelenen deęişkenlerin büyük bir kısmının normal dağılımdan saptığını göstermektedir. VIX ve XAU deęişkenleri sağa çarpık ve sivri bir dağılıma sahipken, GBTC’nin sola çarpık ve yine sivri bir yapıda olduğu görülmektedir. BTC, diğer deęişkenlere kıyasla daha simetrik bir dağılım sergilese de getirilerinin dağılımı (GVIX, GBTC ve GXAU) genel olarak normal dağılımdan uzak bir görünüm çizmektedir. Jarque-Bera test sonuçları tüm deęişkenlerin normal dağılım sergilemediğini göstermektedir.

İncelenen serilere ve getiri serilerine ait grafikler Grafik 1 ile sunulmuştur:



Grafik 1. Serilere ve Getiri Serilerine ait Grafikler

Grafik 1 incelendiğinde, *VIX* 2020’de COVID-19 pandemisi döneminde hızlı bir artış gösterirken, sonraki yıllarda daha durağan bir seyir izlemiş, ancak 2024’e doğru tekrar yükselme eğilimine girmiştir. *GVIX* ise özellikle pandemiyin ilk döneminde büyük dalgalanmalar sergilemiş, sonrasında daha dar bir aralıkta dalgalanmıştır. *BTC*, 2020’den itibaren güçlü bir yükseliş trendi yakalarken, 2021’de zirveye ulaşmış ve dalgalı bir seyir izlemiş, 2023’te hafif bir düşüş yaşamış olsa da *BTC* genel olarak yüksek seviyelerde seyretmiştir. *GBTC*, özellikle 2020’de büyük volatilité göstermiş, sonraki dönemde ise daha dar bir bantta dalgalanmıştır. *XAU*, 2020’den itibaren yükseliş trendine girmiş ve 2024’e doğru hızla artmıştır. *GXAU*, fiyatlara kıyasla daha sınırlı bir dalgalanma göstermiştir. Bu dönemde genel olarak varlık fiyatlarında yukarı yönlü hareketler gözlemlenirken, volatilité ve getirilerde ani sıçramalar ve düşüşler dikkat çekmektedir.

4. Ekonometrik Metodoloji

4.1. Fourier ADF Birim Kök Testi

Enders ve Lee (2012), Fourier ADF (FADF) birim kök testini yapısal değişimlerin tahminini kolaylaştıran bir birim kök testi olarak önermektedir. Bu test için veri üretici işlem şu şekildedir:

$$y_t = \alpha(t) + \rho y_{t-1} + \gamma t + \varepsilon_t \quad (5)$$

Burada α_t belirleyici bileşeni temsil eder ve ε_t hata terimidir. α_t aşağıdaki gibi modellenir:

$$\alpha(t) = \alpha_0 + \sum_{k=1}^n \alpha_k \sin\left(\frac{2\pi kt}{T}\right) + \sum_{k=1}^n \beta_k \cos\left(\frac{2\pi kt}{T}\right) \quad (6)$$

Burada; n frekansların sayısını, k belirli bir frekansı ve T gözlem sayısını temsil etmektedir. $n \leq \frac{T}{2}$ koşulunu sağlamaktadır. Fourier terimleri anlamsız olduğunda, geleneksel birim kök testleri kullanılmaktadır. Diğer bir deyişle, Fourier terimlerinin anlamsız olduğu durumlarda, geleneksel ADF birim kök testi sonuçları güçlü sonuçlar sağlamaktadır.

4.2. ARCH Modeli

Engle (1982) tarafından tanımlanan Otoregresif Koşullu Değişken Varyans (ARCH) modeli, finansal piyasaların oynaklık analizine yenilikçi bir yaklaşım getirmiştir. Bu model, finansal veri setlerinin zaman içinde değişen oynaklıklarını, geleneksel zaman serisi modellerinin sınırlamalarını aşarak daha etkili bir şekilde yakalamaktadır. ARCH modeli, bir zaman serisinin koşullu varyansını geçmişteki kare hataların doğrusal bir fonksiyonu olarak ifade eder. Böylece finansal zaman serilerindeki oynaklık kümelenmesi fenomenini açıklar. Model, geçmiş dönem sonuçlarının karesinin uzun vadeli ağırlıklı ortalamasını temel alır. Bu süreçte, yakın geçmişteki hata terimlerinin etkisi belirgin iken, daha uzak geçmişteki hataların etkisi daha az hissedilir. Hata terimlerinin ağırlıkları genellikle sıfırdan büyüktür (Ghosh vd., 2010: 31).

ARCH modelinin denklemi aşağıdaki gibi gösterilmektedir (Engle, 1982: 988):

$$\sigma_t^2 = \alpha_0 + \sum_{i=1}^q \alpha_i \epsilon_{t-i}^2 \quad (7)$$

Burada σ_t^2 t anındaki koşullu varyansı, α_0 sabit bir terimi temsil etmektedir. α_i , i. gecikme teriminin ARCH parametresidir. ϵ_{t-i}^2 , $t - 1$ anındaki hata teriminin karesini temsil ederken, q parametresi modelde kaç adet önceki gecikme teriminin kullanılacağını belirlemektedir.

4.3. GARCH Modeli

Bollerslev (1986) tarafından geliştirilen Genelleştirilmiş Otoregresif Koşullu Değişken Varyans (GARCH) modeli, geçmiş kare hatalarına ek olarak gecikmeli koşullu varyansları da dahil ederek ARCH modelini genişletmektedir. Bu genişleme, özellikle yüksek frekanslı finansal verilerin analizi sırasında, modelin daha fazla parametre tahmin etme potansiyelini artırarak ARCH modelinin bazı sınırlamalarını aşmaktadır.

GARCH(p, q) modeli şu şekilde ifade edilmektedir (Bollerslev, 1986: 310):

$$\sigma_t^2 = \alpha_0 + \sum_{i=1}^q \alpha_i \epsilon_{t-i}^2 + \sum_{i=1}^p \beta_i \sigma_{t-i}^2 \quad (8)$$

Burada σ_t^2 , t anındaki koşullu varyansı, α_0 , sabit bir terimi temsil eder. α_i ve β_i sırasıyla ARCH ve GARCH parametrelerini ifade eder. ϵ_{t-i}^2 geçmiş dönem hata teriminin karesi ve σ_{t-i}^2 ise geçmiş dönem koşullu varyansı belirtmektedir (Bollerslev, 1986: 307).

GARCH modelinde $\alpha + \beta$ toplamının 1'den küçük olması, varyansın durağanlık koşulunu sağlaması açısından kritik bir öneme sahiptir. Bu durum, modelin zamanla istikrarlı bir volatilité seviyesine yaklaşmasını sağlar. Regresyon parametreleri toplamı ($\alpha + \beta$), geçmiş dönem değişkenlerinin mevcut değişkenlik seviyesine etkisini yansıtır; dolayısıyla volatilité üzerindeki etkilerini ifade eder. Eğer bu toplam 1'e yakın bir değer alırsa, geçmişteki değişkenliklerin mevcut seviyeye katkısı dengeli olup, modelin volatilitéyi etkili bir şekilde açıkladığını gösterir. Ancak, $\alpha + \beta$ toplamının 1'den büyük olması, modelin durağanlık koşulunu karşılamasını zorlaştırabilir ve bu durum modelin performansını olumsuz etkileyebilir. Bu nedenle, bu toplam genellikle 1'e yakın olmalıdır (So ve Yu, 2006: 182).

5. Analiz Bulguları

Tablo 4'te değişkenlerin durağanlık sınaması için uygulanan FADF birim kök testi sonuçları verilmiştir:

Tablo 4. FADF Birim Kök Testi Sonuçları

Modeller	Değişkenler	k	l	F İst.	FADF
C	$GVIX$	2	11	14.8001***	-8.879***
	$GBTC$	2	10	12.187***	-4.682**
	$GXAU$	1	14	10.0609***	-4.632**
$C + T$	$GVIX$	2	11	13.850***	-8.783***
	$GBTC$	2	10	11.864	-4.693***
	$GXAU$	4	13	13.068	-4.745***

Not: ***, ** sembolleri sırasıyla %1 ve %5 anlamlılık düzeylerini göstermektedir. C sabitli modeli, $C + T$ sabitli ve trendli modeli belirtmektedir. F istatistiği için kritik değerler Becker vd. (2016) çalışmasında; FADF birim kök testi için kritik değerler Enders ve Lee (2012) çalışmasında bulunmaktadır. “ l ” uygun gecikme uzunluğunu ve “ k ” uygun frekans sayısını göstermektedir.

Getiri serilerine uygulanan FADF birim kök testi sonuçları incelendiğinde, değişkenlerin hem sabitli modelde hem de sabit ve trendli modelde düzey değerlerinde durağan oldukları görülmektedir. Yani, serilerin zaman içerisinde birim kök içermediği ve ortalamaya dönüş eğilimi gösterdiği tespit edilmiştir.

Birim kök sınavının ardından, regresyon modelin elde edilen kalıntılar, modelin geçerliliğini ve hata terimlerinin yapısını daha iyi anlayabilmek amacıyla çeşitli testlere tabi tutulmalıdır. Bu testler, kalıntılarda otokorelasyon olup olmadığını ve varyansın zamanla değişip değişmediğini tespit etmek için önemlidir. Bu doğrultuda ARMA model seçimi yapılmış ve sonuçlar Tablo 5 ile sunulmuştur:

Tablo 5. ARMA Model Seçim Sonuçları

	Katsayı	Standart Hata	t-İstatistiği	Olasılık
C	0.007	0.8083	-4.009	0.000***
AR(2)	0.003	0.056	-6.0605	0.000***
MA(1)	-0.1807	0.051	-3.487	0.000***

Not: *** sembolü %1 anlamlılık düzeyini göstermektedir.

Yapılan ARMA(p, q) analizlerinde, “ p ” otoregresif (AR) kısmındaki gecikmeleri, “ q ” ise hareketli ortalama (MA) kısmındaki gecikmeleri ifade etmektedir. Bu çerçevede en uygun model, otoregresif kısmı 2 gecikme ($p = 2$) ve hareketli ortalama kısmı 1 gecikme ($q = 1$) içeren ARMA(2,1) modeli olarak belirlenmiştir.

Gerekli başlangıç modeli belirlendikten sonra, volatilité modeli belirlenmeden önce regresyon modelinde değişen varyans ve otokorelasyon sorunlarının varlığı incelenmelidir. Ayrıca, serilerde doğrusal olmayan unsurların varlığına da bakılması gerekmektedir. İlk olarak modele ait değişen varyans ve otokorelasyon sonuçları Tablo 5 ile sunulmuştur:

Tablo 6. ARCH-LM ve Breusch-Godfrey Otokorelasyon Testi Sonuçları

Testler	F İstatistiği	Olasılık
ARCH-LM	11.086	0.001
Breusch-Godfrey	7.687	0.006

Yapılan ARCH-LM ve Breusch-Godfrey otokorelasyon testleri, her üç modelde de değişen varyans ve otokorelasyon sorunlarının bulunduğunu ortaya koymuştur. Modelde de p -değerinin %5’lik anlamlılık seviyesinin altında olduğunu göstererek, varyansın zaman içinde değişkenlik gösterdiğini ve ARCH etkisinin mevcut olduğunu ortaya çıkarmıştır. Ayrıca, Breusch-Godfrey otokorelasyon testi sonuçları da modelde p -değerlerinin 0.05’in altında olduğunu ve otokorelasyon sorununu işaret etmektedir. Bu bulgular, modelde de volatilitenin doğru bir şekilde modellenebilmesi için ARCH/GARCH modellerinin kullanımını gerekli kılmaktadır. Serilerde doğrusal olmayan unsurların varlığını test etmek amacıyla Brock, Dechert, Scheinkman ve LeBaron (BDS) testi uygulanmıştır. Bu test, serilerdeki doğrusal bağıntıların

10th International CEO Communication, Economics, Organization & Social Sciences Congress ötesinde, olası doğrusal olmayan ilişkilerin varlığını incelemeye yönelik güçlü bir yöntemdir. Elde edilen test sonuçları Tablo 7’de sunulmuştur:

Tablo 7. BDS Test Sonuçları

Boyut	BDS İstatistiği	Std. Hata	z İstatistiği	Olasılık
2	0.021	0.006	3.581	0.000
3	0.038	0.009	4.000	0.000
4	0.050	0.011	4.398	0.000
5	0.054	0.012	4.574	0.000
6	0.052	0.011	4.547	0.000

BDS test sonuçları, modelde de olasılık değerlerinin 0,05’ten küçük olduğunu göstermektedir. Bu durum, modelde de doğrusal olmayan unsurların bulunduğunu ve bu yapıların yalnızca doğrusal modellerle açıklanamayacak kadar karmaşık olduğunu ortaya koymaktadır.

Modelde ARCH etkisi ve otokorelasyon sorunlarının bulunduğu gözlemlenmiştir. Ayrıca, modellerin doğrusal olmayan unsurlar içermesi nedeniyle ARCH/GARCH modellerinin kullanımı uygun bir yaklaşım olarak ortaya çıkmaktadır. ARCH/GARCH modelleri, zaman serisindeki volatilitiyi etkili bir şekilde modelleme imkanı sunmakta ve otokorelasyon sorunlarını çözmeye etkili bir yöntem sağlamaktadır. Bu nedenle, elde edilen bulgular ışığında, ARCH/GARCH modellerinin uygulanması, modelin geçerliliğini artıracak ve daha güvenilir tahminler yapma olanağı tanıyacaktır.

ARMA(2,1)-ARCH(1) ve ARMA(2,1)-GARCH(1,1) modellerine ait sonuçlar Tablo 8’de raporlanmıştır:

Tablo 8. ARMA(2,1)-ARCH(1) ve ARMA(2,1)-GARCH(1,1) Modelleri

	ARCH(1)	GARCH(1,1)
Ortalama Denklemi		
<i>GBTC</i>	-0.219 (0.000)***	-0.255 (0.000)***
<i>GXAU</i>	-0.226 (0.498)	-0.128 (0.691)
C	-0.147 (0.163)	-0.167 (0.114)
AR(1)	0.702 (0.000)***	0.714 (0.000)***
AR(2)	0.091 (0.222)	0.113 (0.076)*
MA(1)	-0.987 (0.000)	-0.99 (0.000)***
Varyans Denklemi		
C	129.695 (0.000)***	5.318 (0.126)
α	0.26394 (0.014)***	0.031 (0.212)
β		0.931 (0.000)***
AIC	8.01	7.994
SIC	8.123	8.122

Not: *** ve * sembolleri sırasıyla %1 ve %10 anlamlılık düzeylerini göstermektedir.

Model 1 incelendiğinde, ARCH(1) ve GARCH(1,1) modellerinde *GBTC*’nin *GVIX* üzerindeki etkisinin istatistiksel olarak anlamlı olduğu ($p > 0.01$) görülmektedir, bu da *GBTC*’nin *GVIX* üzerindeki etkisinin güçlü olduğunu göstermektedir. Öte yandan, *GXAU*’nın ARCH(1) modelindeki etkisi ve GARCH(1,1) modelindeki etkisi istatistiksel olarak anlamlı değildir ($p > 0.05$), bu durum *GXAU*’nun *GVIX* üzerindeki etkisinin zayıf olduğunu işaret etmektedir. Zaman serisi otokorelasyonu açısından AR(1) terimi modelde de anlamlıdır ($p < 0.01$), bu da *GVIX*’in bir önceki döneme bağımlı olduğunu ortaya koymaktadır. AR(2) ise GARCH(1,1) modelinde anlamlı bir etkiye sahipken ($p < 0.10$), ARCH(1) modelinde anlamlı değildir ($p > 0.5$). MA(1) terimi de modelde anlamlıdır ($p < 0.01$), bu da hata terimlerinin geçmiş değerlerinin *GVIX* üzerindeki etkisini göstermektedir.

Varyans denklemi incelendiğinde, α katsayısı ARCH(1) modelinde anlamlıdır ($p < 0.05$) ancak GARCH(1,1) modelinde anlamlı değildir ($p > 0.05$), bu da geçmiş volatilitenin

10th International CEO Communication, Economics, Organization & Social Sciences Congress etkisinin ARCH(1) modelinde daha belirgin olduğunu göstermektedir. GARCH(1,1) modelindeki β katsayısı ise istatistiksel olarak anlamlıdır ($p < 0.01$), bu durum önceki dönem volatilitésinin *GVIX* üzerindeki etkisinin güçlü olduğunu ortaya koymaktadır.

Son olarak, AIC ve SIC değerleri GARCH(1,1) modelinin ARCH(1) modeline göre daha düşük olduğunu göstererek, GARCH(1,1) modelinin veri için daha iyi bir uyum sağladığını önermektedir. Genel olarak, *GBTC*'nin *GVIX* üzerindeki etkisi belirgin iken, *GXAU*'nın etkisi zayıf ve istatistiksel olarak anlamlı değildir ($p > 0.05$); GARCH(1,1) modeli ise volatilité tahminlerinde daha uygun bir model olarak öne çıkmaktadır.

6. Sonuç ve Değerlendirme

Finansal piyasalardaki belirsizlik dönemleri, yatırımcıları volatilitéyi anlamaya ve riskten korunma araçlarını değerlendirmeye yönlendirmektedir. Altın, geleneksel bir güvenli liman olarak kabul edilirken, Bitcoin gibi dijital varlıklar ve VIX gibi piyasa belirsizliği ölçütleri, modern finansal sistemin ayrılmaz bir parçası haline gelmiştir. Bu bağlamda, Bitcoin fiyatı, altın fiyatı ve VIX arasındaki ilişkiyi analiz etmek, yatırımcıların ve politika yapımcıların kriz dönemlerinde risk yönetim stratejilerini şekillendirmeleri açısından kritik bir öneme sahiptir.

Bu çalışma, ARCH ve GARCH modellerini kullanarak Bitcoin, altın ve VIX arasındaki volatilité dinamiklerini analiz etmiş ve COVID-19 dönemi ve sonrasında bu varlıkların nasıl bir davranış sergilediğini ortaya koymuştur. *GBTC*, *GVIX* ve *GXAU* arasındaki etkileşimleri ve volatilité dinamiklerini kapsamlı bir şekilde ortaya koymaktadır. Analiz sonuçları *GBTC*'nin *GVIX* üzerindeki etkisinin istatistiksel olarak güçlü olduğu, ancak *GXAU*'nun etkisinin zayıf olduğu görülmüştür. Ayrıca, GARCH(1,1) modelinin volatilité tahminlerinde daha iyi uyum sağladığı anlaşılmaktadır.

Kyriazis (2020) ve Köse vd. (2024) tarafından da vurgulandığı üzere, VIX, Bitcoin fiyat volatilitésinin önemli bir belirleyicisi olup, piyasa belirsizliği dönemlerinde Bitcoin'in spekülâtif niteliğini artırmaktadır. Elgammal vd. (2021), altının, belirsizlik dönemlerinde istikrarlı bir güvenli liman işlevini sürdürdüğünü göstermiştir.

Altın ve Bitcoin arasındaki ilişki, volatilité ve risk-getiri profillerinin farklılığı ile öne çıkmaktadır. Shahzad vd. (2022), altının uzun vadeli güvenli liman özelliğini doğrularken, Bitcoin'in daha spekülâtif bir dinamik sergilediğini ortaya koymuştur. Diniz-Maganini vd. (2021), COVID-19 döneminde artan belirsizliklerin altın ve Bitcoin arasındaki etkileşimleri değiştirdiğini belirtmiştir. Bitcoin, volatilitésini yüksek bir varlık olarak, geleneksel güvenli liman olan altından farklı bir risk-getiri profili sunmaktadır. VIX volatilité endeksinin, piyasa belirsizliklerini ölçmede kritik bir rol oynadığı ve Bitcoin ile volatilité etkileşimlerinde önemli bilgilere ulaşıldığı görülmüştür.

Bu çalışma, VIX volatilité endeksinin Bitcoin ve altın üzerindeki etkilerini derinlemesine inceleyerek, bu iki varlıkla olan ilişkisini yeni bir perspektiften ele almıştır. Bulgular, kriz dönemlerinde yatırımcıların portföy çeşitlendirme stratejilerini optimize etmelerine yardımcı olabilecek niteliktedir. Gelecekteki araştırmalar, farklı kriz dönemlerini veya finansal göstergeleri kullanarak bu bulguların genelliğini test edebilir ve bulguları daha derinleştirebilirler.

Kaynakça

- Becker, R., Enders, W., & Lee, J. (2006). A stationarity test in the presence of an unknown number of smooth breaks, *Journal of Time Series Analysis*, 3(5), 381-409. <https://doi.org/10.1111/j.1467-9892.2006.00478.x>.
- Bollerslev, T. (1986). Generalized autoregressive conditional heteroskedasticity. *Journal of Econometrics*, 31(3), 307-327. [https://doi.org/10.1016/0304-4076\(86\)90063-1](https://doi.org/10.1016/0304-4076(86)90063-1).
- Diniz-Maganini, N., Diniz, E. H., & Rasheed, A. A. (2021). Bitcoin's price efficiency and safe haven properties during the COVID-19 pandemic: A comparison. *Research in International Business and Finance*, 58, 101472. <https://doi.org/10.1016/j.ribaf.2021.101472>.

10th International CEO Communication, Economics, Organization & Social Sciences Congress

- Elgammal, M. M., Ahmed, W. M., & Alshami, A. (2021). Price and volatility spillovers between global equity, gold, and energy markets prior to and during the COVID-19 pandemic. *Resources Policy*, 74, 102334. <https://doi.org/10.1016/j.resourpol.2021.102334>.
- Enders, W., & Lee, J. (2012). The flexible Fourier form and Dickey-Fuller type unit root tests. *Economics Letters*, 117(1), 196-199. <https://doi.org/10.1016/j.econlet.2012.04.081>.
- Engle, R. F. (1982). Autoregressive conditional heteroscedasticity with estimates of the variance of United Kingdom inflation. *Econometrica*, 50(4), 987-1007. <https://doi.org/10.2307/1912773>.
- Ghosh, H., Paul, R. K., & Prajneshu. (2010). Nonlinear time series modeling and forecasting for periodic and ARCH effects. *Journal of Statistical Theory and Practice*, 4, 27-44. <https://doi.org/10.1080/15598608.2010.10411971>.
- Gökgöz, H., Afjal, M., Bejaoui, A., & Jeribi, A. (2024). Comparative analysis of gold, bitcoin and gold-backed cryptocurrencies as safe havens during global crises: A focus on G7 stock market and banking sector indices. *Global Business Review*, 09721509241251547. <https://doi.org/10.1177/09721509241251547>.
- Köse, N., Yildirim, H., Ünal, E., & Lin, B. (2024). The Bitcoin price and Bitcoin price uncertainty: Evidence of Bitcoin price volatility. *Journal of Futures Markets*, 44(4), 673-695. <https://doi.org/10.1002/fut.22487>.
- Kyriazis, N. A. (2020). The effects of gold, stock markets and geopolitical uncertainty on Bitcoin prices and volatility. *Global Economy Journal*, 20(04), 1-15. <https://doi.org/10.1142/S2194565920500207>.
- Malladi, R. K., & Dheeriyaa, P. L. (2021). Time series analysis of cryptocurrency returns and volatilities. *Journal of Economics and Finance*, 45(1), 75-94. <https://doi.org/10.1007/s12197-020-09526-4>.
- Shahzad, S. J. H., Bouri, E., Rehman, M. U., & Roubaud, D. (2022). The hedge asset for BRICS stock markets: Bitcoin, gold or VIX. *The World Economy*, 45(1), 292-316. <https://doi.org/10.1111/twec.13138>.
- Shehzad, K., Bilgili, F., Zaman, U., Koçak, E., & Kuskaya, S. (2021). Is gold favourable than bitcoin during the COVID-19 outbreak? Comparative analysis through wavelet approach. *Resources Policy*, 73, 102163. <https://doi.org/10.1016/j.resourpol.2021.102163>.
- So, M. K., & Yu, P. L. H. (2006). Empirical analysis of GARCH models in value at risk estimation. *Journal of International Financial Markets, Institutions and Money*, 16(2), 180-197. <https://doi.org/10.1016/j.intfin.2005.02.001>.
- Sokhanvar, A., & Hammoudeh, S. (2024). Comparative analysis of responses of risky and safe haven assets to stock market risk before and after the yield curve inversions in the US. *International Review of Economics & Finance*, 103376. <https://doi.org/10.1016/j.iref.2024.103376>.
- Su, C. W., Yang, S., Qin, M., & Lobonç, O. R. (2023). Gold vs bitcoin: Who can resist panic in the US? *Resources Policy*, 85, 103880. <https://doi.org/10.1016/j.resourpol.2023.103880>.



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Endüstri 4.0'ın İnsan Kaynakları Yönetimine Etkisi ve Dijital Dönüşüm Uygulamaları Üzerine Bir Araştırma

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ÖZET

Bu araştırma, Endüstri 4.0 ile insan kaynakları yönetimi (İKY) arasındaki ilişkiyi inceleyerek dijital dönüşümün İKY üzerindeki etkilerini değerlendirmeyi amaçlamaktadır. Endüstri 4.0'ın yapay zekâ, büyük veri, otomasyon, nesnelerin interneti (IoT) ve bulut bilişim gibi unsurlarının, işe alım, performans yönetimi, eğitim ve gelişim, çalışan bağlılığı ve yetenek yönetimi süreçlerine etkisi analiz edilmektedir. Çalışma, bu teknolojilerin İKY süreçlerinde yarattığı fırsatlar, karşılaşılan zorluklar ve değişen liderlik rollerini ortaya koymayı hedeflemektedir. Araştırmada, çeşitli sektörlerden insan kaynakları uzmanları ve yöneticilerden anket aracılığıyla veriler toplanacaktır. Ankette, Endüstri 4.0 teknolojilerinin entegrasyon durumu, dijitalleşmenin çalışan verimliliği, iş tatmini ve bağlılık üzerindeki etkisi, dijital dönüşüm sürecinde karşılaşılan engeller ve dijitalleşmenin işletme kültürü ile liderlik yapısına etkileri ele alınacaktır. Anket sonuçları istatistiksel yöntemlerle analiz edilerek, Endüstri 4.0'ın İKY'deki dönüşümünün detayları grafik ve tablolarla sunulacaktır. Araştırma sonucunda, dijitalleşmenin daha hızlı işe alım, veriye dayalı karar alma, çalışan eğitim stratejilerinde iyileşme ve çalışan bağlılığında artış gibi çıktılar sağlaması beklenmektedir. Bu çalışma, Endüstri 4.0 bağlamında İKY'nin stratejik önemine dikkat çekerek işletmelere yol haritaları sunmayı ve akademik literatüre katkı sağlamayı amaçlamaktadır.

Anahtar Kelimeler: İnsan Kaynakları Yönetimi, İKY4.0, Dijital Dönüşüm, Endüstri 4.0

A Study on the Impact of Industry 4.0 on Human Resource Management and Digital Transformation Practices

ABSTRACT

This study aims to examine the relationship between Industry 4.0 and human resource management (HRM) by evaluating the effects of digital transformation on HRM processes. It analyzes the influence of key Industry 4.0 components—such as artificial intelligence, big data, automation, the Internet of Things (IoT), and cloud computing—on recruitment, performance management, training and development, employee engagement, and talent management. The study seeks to identify the opportunities these technologies present, the challenges encountered, and the evolving roles of leadership within HRM processes. Data for the study will be collected through surveys administered to HR professionals and managers from various sectors. The survey will address topics such as the integration of Industry 4.0 technologies, the impact of digitalization on employee productivity, job satisfaction, and engagement, the barriers encountered during the digital transformation process, and the influence of digitalization on corporate culture and leadership structures. The survey findings will be analyzed using statistical methods, and the details of Industry 4.0's transformative effects on HRM will be presented through tables and graphs. The results of the study are expected to demonstrate that digitalization leads to faster recruitment processes, data-driven decision-making, improvements in employee training strategies, and increased employee engagement. This research aims to highlight the strategic significance of HRM in the context of Industry 4.0, providing businesses with actionable roadmaps while contributing to the academic literature.

Anahtar Kelimeler: İnsan Kaynakları Yönetimi, İKY4.0, Dijital Dönüşüm, Endüstri 4.0

1 .Giriş

Teknolojik gelişmeler, endüstrinin düzeninden bu yana işleyiş biçimi değişmiştir (Rana ve Sharma, 2019: 176). Endüstri 4.0, iş dünyası ve insan kaynaklarının yönetimindeki en önemli yapılardan biridir. Teknolojik gelişmeler, endüstrinin düzeninden bu yana işleyiş biçimi değişmiştir (Rana ve Sharma, 2019: 176). Endüstri 4.0, emek sektöründe üretkenliği artırır, ek kazançlar nedeniyle korunan üretim miktarını azaltır, rutin, tekrarlayan ve tehlikeli işlemleri makineler ve robotlara aktarır ve geleceğin endüstrilerini yaratmak için insan kaynakları, makineleri ve bilgisayarları birleştiren çeşitli yeni teknolojiler sunar (Chulanova, 2019: 13) . Endüstri 4.0 (şekil 1) fikri ilk olarak 2011 yılında Almanya'daki Hannover Fuarı'nda önerildi. Alman mühendisler, üretim ve üretim süreçlerini kendi kontrollerini içeren "Endüstri 4.0" adı verilen yeni bir paradigma değişimini fark ettiler. O zamandan beri, Endüstri 4.0 terim imalat endüstrisi ve akademide popüler hale geldi (Qin, Liu ve Grosvenor, 2016: 174).

Endüstri 4.0, işletmelere ve çalışanlara para kazanmanın yeni yollarını sağlar, ancak aynı zamanda bazı riskler de taşınır. En büyük endişeler, insanların gelişmesi ve teknolojinin giderek yaygınlaşması nedeniyle yeni çağın yeni yeteneklere ihtiyaç duymasıdır. Liboni'nin ekibine göre (2019: 125), günümüzde insan kaynaklarıyla sağlanma temel zorluklardan biri, tam otomasyon ve bilgisayarlar, kendi kendini öğrenme, ışıklar ve veri analizi ve yeni teknolojiler gibi işler konusunda insanlar ve makineler arasındaki rekabet mücadelesidir. Eğitimli ve entegrasyonu insanların istihdamı için çekme ve seçmenin ve Endüstri 4.0 için gerekli kapasite gelişiminin önemi, insan kaynakları yönetiminin değişiminin rolünde açıkça görülmektedir (Özer, Eriş ve Timurcanday Özmen, 2018: 805).

2. Teorik Çerçeve

2.1. Dijital Dönüşüm

Dijital Dönüşümün tanımı: “para ve zamandan tasarruf etmek amacıyla iş süreçlerini ve bilgilerini bilgi teknolojileri aracılığıyla elektronik genel aktarım; dijital dönüşüm”dür (TDAK). Günümüzde dijital dönüşüm, bireylerin kalmak için kaçınmayacağı iş dünyasında önemli bir olgu haline gelmiştir. Bu dönüşüm üç ana yaklaşımla şekillenmektedir: müşteri temelinde, büyüme temelinde ve teknoloji temelinde yaklaşımdır (İKustek vd., 2019: 1306). Dijital performansın insan kaynağında ihtiyaç duyduğu altı temel itici güç açıklandı. Bunlar bilgi teknolojisi, yeniden mühendislik süreci ve organizasyon, yüksek hızlı yönetim, ağ organizasyonları, bilgi çalışanları ve küreselleşmedir. Altı itici güç, maliyetler en aza indirilirken insan kaynakları yönetim departmanına doğru da geliştirilmektedir. Özetle, dijital dönüşüm, dijital teknolojilerin güncel yıkıcı değişimlerinin faydalarını ve toplum üzerinde yaygınlaşanlar ve geniş bir şekilde tam olarak izlemek için ticari pazarların, parçaların, yeterliliklerin ve modellerin derin ve hızlı bir şekilde dönüştürülmesidir (Demirkan vd., 2016).

2.2. Endüstri Devrimleri

Endüstri 1.0, Modern Sanayi Devrimi'nin ilk başlangıcı 18. yüzyılın sonlarında İngiltere'de başlamıştır. Endüstri 2.0, sanayi üretiminde radikal değişimlere yol açtı. Amerika'da 1865-1896 arasında ve Avrupa'da 1883-1894 arasında fiyatlar düştü, maliyet düşürme çabaları yoğunlaştı ve seri üretim yöntemleri şekli. Pamuk, kağıt, yiyecek ve saat gibi mallara uygulanan bu seri üretim, üretimdeki verimlilik artırıldı ve geniş kitlelere tüketim malları sağlamada önemli bir rol oynadı. Genel Endüstri 3.0, üretim sürümlerinde dijital bir devrime doğru interneti kullanırken, iletişim ve iş yapma yöntemleri kökten bir değişim geçirdi. İnternet sayesinde büyüme hızının arttığı küresel, işbirlikleri ve esnek iş modelleri ortaya çıktı. 20. yüzyılın ikinci yarısında gelen mikroişlemciler ve 'akıllı' sensörler sayesinde, insanlar ve makineler arasındaki

10th International CEO Communication, Economics, Organization & Social Sciences Congress iş birliği daha da yakınlaştı ve üretim daha uyumlu hale geldi. Bu tür bir dijitalleşme, insanların varlığını sağlamlaştırdı ve böylece Endüstri 4.0 için sahneyi hazırladı.

Temellerinden yola çıkan Endüstri 4.0, ilk olarak 2011 yılında Alman hükümeti tarafından ifade edilmiş olup, dijitalleştirme, otomasyon, veri alışverişi, patlama interneti gibi ileri teknolojilerin endüstriyel işlemlerde performansını ifade eder. Bu fikir, ilk olarak 2013 yılında Almanya'daki bir endüstri fuarında sunulduğunda büyük bir heyecan yaratmıştı. Planlanmış düzenlemeleri yalnızca daha etkili bir şekilde değil, aynı zamanda daha esnek ve daha müşteri odaklı bir şekilde düzenlemek ve kontrol etmek için tamamen yeni bir yol sağlıyor. Dördüncü Sanayi Devrimi Klaus Schwab, Endüstri 4.0'ı şu şekilde anlıyor: Üçüncü Sanayi Devrimi'nin getirdiği devrimin ötesinde bir evrim adımı; seleflerinden dağılım ve kapsam olarak daha hızlandırılmış; yapay zeka, robotik, 3D baskı, nanoteknoloji ve kuantumdaki dönüştürücü hareketler kanalize edilmiş yenilikler yer alıyor.

2.3. İnsan Kaynakları Endüstri 4.0'ın Etkisi

Dördüncü sanayi devrimine uyum, dördüncü sanayi devriminin gelişmiş teknolojiye dayalı gelişmiş bilgilerini kapsayan insan kaynaklarının yönetiminde yeni bir kavram olan İK 4.0 ile bağlantılıdır. Bu yaklaşımla, yetenek yönetimini kişiselleştirir, çalışanın optimize etmesini ve veriye dayalı kararlarını sağlarken işe alım süreçlerini geliştirir ve insan kaynakları tarafından yönetilen yeni nesil bir değişimi sağlar (Hecklau vd., 2016). İnsan kaynaklarının yönetimi, bir organizasyonun iş gücü kapasitesi, değişebilen davranışlar ve tutumlarını desteklenen, görüntülenebilmesi için şekillendirmek için kullanılabilir en kritik araçlardan biri olarak algılanmaktadır. Böylece organizasyonlar, uygun İK uygulamaları tasarlayarak iş gücünün gelişmişliğini, bilgi yönetimi faaliyetlerini ve öğrenme süreçlerini gerçekleştirebilirler. Dolayısıyla İK etkilerine dayalı bir ekonomide oluşturulur.

Dördüncü sanayi devriminin ortasında, süreçlerin dijital dönüşüm sürecini üstlenebilmesi için İK uygulamalarının yeniden gözden geçirilmesi ve yeniden düzenlenmesi gerekmektedir. Bunu başarmak için, bir kuruluşta yenilik ve sürekli öğrenmeyi iyileştirme amacıyla eğitim programları, performans değerlendirme sistemleri, tazminat politikaları ve işe alımlar gibi mevcut İK kayıtlarının yeniden düzenlenmesi kesinlikle önemlidir. Böyle bir yeniden tasarım, dijital çağ için daha özgür ve dinamik sistemlerin desteği (Donate ve Sanchez, 2015: 166). Bunlar, insan kaynakları yönetiminin kuruluşlarının organizasyonel inovasyona katkıda bulunabileceği yollardır (Koster, 2019). Bu tür bir dönüşüm için, insan kaynaklarının desteklenmesi organizasyonel inovasyonu geliştirmelidir. Kuruluşlar İK 4.0'ı uygularken ortaya çıkacak sorunlar ve uygulamadan sonra elde edilecek faydalar Uygulama aşamalarındaki zorluklar arasında, her şeyden önce, oldukça karmaşık bir teknoloji ortamından doğru teknolojik araçları seçmek ve bunların birleşimi için en uygun bileşenlerin seçimlerini sağlamak yer almaktadır. Ek olarak, mevcut organizasyon kültürü ile dijitalleşme arasında uygun bir sinerji düzeyine ulaşmak oldukça zor olabilir. Çoğu şirket, dijital dönüşüme direnen bir kültür aşımı açısından ciddi bir zorlukla karşı karşıyadır. İK 4.0'ı birleştiren önemli bir güç, farklı nesillerin teknolojiye, kariyer beklentilerine ve öğrenme yollarına karşı farklı tutumlara sahip olması nedeniyle çok nesilli çalışanların kapasiteleri değişir, bu nedenle karma bir kültür dinamiği yaratan zorlu bir görev olabilir.

Dijitalleştirilmiş İK parçacıkları, insan kaynakları operasyonlarını daha verimli ve hızlı hale getirir. Veriye dayalı birleştirilmiş otomasyonlar, İK departmanları üzerindeki iş akışını azaltır ve daha az kapsamlı bir organizasyonel yapı sunar, böylece çalışan büyümeyi artırır ve organizasyonel değişimi artırır (Sivathanu ve Pillai, 2018: 7). Teknolojinin hızlanmasıyla, dijitalleşen iş dünyasında kendi aralarında yeniden yazıyor Ma ve Je (2015: 72). Bu nedenle, özellikle Y ve Z Kuşağı'ndan yetenek ve dinamik ve enerjik çalışanların elde tutmak isteyen

10th International CEO Communication, Economics, Organization & Social Sciences Congress organizasyonlar için insan kaynaklarının kaydedilmesi mobil ve dijital platformlarda yapısı kritik bir gerekliliktir. Bu senaryoya göre, insanların deneyimini, değişimini ve sadakatini artırmak için yeni stratejiler oluşturulmalıdır. Vodafone, Denizbank, DHL Freight Turkey, Akbank, Arçelik, Enerjisa ve Ford Otosan gibi önde gelen dijital insan kaynakları uygulamalarına yaptıkları yatırımlar ve iş gücü sundukları desteği bu şekilde hızlandırıyor. Ayrıca birimler, dijitalleşme süreciyle iş yaşamlarını gösterir ve iyi kapasiteye sahip çalışanlar olarak organizasyonlara çekmek için ideal bir vizyon da yaratılırlar.

2.3.1.Eğitim programları:

Kuruluşlar, dijital dönüşüm dalgasında kalmak ve çalışanların öğrenme süreçlerini sürdürmek için Endüstri 4.0 sürecinde eğitim programlarını yeniden düzenleyecekler kalacaklardır. Eğitim programları, oryantasyonun geçici olması, çok gelişime odaklı olması için düzenli olarak planlanmalıdır. Bu, insanların yeni teknolojiler ve üretimleri iş uygulamalarıyla başa çıkma süreçlerini hızlandıracaktır. Bu süreçte, yeni çalışanlara mentorluk başlıyor, kuruluş içinde erken benzeşimler ve beceri geliştirmeleri için işe yaramayacak. Yeni çalışanlar için rol bölümü ve manevi destek kanallarının açılması, kuruluşa iyi uyum sağlamalarına ve kurtarılmasını iyileştirmelerine yardımcı olacaktır. Bu nedenle, bu alandaki geliştiriciler geliştirmeyi amaçlayan programlara problem çözmeye odaklanan çalışmaları dahil etmek esastır. Tüm bu faktörler, dijitalleşme ve otomasyondan kaynaklanan bozulma idaresi yönetilebilir ve sürekli öğrenmeyi benimseyen bir merkezi oluşturmada temeldir (Ermolaeva, 2017:35). Demografik gerçeklik, Y kuşağının ve kuşaklarının piyasalarına girmesi ve X Kuşağının varlığıyla gelir getiren iş yapılarının tamamen işlenmesini gerektirir; bu kuşak, Endüstri 4.0'ın taleplerine yeterli şekilde yanıt verebilecek donanıma sahip değildir (Trevor ve Varma, 2017). Dijitalleşme, İK bileşenlerinde uygun bir odak noktası olarak kabul edilir ve bu genişlikler dijital platformlara aktarılır. En görünen örneklerden biri, The Great Place to Work Institute tarafından “İnsan Kaynaklarında Dijital Dönüşüm” ve “Çeşitlilik” kategorilerinde “özel ödüller”e layık görülen Vodafone Türkiye olabilir. Programlar, çok sayıdaki gelişmiş bileşenlerinden biridir. Vodafone, Vodafone Red Academy Öğrenim Merkezi ülke genelinde 2900'den fazla tam teşekküllü çalışana ve bu bayilerle sağlanan çalışanlara ve bayiler ve alt bayiler de dahil olmak üzere toplam dağıtıma ulaşıyor. Yeni alınanlar için çok sayıda dijital programla uyumlu olan önemli bir duyuru - DiscoveRed bir oryantasyon programı, ardından liderlik ve yetenek geliştirme ve ayrıca geliştirme ve işlevsel geliştirme şirket tarafından sürdürülüyor. Bunun bir örneği, 2017 yılında "En Yenilikçi İnsan Kaynakları Teknolojileri" bileşenleri alan Denizbank'tır. Kurum, dijital sürece tam teşekküllü bir 'yeni yüz' uyguladı: Türkiye'de ilk kez yaşadı ve daha sonra o zamandan beri çeşitli dijital platformlarda gelişimlerini alan dünyanın dört bir yanında binlerce genç yetenek tarafından takip edilen çevrimiçi staj programı "DenizAşırı". Bu tür gelişmiş uygulamalar,İnsan kaynaklarının insan kaynaklarına yayılmasını dijitalleştirerek teknolojiyle kalıcı hale getirir (<http://kariyer.denizbank.com>).

2.3.2.Performans Değerlendirme:

Endüstri 4.0'a uygun performans değerlendirme sistemi yalnızca nihai sonuca ve davranışa odaklanmayan, aynı zamanda çalışanların gelişimini de kucaklayan bir sistem olması gerekir. Performansla ilgili bilgilendirme, daha fazla gelişime için kapsamlı yanı sıra güçlü ayrıntıların belirlenmesine de yardımcı olur. En iyi performans değerlendirmesi, performans düzeylerinin güzel bir şekilde iyileştirme sistemine sahip olması ve alınmış olması, onun bir ölçümünün ne olduğunu açıkça belirttiği bir performans ölçümünün aralık olarak seçilebilmesini sağlaması gerekir. Bu nedenle ideal olarak, performans süreci performans standart belirlemelerini, bu

10th International CEO Communication, Economics, Organization & Social Sciences Congress beklentilerin çalışanlara iletilmesini, gerçek performans ölçümlerini, bu performansları standartlarla karşılaştırmayı, geri bildirimlerle mükemmelleştirmeyi ve son olarak şirketlerin faaliyetlerinde bulunmayı içermelidir. Bu süreçle ilgili yaygın olarak benimsenen bir teknik, "hedeflere göre yönetim" yani MBO'dur. Hedeflerin belirlenmesi ve değerlendirilmesi, hedef başarıya bağlı olarak çalışanlar ve yöneticiler arasında alışılmış sorumluluklar olmalıdır. Hedefler aslında yönetim tarafından tek veriler olarak belirlenmez; Bunun yerine, yöneticiler ve çalışanlar arasında fikir birliğine varılarak müzakereler yoluyla oluşturulur. Ayrıca sürekli geri bildirim almayı ve vermeyi de içerir. Sürekli olarak geri bildirim, beslenmenin ve çalışanların performansını takip eden herhangi bir eksiklik hemen düzeltilerek değerlendirme yapılabilir. Bu nedenle MBO'nun Endüstri 4.0 çözümleri için uygun bir performans değerlendirme sistemi ileri sürülmüştür.

Mercedes-Benz Türk'ün diğer gelişmiş uygulamaları da var. bunlardan biri de mentorluk programıdır. Son dönemde stajyer olarak değil de mentee olarak çalışan yeni mezun öğrenciler ve uzun dönemli stajyerler, katılanların katıldığı yeni teknolojik trendler, dijitalleşme, girişimcilik, yapay zeka ve sosyal medya şirketlerinin mentorluk yapmayı amaçlıyor. Gruplar, genç insanların teknoloji bilgi ve becerilerini üst düzey düzeylerin ilişkilerine aktarabileceklerini, nesiller arası uyum için iyi bir kurum yapısını sürdürebileceklerini ve şirketin dijital dönüşüm sürecini geliştirebileceklerini hayal ediyor (<http://www.hurriyet.com.tr>).

2.3.3.Ücretlendirme:

Bordro programlamalarına dayalı bu işlemler, inovasyon ve dijitalleşmenin insanoğlunun bir parçası olarak tazminat sistemlerine getirilen büyük bir değişikliktir. Bordro programlamaları bu nedenle daha hızlı, daha düşük artışlarla ve yasal etki altında dijital yedeklemeler kullanılarak daha önceden daha az hata ödemesiyle yapılır. Böylece, bir şirkette binlerce çalışan olan daha büyük miktarlarda, dijitalleştirilmiş süreç sayesinde çok kolay bir şekilde yürütülebilir. Uygulanan bir dijital bordro sistemi, bir organizasyonda sosyal haklar, yaptırım kesintilerini ve diğer finansal faaliyetler oldukça iyi bir şekilde kurulur. İnsanlığın dijitalleştiği çağda kurumsal portallar ve mobil uygulamalar da benzer şekilde önemli hale geldi. Türkiye'nin önde gelen gelen üyelerinden biri olan Tofaş'ın başlattığı TofaşGo adlı kurumsal mobil ve web platformu, tüm çalışanlarını tek bir yerde bir araya getiriyor. Bu platform, çalışanların maaş bordrolarına, yıllık izin talebi/fon yönetimine, zaman yönetimi raporlarına ve Koç Grubu Şirketleri Birikimindeki açık rollerin takibi ve özelliklerine tek bir mobil uygulama üzerinden erişebilirler. Bu tür dijital çözümler, ülkelerin iş operasyonlarını geliştirir ve çalışanlarının İK genişlemelerine çok daha fazla özgürlük ve etkinlikle birikimlerini sağlar (OGOO Digital, 2017).

2.3.4.İşe Alım (Kadrolama):

Endüstri 4.0'ın tanıtımı dijital ortamda ve teknolojik ortamda ortaya çıktı; Yani kişisel alım sürecinin önemli bir dönüşüm geçirmesi gerekiyor. Süreç boyunca sadece adayların teknik bilgi ve bakış açıları değil, aynı zamanda çeşitli yeterlilikler ve heterojen kaynaklar açısından da test yapmaları önemlidir. Çok işlemlerli iş alım süreci, bu tür 'yanlış' aday seçimleri nedeniyle oluşan yüksek hata maliyeti en az indirirken doğru gün seçme seçmeyi artırmaya hizmet edecektir. Psikometrik testler, adayların bu yeterliliklerinin etkili bir göstergesi olabilir. İşletmelerin adayların değerlendirilmesinde aktif hayal gücü, zihinsel duygusal dikkat, zeka merakı, yenilikçilik ve esnek düşünme gibi özellikler değerlendirmeye odaklanmaları önerilir. Ayrıca Endüstri 4.0'da amansız kendini geliştirme ve yeni şeyleri öğrenme açlığı çok hayati önem

10th International CEO Communication, Economics, Organization & Social Sciences Congress taşıyor. Kendini geliştiren açık fikirli çalışanlar, dijitalleşme ve yenilikler için bu dinamizm döneminde faaliyet gösteren değer katan dinamik bir iş gücü yaratacaktır. Böylelikle, ürünlerin alım oranlarında kendilerinin odaklanan yeteneklerinin belirlenmesi, uzun vadeli büyüme verimliliğine katkıda bulunulacaktır (Ma Prieto ve Pilar Perez-Santana, 2014:192).

İşe alımdaki en önemli özelliklerden birinin, alımda yapay zekanın uygun ve belirgin bir şekilde görülebilen Endüstri 4.0'dan geldiğine dair şüphe yok. Bu sayede teknoloji, satın almanın iki aşamasını hızlandırırken, işe alım maliyetlerinden de tasarruf sağlıyor. Bu tür uygulamaların arasında dikkat edilmesi ise MYA yapay zeka işe alımlarının kullanımının kullanılmasıdır. MYA, İK zamanında %75'e kadar tasarruf sağlıyor ve günlük oda hacmi sonrasında 10 üzerinden 9,8 puan almış. Mülakatları daha verimli hale getiriyor ve maliyetleri %80 oranında azaltıyor. Örneğin dünyanın en büyük kozmetik markalarından biri olan L'Oréal, MYA'nın yapay zeka işlemlerinin görüşmelerini kullanıyor. Bu sistemin ayrı ayrı güzellikleri, stajyerler gibi pozisyonlara uygulanıyor. Eylül 2018'den itibaren ABD, İngiltere ve Fransa'da başarılı bir şekilde uygulamaya konuldu. Yapay zekanın kullanımı, L'Oréal'in yılda 1 milyondan fazla başvuruyu daha verimli bir şekilde değerlendirmesini sağladı ve işe alım süreci adayın memnuniyetini artırdı. 10.000 iş görüşmesinde adayların %92'si ile etkili bir iletişim yayılımı ve %100 duygu oranı elde edildiği, adaylardan gelen geri bildirimlerde, sistem rahatlığı ve yaşadıkları ne kadar özel hisleri konusunda çok olumlu tepkiler görüldüğü görüldü. Bu durumda, yapay zekanın alım miktarında günlük artışta ve kapasitenin muazzam zaman ve maliyet tasarrufu sağlamada oynayabileceği potansiyel rolü açıkça ortaya çıkıyor (<http://www.loreal.com.tr>).

2.5.Dijital İK Dönüşümündeki Zorluklar ve Riskler

İnsan kaynakları yönetiminin dijital dönüşümündeki en acil zorluklardan biri veri gizliliği ve güvenliği konusundaki endişedir. Kuruluşlar çalışan bilgilerini yönetmek için giderek daha fazla dijital platformlara güvendikçe, veri ihlalleri ve hassas bilgilere yetkisiz erişim riski artmaktadır (Amla, M. & Malhotra, M. 2017). Bu güvenlik açığı yalnızca kuruluş için değil, aynı zamanda çalışanları için de ciddi sonuçlar doğurabilir ve potansiyel olarak kimlik hırsızlığına veya kişisel verilerin kötüye kullanılmasına yol açabilir. Bu riskleri azaltmak için şirketler, BT altyapılarının olası tehditlere karşı güvenli ve dayanıklı olduğundan emin olarak sağlam siber güvenlik önlemlerine yatırım yapmalıdır. Dahası, Genel Veri Koruma Yönetmeliği (GDPR) gibi veri koruma düzenlemelerine uyum, İK uygulamalarında güven ve bütünlüğü korumak için çok önemlidir. Veri gizliliği ve güvenliğine öncelik vererek kuruluşlar kendilerini ve çalışanlarını dijital dönüşümün olumsuz sonuçlarından koruyabilirler (Betchoo, 2016).

Değişime ve dijital benimsemeye karşı direnç, insan kaynakları yönetiminin dijital dönüşümündeki bir diğer önemli engeldir. Çalışanlar ve yönetim, bilinmeyenden veya iş güvenliğine yönelik algılanan tehditlerden korktukları için yeni teknolojileri benimseme konusunda tereddütlü olabilirler (Aytar, 2019:89). Bu direnç, dijital araçların ve süreçlerin başarılı bir şekilde uygulanmasını engelleyebilir ve nihayetinde İK işlevlerinin genel verimliliğini ve etkinliğini etkileyebilir. Bu zorluğun üstesinden gelmek için kuruluşların inovasyonu ve sürekli öğrenmeyi destekleyen bir kültür oluşturmaları gerekir. Eğitim ve gelişim fırsatları sağlamak, çalışanların yeni teknolojileri kullanma konusunda güven kazanmalarına yardımcı olabilir, böylece direnci azaltır ve katılımı teşvik eder. Ek olarak, dijital dönüşümün faydaları ve etkileri hakkında şeffaf iletişim, endişeleri giderebilir ve değişime karşı daha açık bir tutumu teşvik edebilir (Asiltürk, A 2018).

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Dijital dönüşümle ilişkili maliyetleri ve yatırımları yönetmek, kuruluşlar için zorlu bir zorluk teşkil eder. Yeni teknolojilerin benimsenmesi genellikle önemli miktarda finansal kaynak gerektirir, bu da bütçeleri zorlayabilir ve diğer stratejik girişimleri etkileyebilir (Akduman, G. 2019). Ölçeklenebilir ve esnek çözümlere öncelik vermek, finansal risklerin azaltılmasına da yardımcı olabilir ve kuruluşların aşırı maliyetlere katlanmadan gelişen teknolojik ortamlara uyum sağlamasını sağlayabilir (Filizöz, B. ve Orhan, U. 2018).

2.6. İK ve BT Departmanları Arasında Stratejik İş Birliği

Dijital strateji uyumunun İK hedefleriyle uyumlaştırılması, modern iş dünyasında önemli bir gereklilik haline gelmiştir. İnsan kaynaklarının yönetimi, Endüstri 4.0'ın paylaşımı dijital bir dönüşüm yaşama başladı (Ayan, G. 2019). İK inovasyonu için Bilgi Teknolojileri uzmanlığından yararlanılır, dijital dönüşüm sürecinin önemli bir parçasıdır. İK 4.0'ın ortaya çıkışında yeni teknolojiler ve çalışan neslinin değişimi etkili olmuştur (Aytar, O. 2019). Bu bağlamda, İK departmanları, BT uzmanlığına başvurularak yenilikçi çözümler, kapsamalarını ve süreçlerini dijitalleştirmektedir. Başarılı dijital uygulama için faaliyetler arası ekipler oluşturmak, dijital dönüşüm işlemlerini iyileştirmede kritik bir faktördür. Dijital dönüşüm süreci İK'nın bireysel süreçlerini otomatik ve veri odaklı hale gelmesi önem kazanmaktadır (Alshammari, A. A. 2020). Özellikle İK ve BT departmanları arasında dağıtım işbirlikleri, dijital pazarların etkin toplantıları ve dağıtımın optimize edilmesi. Bileşenler arası bileşenlerin çeşitliliği bu çeşitliliği, inovasyonu teşvik ederek, farklılıkların rekabet avantajını artırmasına olanak tanır.

2.7. İK 4.0 ve Dijital Dönüşümdeki Gelecek Trendler

Çalışanların refahına ve ruh sağlığına odaklanmanın artması, kuruluşların üretkenliği ve katılımı artırmada sağlıklı bir iş gücünün önemini kabul etmesiyle birlikte İK 4.0'da ortaya çıkan bir diğer trenddir (Akduman, G. 2019). Şirketler artık daha destekleyici bir çalışma ortamı yaratmak için esnek çalışma düzenlemeleri, sağlıklı yaşam uygulamaları ve ruh sağlığı destek hizmetleri gibi girişimlere öncelik veriyor. Bu çabalar, çalışanları yalnızca kaynak olarak görmekten, genel refahlarına değer veren daha bütünsel bir yaklaşıma doğru bir geçişi ifade ediyor. Dijital araçların bu girişimlere entegre edilmesi, gerçek zamanlı izleme ve kişiselleştirilmiş sağlık planları sağlayarak çalışanlara iş-yaşam dengelerini geliştirmek için özel destek ve kaynaklar sunuyor. Bu trend, İK'nın işyerinde bakım ve kapsayıcılık kültürünü teşvik etmedeki gelişen rolünü vurgulamaktadır.

Dijital dönüşüm bağlamında, İK profesyonelleri yeni teknolojik taleplere uyum sağladıkça İK rollerinin evrimi giderek daha belirgin hale geliyor (Asiltürk, A. 2018). İnsan kaynaklarının geleneksel işlevleri yeniden tanımlanıyor ve İK uygulayıcıları organizasyonel değişimi ve inovasyonu yönlendirmek için daha stratejik roller üstleniyor. Dijital dönüşüm, İK'nın karar alma süreçlerini bilgilendirmek için büyük miktarda veriyi yönetmesini ve analiz etmesini ve böylece iş hedeflerine stratejik katkılarını artırmasını gerektiriyor. İK 4.0'a doğru geçiş, İK operasyonlarını kolaylaştırmak için veri analitiği, bulut bilişim ve blok zinciri gibi gelişmiş teknolojilerin entegrasyonunu da içeriyor. Bu değişiklikler, İK profesyonellerinin bu dönüşümü etkili bir şekilde yönetmek için dijital okuryazarlık ve veri analizi dahil olmak üzere yeni beceri setleri geliştirmesini gerektiriyor. Sonuç olarak, İK rollerinin evrimi, idari görevlerden organizasyonun stratejik hedefleriyle uyumlu daha dinamik bir yaklaşıma doğru bir sapmayı ifade ediyor.

3.Yöntem

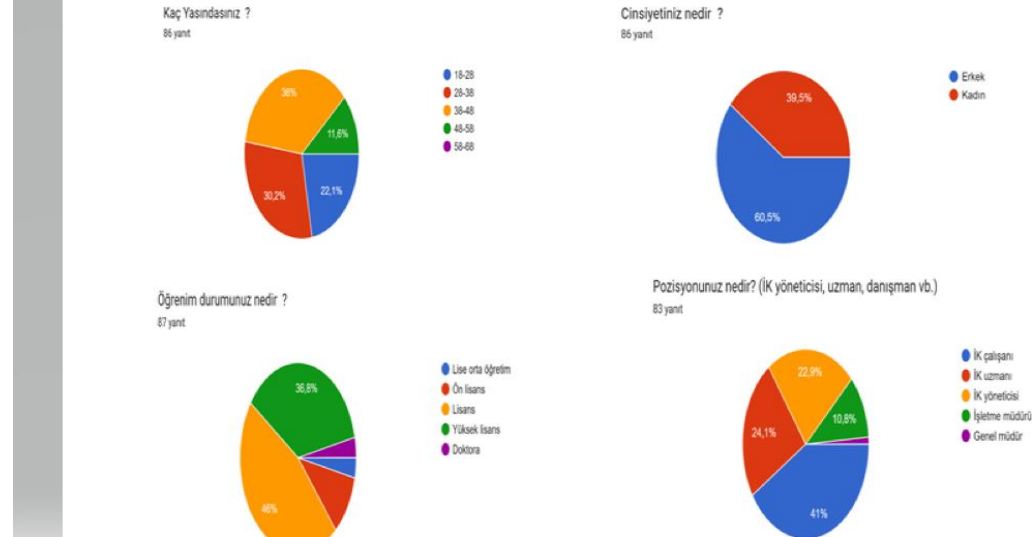
Bu arařtırmada, alıřma konusunu daha derinlemesine anlamak ve veriye dayalı ıkarımlarda bulunmak amacıyla nicel arařtırma deseni tercih edilmiřtir. Nicel arařtırmalar, nesnel verilerin toplanması, analiz edilmesi ve yorumlanmasına olanak saęlayarak, arařtırma probleminin sistematik bir řekilde incelenmesini mmkn kılar (Creswell, 2014).

Arařtırma kapsamında, katılımcıların grř ve deneyimlerini lmek iin anket yntemi kullanılmıřtır. Anketler, geniř bir katılımcı kitlesinden veri toplamak iin etkili bir ara olup, sonuların genellenebilirlięini artırır (Bryman, 2012). Bu alıřmada kullanılan anket formu, arařtırma soruları ve hipotezlerle doęrudan iliřkilendirilen sorulardan oluřmakta ve katılımcıların belirli deęiřkenlere iliřkin tutum ve algılarını lmeyi amalamaktadır.

Toplanan veriler, istatistiksel analiz teknikleri kullanılarak analiz edilmiřtir. Bu teknikler, arařtırma sorularını yanıtlamak ve deęiřkenler arasındaki iliřkileri belirlemek iin kullanılmıřtır. Elde edilen sonular, hem betimsel hem de ıkarımsal istatistiklerle deęerlendirilerek arařtırma hipotezlerinin test edilmesine olanak tanımıřtır.

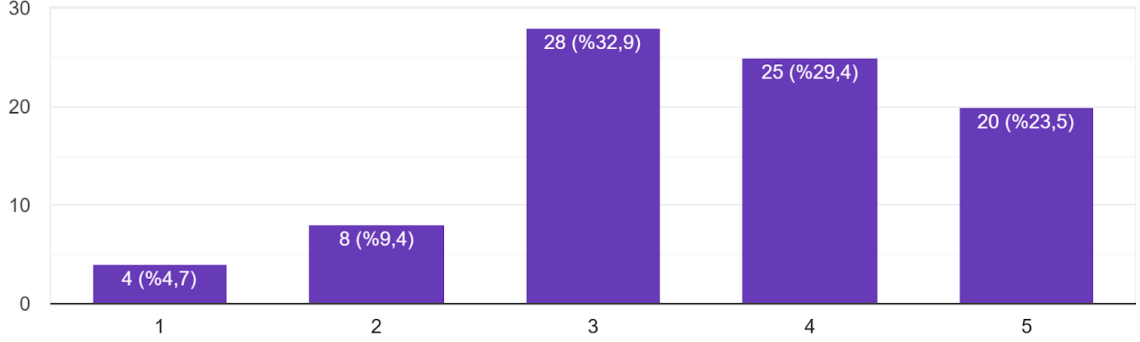
Bu metodolojik yaklařım, arařtırma problemini sistematik ve llebilir bir řekilde ele alarak gvenilir ve geerli sonular elde edilmesini saęlamayı hedeflemektedir.

4.Bulgular ve Tartıřma



Şirketinizin dijitalleşme düzeyini nasıl değerlendirirsiniz?

85 yanıt



Veri analizi toplanan veriler; şimdilik frekans dağılımlarına dair grafiklerle sunuldu. Ki kare testleri, farklılık testleri, korelasyon ve regresyon testleri araştırma devam etmesi sebebiyle henüz yeteri kadar veri toplanamadığından verilere uygulanmadı.

5.Sonuç ve Öneriler

Sonuç olarak, özellikle Endüstri 4.0 çerçevesinde dijital teknolojilerin insan kaynakları yönetimine entegre edilmesi, kuruluşların işgücü yönetimi ve çalışan katılımına yaklaşımında önemli bir evrimi işaret ediyor. Yapay zeka ve makine öğrenimi aracılığıyla rutin İK görevlerinin otomasyonu, bulut tabanlı İK sistemlerinin benimsenmesiyle birlikte verimliliği artırıyor ve veri analitiği aracılığıyla stratejik karar almayı destekliyor. Ayrıca, kişiselleştirilmiş çalışan katılım platformlarının geliştirilmesi ve eğitim için sanal gerçekliğin kullanılması, genel çalışan deneyimini iyileştirmeye doğru bir değişimi vurguluyor. Uzaktan çalışma ve yeni beceri setlerine olan talep tarafından yönlendirilen işgücünün dinamikleri geliştikçe, veri gizliliği, değişime karşı direnç ve maliyet yönetimi zorlukları dikkatlice yönetilmelidir. İK ve BT departmanları arasındaki stratejik iş birliği, dijital stratejileri İK hedefleriyle uyumlu hale getirmek ve inovasyonu teşvik etmek için gerekli olacaktır. İleriye baktığımızda, İK 4.0, yapay zeka destekli işe alım ve çalışanların refahına daha fazla odaklanma gibi trendleri benimsemeye hazır ve çeviklik ve öngörü gerektiren insan kaynakları için dönüştürücü bir çağın sinyalini veriyor. Kuruluşlar bu değişimlere uyum sağlamaya devam ettikçe, dijital dönüşümün İK'da başarılı bir şekilde uygulanması şüphesiz ki işin geleceğini şekillendirmede önemli bir rol oynayacaktır.

KAYNAKÇA

- Akduman, G. (2019). Dijital işe alım: Dijital Dünya'nın insan kaynakları işe alım fonksiyonuna etkisinin kavramsal ve uygulama örnekleriyle değerlendirilmesi, *International Journal of Arts & Social Studies Dergisi*, Cilt:2, Sayı:3, ss.24-44.
- Allen, R. C. (2009). *The British Industrial Revolution in Global Perspective*. Cambridge University Press.
- Alshammari, A. A. (2020). The impact of human resource management practices, organizational learning, organizational culture and knowledge management capabilities on organizational performance in Saudi Organizations: A conceptual framework. *Revista Argentina de Clínica Psicológica*, 29(4), 714-721. <http://dx.doi.org/10.24205/03276716.2020.876>

10th International CEO Communication, Economics, Organization & Social Sciences Congress

- Amla, M. & Malhotra, M. (2017). Digital Transformation in İK. *International Journal of Interdisciplinary and Multidisciplinary Studies*, 4(3), 536-544.
- Asiltürk, A. (2018). İnsan kaynakları yönetiminin geleceği: İK 4.0. *Journal of Awareness*, 3(3), 527-544. Doi: 10.26809/joa.2018548665
- Ayan, G. (2019). Elektronik insan kaynakları yönetiminde bilgi yönetimi süreçleri (Yüksek Lisans Tezi). Yakın Doğu Üniversitesi, Sosyal Bilimler Enstitüsü, İnsan Kaynakları Yönetimi Anabilim Dalı, Lefkoşa.
- Aytar, O. (2019). Endüstri 4.0 ve Bu Paradigmanın Örgüt Yönetimi Üzerindeki Olası Etkileri. "İŞ, GÜÇ" Endüstri İlişkileri ve İnsan Kaynakları Dergisi, 21 (2), 75-90.
- Betchoo, N.K. (2016). Digital Transformation and its Impact on Human Resource Management: A Case Analysis of Two Unrelated Businesses in the Mauritian Public Service. 2016 IEEE International Conference on Emerging Technologies and Innovative Business Practices for the Transformation of Societies.
- Celep, D. N. (2020). Toplum 5.0: İnsan Merkezli Toplum. Türk Eğitim Derneği
- Çabuk, S., Doğan Südaş, H. & Kaya, L. (2019). Sosyal Medya Müşteri İlişkileri Yönetimi Faaliyetlerini Etkileyen Faktörlerin İncelenmesi. *Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 28 (1), 206-221 . Denizbank Kariyer, <http://kariyer.denizbank.com/life>, (25.04.2019).
- Ermolaeva, A. (2017) "Industry 4.0 And İK in Logistics", The Master Thesis, University Of Economics in Prague, International Business - Central European Business Realities, Prague.
- Filizöz, B. ve Orhan, U. (2018). İnsan kaynakları yönetimi bağlamında endüstri 4.0: bir yazın çalışması, C.Ü. İktisadi ve İdari Bilimler Dergisi, 19(2), 110-117.
- Göktaş, P. & Baysal H. (2018). Türkiye’de Dijital İnsan Kaynakları Yönetiminde Bulut Bilişim. *Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 23(4), 1409-1424.
- Güdek, B. (2023). Endüstriyel dönüşüm ve endüstri 5.0. Ömer Halisdemir Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 16(4), 1129-1142.
- Güler, E. Ç. (2006). İşletmelerin E- İnsan Kaynakları Yönetimi ve E-İşe Alım Süreçlerindeki Gelişmeler. *Ege Akademik Bakış Dergisi*, 6(1), 17-23.
- Günay, D. (2002). Sanayi ve Sanayi Tarihi. Mimar ve Mühendis Dergisi, 31, 8-14.
- Hamilton, R. H. & Sodeman, W. A. (2020). The questions we ask: Opportunities and challenges for using big data analytics to strategically manage human capital resources. *Business Horizons*, 63(1), 85-95. <https://doi.org/10.1016/j.bushor.2019.10.001>
- Hecklau, F., Galeitzke, M., Flachs S. & Kohl H. (2016). Holistic approach for human resource management in Industry 4.0. *Procedia CIRP*, 54, 1-6. <http://dx.doi.org/10.1016/j.procir.2016.05.102>
- Hess, T., Matt, C., Benlian, A. & Wiesböck, F. (2016). Options for Formulating a Digital Transformation Strategy. *MIS Quarterly Executive*, 15(2), 123-139.
- Hürriyet (2019) "Gençler Yöneticilere Mentorluk Yaptı", <http://www.hurriyet.com.tr/ik-yeni-ekonomi/gencler-yoneticilere-mentorluk-yapti-41136897>, (25.04.2019).
- L’Oréal, "İş Başvurularında Yapay Zeka Kullanmaya Başladı, L’Oréal Kurumsal Basın Bültenleri", <http://www.loreal.com.tr/medya/kurumsal-basin-bultenleri/loreal-basvurularinda-yapay-zeka-kullanmaya-basladi-6134.htm>, (26.04.2019).
- Ma Prieto, I., Pilar Perez-Santana, M., (2014) "Managing Innovative Work Behavior: The Role Of Human Resource Practices", *Personnel Review*, 43(2): 184-208.
- Nahavandi, S. (2019). Industry 5.0—A human-centric solution. *Sustainability*, 11(16), 4371.
- Ogoo Blog (2017) "Tofaş Mobil Intranetle İç İletişimde Dijital Dönüşüm", <http://blog.ogoodigital.com/tofas-mobil-intranetle-ic-iletisimde-dijital-donusum/>, (25.04.2019).
- Osmundsen, K., Iden, J., & Bygstad, B. (2018, September). Digital Transformation: Drivers, Success Factors, and Implications. In MCIS (p. 37).
- Parsehyan, B. G. (2020). İnsan kaynakları yönetiminde dijital dönüşüm: İK 4.0. *Turkish Studies*, 15(2), 211-224. <https://dx.doi.org/10.29228/TurkishStudies.41930>
- Parsehyan, B. G. (2020). İnsan kaynakları yönetiminde dijital dönüşüm: İK 4.0. *Turkish Studies*, 15(2), 211-224.
- Schwab, K. (2017). The Fourth Industrial Revolution. Currency.
- Seeger, G. & Bick, M. (2013). Mega and Consumer Trends – Towards Car-independent Mobile Applications. *2013 International Conference on Mobile Business*, 27.
- Shamim, S., Cang, S., Yu, H. and Li, Y. (2016) "Management Approaches for Industry 4.0: A Human Resource Management Perspective", IEEE Congress on Evolutionary Computation (CEC): 5309-5316.
- Sivathanu, B. & Pillai, R. (2018). Smart İK 4.0 – how industry 4.0 is disrupting İK. *Human Resource Management International Digest*, 26(4), 7-11.
- Smith, B. L. (2001). The Third Industrial Revolution: Policymaking for the Internet. *The Columbia Science and Technology Law Review*, 3, 1-45.
- Türk Dil Kurumu, <https://sozluk.gov.tr/>, Erişim Tarihi:14.10.2024



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- Uğur N. & Koç, T. (2016). A Strategic Analysis of Smac Technology. *PressAcademia Procedia*, 2(1), 634-629.
- Xu, X., Lu, Y., Vogel-Heuser, B., & Wang, L. (2021). Industry 4.0 and Industry 5.0— Inception, conception and perception. *Journal of Manufacturing Systems*, 61, 530-535.
- Zhou, K., Liu, T. & Zhou, L. (2015). Industry 4.0: Towards Future Industrial Opportunities and Challenges. 12th International Conference on Fuzzy Systems and Knowledge Discovery (FSKD), 2147-2152.
- Zizic, M. C., Mladineo, M., Gjeldum, N., & Celent, L. (2022). From industry 4.0 towards industry 5.0: A review and analysis of paradigm shift for the people, organization and technology. *Energies*, 15(14), 5221.



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Kentte Engelli Olmak: Engelli Bireylerin Kent Deneyimlerinin Olgubilim Yaklaşımıyla Keşfedilmesi

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ÖZET

Bu araştırma, Türkiye’deki orta ölçekli bir kentte yaşayan engelli bireylerin kent yaşamına ilişkin deneyimlerini onların bakış açısından anlamayı ve ayrıntıları ile birlikte ortaya koymayı amaçlamaktadır. Bu amaçtan hareketle nitel araştırma yaklaşımının esas alındığı çalışmada, olgubilim araştırma deseninden yararlanılarak amaçlı örnekleme yöntemine göre seçilen ortopedik ve görme engelli katılımcılardan yarı yapılandırılmış ve fotoğrafa dayalı görüşme teknikleri ile veri toplanmıştır. Veri doygunluğu esas alınarak toplanan veri, tümevarım yöntemi ile analiz edilmiştir. Bulgular, katılımcıların kent bağlamında akılcı (işlevsel) ve duygusal temalı çeşitli deneyimler yaşadıklarını ve bu deneyimlere kentin farklı etkileşim (temas) noktalarının bağlam oluşturduğunu ortaya koymuştur. Sonuçların gerek kavramsal alanyazına gerekse uygulamaya önemli katkılar sağlayabileceği düşünülmektedir.

Anahtar Kelimeler: Engelli Birey Kent Deneyimi, Duygusal Kent Deneyimi, Akılcı (İşlevsel) Kent Deneyimi, Nitel Araştırma, Olgubilim Araştırma Deseni

Being Disabled in the City: Exploring the Urban Experiences of Disabled People with a Phenomenological Approach

ABSTRACT

This research aims to understand the experiences of disabled individuals living in a medium-sized city in Turkey regarding urban life from their perspective and to reveal them in detail. For this purpose, in the study based on the qualitative research approach, data were collected from orthopedic and visually disabled participants selected according to the purposeful sampling method by using the phenomenological research design, using semi-structured and photo-based interview techniques. The data collected based on data saturation was analyzed using the inductive method. The findings revealed that the participants had various rational (functional) and emotional themed experiences in the urban context and that the different interaction (contact) points of the city formed the context for these experiences. It is thought that the results can make significant contributions to both the conceptual literature and practice.

Keywords: Disabled People Urban Experience, Emotional Urban Experience, Rational (Functional) Urban Experience, Qualitative Research, Phenomenological Research Design

GİRİŞ

Kentler, gündelik yaşam içinde gerçekleşen sosyal pratikler için sahne görevi görerek (Snepenger vd., 2007, s.310) insanların yaşamlarını tanımladıkları ve gündelik hayata katıldıkları mekânlardır. Bu anlamda, kentlerin yalnızca ekonomik alışverişler için bir alan değil, aynı zamanda çok sayıda deneyimin yaşandığı bir mekâna dönüştüğü söylenebilir (Taecharungroj & Stoica, 2024, s.49). Geleneksel hizmet çevreleri ile kıyaslandığında, kent mekânı, alışveriş, eğlence-dinlenme, sosyal etkileşim ve benzerleri gibi çok çeşitli tüketici faaliyetlerini kapsamaktadır. Kent, tarihi ve kültürel nitelikleri, sahip olduğu mekânları, gerçekleşen etkinlikleri yoluyla, vatandaşlarının zengin deneyimler yaşadıkları mekanlar haline gelmektedir (Stocchi vd., 2016, s.1563). Başka bir deyişle kentler, sahip oldukları tüm olanakları ile bir taraftan vatandaşların ihtiyaçlarını karşılarken, diğer taraftan onlara çeşitli deneyimler de sunmaktadır. Buna karşın kentin önemli bir kesimini oluşturan engelli bireylerin kent yaşamı içerisinde çeşitli fiziksel ve sosyal sorunlarla karşılaştığı, kent olanaklarına erişemedikleri ve kentsel yaşama katılımlarını sağlayan günlük faaliyetleri gerçekleştiremedikleri anlaşılmaktadır (Stafford vd., 2024, s.113). Bu durum, kentin içinde yaşayan tüm vatandaşları kapsayıcı hizmet sunma becerisini de kısıtlamaktadır.

Engelli bireylerin kent yaşamı üzerine yapılan alanyazın incelendiğinde, çalışmaların daha çok kentin fiziksel çevresiyle ilgili (Eisenberg vd., 2024; Karimi vd., 2014; Nykiforuk vd., 2021) ve belirli hizmetlere erişime (Alhusban & Almshaqbeh, 2023; Beaton, 2005; Calder vd., 2018; Park & Chowdhury, 2018) odaklanıldığı anlaşılmaktadır. Ancak kent olgusu sadece fiziksel çevreden oluşmamakta, sosyal ve kültürel bağlamları da kapsayan, birden fazla temas noktası ile değer yaratan çeşitli etkileşimlerden oluşan karmaşık hizmet mekânları (Muschket ve Wulfert, 2022, s.273) olarak bütüncül bir yaklaşımı gerektirmektedir. Bu nedenle konuya tüketici ve hizmet deneyimi bakış açısıyla yaklaşarak engelli bireylerin kent ile hangi temas noktalarıyla etkileşime girdiklerini ve ne tür deneyimler yaşadıklarını ele alan çalışmalara ihtiyaç duyulduğu anlaşılmaktadır. Engelli bireylerin kent yaşamına katılarak aktif vatandaş haline gelmelerini sağlamayabilmek için, kapsayıcı bir kentin onlar için ne anlama geldiğini ve kentte ne tür deneyimler yaşadıklarını anlamak oldukça önemlidir. Dolayısıyla bu çalışmada, Türkiye'deki orta ölçekli bir kentte yaşayan engelli bireylerin kent yaşamına ilişkin deneyimlerini onların bakış açısından anlamak ve ayrıntıları ile birlikte ortaya koymak amaçlanmaktadır. Bu amaç doğrultusunda aşağıdaki araştırma sorularına yanıt aranmıştır:

Araştırma Sorusu-1: Aksaray kenti bağlamında engelli bireylerin yaşadıkları kent deneyim türleri nelerdir?

Araştırma Sorusu-2: Engelli bireylerin yaşadıkları kent deneyimleri hangi temas noktalarında yaşanmaktadır?

1. BÖLÜM - YÖNTEM

Çalışmada engelli bireylerin kent yaşamına ilişkin deneyimlerini, onların bakış açısından yansıtmak amaçlandığından nitel araştırma yaklaşımının olgu bilim deseninden yararlanılmıştır. Bu tür nitel araştırmalar, deneyimleri mümkün olduğunca katılımcıların hissettiği ya da algıladığı şekliyle anlamayı (Haytko ve Baker, 2004, s.69) sağlamaktadır.

1.1 Örneklem Stratejisi, Veri Toplama, Veri Analizi ve Yorumlama Süreci

Araştırma Aksaray ilinde yürütülmüştür. Araştırmada, amaçlı örneklemeden hareketle, Aksaray ilinde yaşayan görme ve ortopedik engelli gönüllü katılımcılar seçilmiştir. Katılımcı sayısı, veri doygunluğuna göre belirlenmiş olup yarısı erkek, yarısı kadın toplam 10 katılımcıdan gönüllülük esasına göre veri toplanmıştır. Araştırma katılımcılarının özellikleri, özet şeklinde Tablo-1'de sunulmuştur.

Tablo-1: Araştırma Katılımcılarının Özellikleri

İsim	Cinsiyet	Yaş	Eğitim Durumu	Medeni Durum	Meslek	İkamet Süresi	Memleket	Engel Türü
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Recep	Erkek	35	Lisans	Evli / 2 çocuk	Memur	35	Aksaray	Görme
Polat	Erkek	23	Lisans	Bekâr	Memur	23	Aksaray	Görme
Yasin	Erkek	50	Lisans	Evli / 2 çocuk	Memur	50	Aksaray	Görme
İzel	Kadın	52	Lise	Bekâr	Emekli	52	Aksaray	Ortopedik
Volkan	Erkek	37	İlköğretim	Bekâr	Emekli	10	Nevşehir	Ortopedik
Hakkı	Erkek	41	Lise	Evli	Milli Sporcu	41	Aksaray	Ortopedik
İlkay	Kadın	41	İlköğretim	Evli	Milli Sporcu	9	Diyarbakır	Ortopedik
Çağla	Kadın	21	Lise	Bekâr	İşsiz	21	Aksaray	Görme
Müge	Kadın	29	İlköğretim	Bekâr	İşsiz	29	Aksaray	Görme
Nur	Kadın	22	Lise	Evli	Memur	2	Karaman	Görme

Araştırmada, yarı yapılandırılmış görüşme ve fotoğrafa dayalı öyküleme tekniğinden yararlanılarak veri toplanmıştır. Bu kapsamda, katılımcılardan açık uçlu sorulara dayalı metinler, fotoğraflamaya dayalı görseller, bu fotoğraflar kapsamındaki metinler sağlanmıştır. İki aşamalı olarak gerçekleştirilen görüşme sürecinin ilk aşamasında katılımcılar ile önceden hazırlanmış yarı yapılandırılmış görüşme soru listesi üzerinden görüşmeler yürütülmüştür. Bu görüşmeler sonunda katılımcılardan “Aksaray kentinin kendileri için taşıdığı anlam” teması üzerinden kent deneyimleri olgusunu en iyi biçimde temsil eden ortalama 5 adet görsel getirmeleri istenmiştir. İkinci aşamada, katılımcılarla getirdikleri görseller üzerinden bir görüşme yürütülmüştür. Her katılımcının sağladığı olduğu bu görseller, öznel önem açısından katılımcılara öncelik sırasına koydurulduktan sonra, her bir görsele ilişkin sözlü öyküleri alınmıştır. Tüm görüşmeler, veri kaybını önlemek amacıyla ses kayıt cihazı ile kayda alınmıştır. Görüşmeler yoluyla elde edilen nitel veriler, veri içindeki örüntülerin, temaların ve kategorilerin keşfedilmesi için tümevarım (Patton, 2002, s.453) bakış açısıyla analiz edilmiştir. Katılımcıların Aksaray kentine ilişkin ne gibi ve nasıl anlamlar inşa ettikleri ve kent deneyimlerinin neler olduğu (Bogdan ve Biklen, 2007, s.25), kendi bakış açılarından yansıtılarak betimlenmeye çalışılmıştır. Çalışmada veri analizi kapsamında ilk olarak, ses kayıtları halindeki görüşmeler, kelimesi kelimesine yazılı hale getirilmiştir. Yazılı hale gelen veri organize edilerek anlamlı kodlar oluşturulmuş, ortak özellikleri bulunan kodlar belirli kategoriler altında toplanabilen temalar haline getirilmiştir. Bu temalar, ilgili alanyazın da göz önünde bulundurulularak raporlaştırılmıştır. Tüm bu süreçler bir alan uzmanıyla işbirliği sağlanarak gerçekleştirilmiştir.

1.2 İnanılabilirlik

Nitel araştırma yaklaşımı ile yürütülen bu çalışmanın inanılabilirliği, çeşitli araştırmacılar (Brantlinger vd., 2005, s.200; Creswell ve Creswell, 2018, s.274-275; Wallendorf ve Belk, 1989, s.71) tarafından önerilen ölçütlerin uygulanmasıyla sağlanmıştır. Buna göre araştırmada, fotoğraflama ve öyküleme teknikleri bir arada kullanılarak veri çeşitlemesi sağlanmıştır. Veri toplama ve analiz süreçlerindeki ses kayıtlarının ve yazılı kayıtların düzenli olarak tutulması, dokümantasyonların doğruluğunun başka araştırmacıya kontrol ettirilmesi ve tüm süreçlere ilişkin araştırmacı günlüğü oluşturulması, verinin denetlenmesine imkân vermiştir. Veri toplama aracının tasarlanmasında, veri analizlerinde ve verilerin doğrulanmasında başka bir uzman araştırmacı ve alan uzmanı kişilerle işbirliği yapılmıştır. Ayrıca tüm bu süreçlerde alanyazından da yararlanılmıştır. Bulguların sunumunda, görüşmeler, görseller ve görsellere yönelik öyküler bir arada değerlendirilmiş ve birbirini destekleyecek şekilde raporlanmıştır. Bulgularda ortaya çıkan deneyimlere ilişkin katılımcı atıflarıyla kanıtlar sağlanırken, içlerinde en çarpıcı olan orijinal atıflara yere verilmiştir. Ayrıca bulgular sonucu elde edilen deneyimler, ortaya çıktıkları temas noktaları bağlamında ele alınarak bağlam çeşitliliği de raporda yansıtılmıştır.

2. BÖLÜM - BULGULAR

Bulgular, engelli bireylerin Aksaray kentine yönelik deneyimlerinin kentin “kapalı mekânları, açık mekânları, sosyal çevresi ve işlevsel özellikleri” olmak üzere dört temel temas noktasında

10th International CEO Communication, Economics, Organization & Social Sciences Congress gerçekleştiğini göstermiştir. Başka bir ifadeyle engelli bireyler, kent ile bu dört temel temas noktası aracılığı ile etkileşime girmekte ve çeşitli deneyimler yaşamaktadır. Bu temas noktaları bağlamında yaşanan kent deneyimler ve bunların ayrıntıları aşağıda sırasıyla izlenebilir.

2.1 Kentin Sosyal Çevresine Yönelik Deneyimler

Bulgular, kentin en önemli temas noktasının sosyal çevresi olduğunu ve katılımcıların tamamının bu temas noktası ile etkileşim sonucunda yaşadıkları daha çok duygusal içerikli çeşitli deneyim türlerine dikkat çektiklerini göstermiştir. Buna göre sosyal çevre temas noktası etrafında şekillenen deneyimler, “kişilerarası ilişkilere yönelik deneyimler, sosyal bağlara yönelik deneyimler, kültürel otantiklik deneyimleri, sosyal etkinliklerin yeterliliğine yönelik deneyimler ve nostalji deneyimi” olmuştur. Bu katılımcılardan dördünün sağladığı görseller, Görsel-1’de örnek katılımcı görselleri biçiminde sunulmuştur.



Volkan-1. Görsel
(Kişilerarası ilişkiler)



Recep-5. Görsel
(Kültürel Otantiklik)



Yasin-1. Görsel
(Sosyal Etkinliklerin Yetersizliği)



Recep-4. Görsel
(Nostalji)

Görsel-1: Kentin Sosyal Çevresine Yönelik Deneyimlere İlişkin Görseller

Kişilerarası ilişkilere yönelik deneyimler, kent sakinlerinin farklı giyim tarzı, inanç, fikir ve yeniliklere karşı önyargılı davranışları gibi açık ve hoşgörülü olmayan davranışlarını ve engelli bireylere yönelik duyarsız davranışları, yetkinliklerine, kişisel özelliklerine ilişkin önyargı, kullanılan dil gibi engelli bireylere yönelik tutumlarını ifade etmektedir. Kentin sosyal çevresine yönelik deneyimlerden *sosyal bağlara yönelik deneyim* boyutunun özünü, sosyal çevrenin katkı sağladığı sosyal güven, sosyal yabancılık ve sosyal yardımlaşma oluşturmaktadır. *Kültürel otantiklik deneyim* boyutuyla ilgili katılımcılar, kentin düğün-cenaze gibi kendine has geleneklerinden söz etmekle birlikte, bu geleneklerin kaybolmaya başladığını da ifade etmişlerdir. *Sosyal etkinliklerin yeterliliğine yönelik deneyim* boyutu açısından katılımcılar, spor, tiyatro, sinema, çeşitli kurslar gibi sosyal etkinliklerin yetersiz olduğunu belirtmişlerdir. *Nostalji deneyimiyle* ilgili ise çocukluğunu hatırlama deneyimi dikkat çekmiştir. Tablo-2’de bu deneyimlere yönelik örnek katılımcı atıfları sunulmuştur.

Tablo-2: Kentin Sosyal Çevresine Yönelik Deneyimlere İlişkin Orijinal Katılımcı Alıntıları

Boyut	Alt Boyut	Orijinal Katılımcı Alıntısı
Kişilerarası ilişkilere yönelik deneyimler	Açık ve hoşgörülü davranışlar	“...saçını boyatmış derler...herkesin kabul ettiği giyimi giymek zorundasınız...etiketlenirsiniz...” (Recep-Görüşme Verisi)
	Engelli bireylere yönelik tutumlar	“...engelli rampasını kullanmamıza engel olmuş. İnsanların duyarsızlığı...” (Volkan-Fotoğraf Görüşme Verisi)
Sosyal bağlara yönelik deneyimler	Sosyal güven	“Aksaray’da kendimi güvende hissediyorum... insanlarını tanıyorum...” (Yasin-Görüşme Verisi)
	Sosyal yabancılık	“Kendi şehrim olduğu için...yabancılık çekmiyorum.” (Polat-Görüşme Verisi)
	Sosyal yardımlaşma	“...eşin dostunun...yardımı daha farklı...daha güvenilir...(İzel-Görüşme Verisi)
Kültürel otantiklik deneyimleri	Kendine has yerel kültüre sahip olma	“...kına günü...çeyiz götürüyorlar...erkek tarafı bayanın bütün ailesine kıyafet alıyo...” (İlkay-Görüşme Verisi)
	Geleneklerin kaybolması	“...geleneklerdeki yozlaşma...var. Kayboluyo ki zaten...” (Yasin-Görüşme Verisi)
Sosyal etkinliklerin yeterliliğine yönelik deneyimler	Spor etkinliklerinin yetersizliği	“...Spor müsabakaları Aksaray’da daha öncesinde olmadı...”(Recep-Görüşme Verisi)
	Sanat etkinliklerinin yetersizliği	“Etkinlikler çok az... tiyatro, işte konser...” (Müge-Görüşme Verisi)
Nostalji deneyimi	Çocukluğunu hatırlama	“... çocuklumu, eski günleri hatırlıyorum...” (Recep-Fotoğraf Görüşme Verisi)

2.2 Kentin İşlevsel Özelliklerine Yönelik Deneyimler

Kentin en önemli temas noktalarından bir diğeri de kentin işlevsel özellikleri olup, katılımcıların tamamı bu bağlamda yaşadıkları çeşitli deneyimlere vurgu yapmıştır. Bu temas noktasında yaşanan deneyimler, “fiziksel çevre koşullarına, ulaşım koşullarına, erişim koşullarına, kamu hizmet koşullarına, güvenlik koşullarına, yaşam maliyeti koşullarına, iş koşullarına, alışveriş koşullarına yönelik deneyimler” biçiminde sekiz boyutta toplanmıştır. Bu deneyimlerde, katılımcıların akılcı yönü daha fazla öne çıkmaktadır. Katılımcılardan yedisinin sadece fiziksel çevre koşullarına yönelik deneyim boyutu açısından paylaştığı görsellere, Görsel-2’de örnek katılımcı görselleri olarak yer verilmiştir.



Görsel-2: Kentin İşlevsel Özelliklerine Yönelik Deneyimlere İlişkin Görseller

Fiziksel çevre koşullarına yönelik deneyimler, nüfus yoğunluğu, kent kirliliği, fiziksel çevrenin dönüşümü ve fiziksel çevrenin engelli bireylere uygunluğu alt boyutlarından oluşmaktadır. *Ulaşım koşullarına yönelik deneyimler* açısından kentte trafik yoğunluğunun olmadığı ancak metro, tramvay gibi alternatif ulaşım araçlarının eksikliği öne çıkmıştır. *Erişim koşullarına yönelik deneyimler*, coğrafi konumundan dolayı diğer kentlere ve kent içinde her noktaya kolaylıkla erişimi ifade etmektedir. *Kamu hizmet koşullarına yönelik deneyim* boyutuyla ilgili katılımcılar, kamu kurumları tarafından sunulan altyapı, eğitim, sağlık gibi hizmetlerin kentte sürekli gelişim gösterdiğini dile getirmişlerdir. *Güvenlik koşullarına yönelik deneyimler* açısından, şiddet olayları, gece dışarıya çıkabilme gibi güvenlik ile ilgili görüşler bildirilmiştir. *Yaşam maliyeti koşullarına yönelik deneyimler*le ilgili, kentin kira, gıda gibi temel ihtiyaçlar bakımından ucuz bir kent olduğu vurgulanmıştır. *İş koşullarına yönelik deneyimleri*, kentin sanayi yatırımlarını çekmesi ve iş fırsatlarının giderek artmasını ifade etmektedir. Son olarak *alışveriş koşullarına yönelik deneyimle* ilgili ise kentte ihtiyaç duyulan her ürünü bulabilmenin zor olduğu öne çıkmıştır. Tablo-3’te kentin işlevsel özellikleri temas noktasında yaşanan tüm deneyimlere yönelik örnek katılımcı atıfları sunulmuştur.

Tablo-3: Kentin İşlevsel Özelliklerine Yönelik Deneyimlere İlişkin Katılımcı Alıntıları

Boyut	Alt Boyut	Orijinal Katılımcı Alıntısı
Fiziksel çevre koşullarına yönelik deneyimler	Nüfus yoğunluğu	“...küçük. Çok büyük değil, o kadar kalabalık da değil. (Çağla-Görüşme Verisi)
	Kent kirliliği	“...Yerlere çöp bile atmasınlar isterdim.” (Çağla-Görüşme Verisi)
	Fiziksel çevrenin dönüşümü	“...kentin merkezi...elli yıl önce haliyle aynı.” (Yasin-Görüşme Verisi)
	Fiziksel çevrenin engelli bireylere uygunluğu	“..Kaldırımı... düz yapsalar daha yani akülü sandalye çıkamıyor oraya...” (Volkan-Fotoğraf Görüşme Verisi) “mimari engeller...yeni yapılan apartmanlarda rampa problemi...” (İlkay-Görüşme Verisi) “...sarı çizgiler...Aksaray’da bunlar çok çok kısıtlı...” (Nur-Görüşme Verisi)
Ulaşım koşullarına yönelik deneyimler	Trafik yoğunluğu	“...tıkanık bi trafiği yok...” (Hakkı-Görüşme Verisi)
	Ulaşım araçlarının çeşitliliği	“...tramvaylar var büyükşehirlerde genelde ya da metro...” (Nur-Görüşme Verisi)
Erişim koşullarına yönelik deneyimler	Diğer kentlere yakınlık	“...her yere rahat ulaşım noktası hani Türkiye’nin tam ortasında...” (Polat-Görüşme Verisi)
	Kent içi erişim kolaylığı	“...küçük şehir...her şey ayağımın altında...” (Nur-Görüşme Verisi)
Kamu hizmet koşullarına yönelik deneyimler		“...yollar olsun, kanalizasyon,... doğalgaz kırsal kesimlere kadar ilermiş durumda...” (HakkıGörüşme Verisi)

Güvenlik koşullarına yönelik deneyimler		"...bi engelli...bi kadın... genç kız.. gecenin saat on ikisinde evinden rahatlıkla çıkıp...dönebilmeli.... tereddütleri olmadan..." (Yasin-Görüşme Verisi)
Yaşam maliyeti koşullarına yönelik deneyimler		"...yaşam açısından ucuz..." (Polat-Görüşme Verisi) "...çok aşırı bi pahalı bi şehir değil..." (Nur-Görüşme Verisi)
İş koşullarına yönelik deneyimler	Sanayi yatırımlarını çekme	"...organize sanayisinde açılan fabrikalar var. İş sahaları var..." (Hakkı-Görüşme Verisi)
	İş fırsatlarının artması	"...iş imkanı olsun...birazcık kısıtlı.." (Volkan-Görüşme Verisi)
Alışveriş koşullarına yönelik deneyimler	İhtiyaç duyulan ürünleri bulabilme	"...her istediğimizi bulma konusunda sıkıntı yaşayabiliyoruz.... kıyafet ayakkabı filan ararken...biraz sıkıntı oluyo..." (Polat-Görüşme Verisi)

2.3 Kentin Kapalı Mekânlarına Yönelik Deneyimler

Kentteki kapalı mekânlar da önemli bir temas noktası olup (9 katılımcı), engelli bireyler bu mekânlar aracılığıyla çeşitli akılcı ve duygusal içerikli deneyimler yaşamaktadırlar. Bulgulardan elde edilen bu deneyimler; "kapalı mekânlara yönelik sosyal ve duygusal deneyimler ve kapalı mekânların fiziksel yeterlilik deneyimleri" olmak üzere iki boyutta toplanmıştır. Katılımcılardan dördünün sağladığı görsellerden örnekler ise, Görsel-3'te yer verilmiştir.



Çağla-3. Görsel



Yasin-1. Görsel



Yasin-3. Görsel

(Etkileşim ve Sosyalleşme, Fiziksel Yeterlilik) (Etkileşim ve Sosyalleşme) (Fiziksel Yeterlilik)

Görsel-3: Kentin Kapalı Mekânlarına Yönelik Deneyimlere İlişkin Görseller

Duygusal içerikli ilk boyut olan *kapalı mekânlara yönelik sosyal ve duygusal deneyimler* ile ilgili katılımcılar kentte bulunan çeşitli mekânlar aracılığıyla yaşadıkları "etkileşim ve sosyalleşme, sembolik, sosyal konfor, eğlence ve fantezi deneyimlerine" dikkat çekmişlerdir. *Etkileşim ve sosyalleşme deneyimini*, kapalı mekânlarda aile ya da arkadaşlarla birlikte vakit geçirme, yeni arkadaşlar edinebilme ve gezinti yapma oluşturmaktadır. *Sembolik deneyimin* özünde benzer özelliklere sahip kişilerle bir arada olma isteği yatmaktadır. *Sosyal konfor deneyimi*, benzer özellikte kişilerle aynı mekânda bulunmaktan doğan rahatlık hissini ifade etmektedir. *Eğlence deneyimi* açısından sosyalleşerek eğlenmenin verdiği mutluluk öne çıkmıştır. Akılcı yönlü ikinci boyut olan *kapalı mekânların fiziksel yeterlilik deneyimleri* açısından "alışveriş ve sanat ve spor etkinlikleri ile ilgili mekânların" sayısal yeterliliklerine ve fiziksel özelliklerinin engelli bireylere uygunluğuna vurgu yapılmıştır. Tablo-4'te kentin kapalı mekânlarına ilişkin tüm deneyimlere yönelik örnek katılımcı atıfları sunulmuştur.

Tablo-4: Kentin Kapalı Mekânlarına Yönelik Deneyimlere İlişkin Katılımcı Alıntıları

Boyut	Alt Boyut	Orijinal Katılımcı Alıntısı
Kapalı mekânlara yönelik sosyal ve duygusal deneyimler	Etkileşim ve sosyalleşme	"...Arkadaşlarımızla... oturuyor, işte sohbet ediyoruz... (Müge-Fotoğraf Görüşme Verisi)
	Sembolik	"burda... kendi gibi insanlar...herkesin aynı ortak sıkıntısı olduğu için hoş karşılanıyo..." (Recep-Görüşme Verisi)
	Sosyal Konfor	"...bütün üyelerimiz görme engelli olduğu için kişi...daha rahat hissediyö..." (Polat-Görüşme Verisi)
	Eğlence	"...bi kafede oturup... müzik dinledik, eğlendik, şarkılara eşlik ettik..." (Nur-Görüşme Verisi)
	Fantezi	"...genel olarak mutluydum....sevdiğim insanlarla birlikteydim..." (Nur-Görüşme Verisi)
Kapalı mekânların fiziksel yeterlilik deneyimleri	Alışveriş mekânları	"...büyük alışveriş merkezlerinin açılması bizim için güzel." (İzel-Fotoğraf Görüşme Verisi)
	Sanat ve spor etkinliklerine yönelik mekânlar	"Eksik yönünü temsil ediyö....salon bulamıyöz mesela..." (Yasin-Fotoğraf Görüşme Verisi)

2.4 Kentin Açık Mekânlarına Yönelik Deneyimler

Engelli bireylerin kent ile etkileşimlerinde açık mekânlar da önemli temas noktası (8 katılımcı) olmuştur. Buna göre yaşanan deneyimler, “açık mekânlara yönelik sosyal ve duygusal deneyimler ve açık mekânların fiziksel yeterlilik deneyimleri” olmak üzere iki boyuttan oluşmaktadır. Katılımcılardan dördünün sağladığı görsellerden örneklere ise, Görsel-4’te yer verilmiştir.



Görsel-4: Kentin Açık Mekânlarına Yönelik Deneyimlere İlişkin Görseller

Duygusal yönlü ilk boyut *sosyal ve duygusal deneyimler*, “etkileşim ve sosyalleşme, estetik, kaçış, öğrenme ve fantezi deneyimlerinden” oluşmakta ve kentin yeşil alanları ve park alanları gibi açık mekânlar aracılığıyla yaşanabilmektedirler. *Etkileşim ve sosyalleşme deneyimi* açısından bu mekânlarda aile ya da arkadaşlarla birlikte vakit geçirme ve gezinti yapma öne çıkmıştır. *Estetik deneyim*, kentteki doğal alanların, tarihi eserlerin ve genel kent mimarisinin sağladığı görsel zevki temsil etmektedir. *Kaçış deneyimi*, açık mekânlarda kent kalabalığından uzaklaşarak kafa dinleme biçiminde yaşanmaktadır. *Öğrenme deneyiminin* özünü doğal alanların bireyde yarattığı merak duygusuyla birlikte yeni yerler görerek bilgi edinmek oluşturmaktadır. *Fantezi deneyimi*, yeşil alanların huzur ve sakinlik duygusunun yaşanmasını sağlamaıyla ortaya çıkmaktadır. Akılcı içerikli ikinci temel boyut *açık mekânların fiziksel yeterlilik deneyimleri* bakımından; “yeşil alanlar, park alanları ve doğal alanlar” öne çıkmıştır. Tablo-5’te kentin açık mekânlara ilişkin yönelik tüm deneyimlere yönelik örnek katılımcı atıfları sunulmuştur.

Tablo-5: Kentin Açık Mekânlarına Yönelik Deneyimlere İlişkin Katılımcı Alıntıları

Boyut	Alt Boyut	Orijinal Katılımcı Alıntısı
Açık mekânlara yönelik sosyal ve duygusal deneyimler	Etkileşim ve sosyalleşme	“Bi arkadaşım ile beraber ailemle beraber ortaklaşa pikniğe gittik. Hıdırellez günüydü işte...” (Yasin-Fotoğraf Görüşme Verisi)
	Estetik	“...Aksaray’ın güzelliklerini izlemek benim hoşuma gidiyo...” (Polat-Fotoğraf Görüşme Verisi)
	Kaçış	“...sakin sessiz kalmayı, kafamı dinlemek istediğim zaman...Kılıçaslan parkı daha sakin oluyo, sessiz oluyo...” (Nur-Görüşme Verisi)
	Öğrenme	“... Doğayla beraber olmak, iç içe olmak... yeni şeyler görmek yeni şeyler bilgi edinmek hoş.” (Polat-Görüşme Verisi)
	Fantezi	“... su ve yeşillik olduğu için insanın içine ferahlık veriyö. insanın içine huzur, ferahlık geliyo.” (Polat-Fotoğraf Görüşme Verisi)
Açık mekânların fiziksel yeterlilik deneyimleri	Yeşil alanlar	“... Hiç yeşillik yok ya. Aksaray’da yeşillik yok.” (Yasin-Görüşme Verisi)
	Park alanları	“..... yeni parklar açılıyo galiba, parklar yapılacak...” (İlkay-Görüşme Verisi)
	Doğal alanlar	“...doğal yapı... Aksaray’a özgü...” (Hakkı-Fotoğraf Görüşme Verisi)

SONUÇ

Bu çalışma sonucunda engelli bireylerin, kent bağlamında akılcı (işlevsel) ve duygusal içerikli çeşitli deneyimler yaşadıkları ve bu deneyimlere, kentin farklı etkileşim (temas) noktalarının bağlam oluşturduğu belirlenmiştir. Bu anlamda en önemli temas noktaları kentin sosyal çevresi ve işlevsel özellikleri olmuş, bunu kentin kapalı mekânları ve açık mekânları takip etmiştir. Bu çalışmadan elde edilen sonuçların engelli bireylerin kent çevresinde yaşadıkları tüm deneyimlerini ele alarak bütüncül bir anlayış kazandırması bakımından önemli olduğu düşünülmektedir. Uygulama açısından kent yöneticilerinin, engelli bireyler için yapacakları

10th International CEO Communication, Economics, Organization & Social Sciences Congress kentsel çalışmalarda, hizmet işletmelerinin ise engelli bireylerin ziyaretlerini kolaylaştıracak biçimde mekân tasarımlarını gerçekleştirmelerinde bu çalışmanın bulguları katkı sağlayıcı niteliktedir.

Bu çalışmada, ele alınan olgunun tüm ayrıntıları ile ortaya konulması amaçlanmış olup başlangıç niteliğinde keşfedici bir çalışma özelliğine sahiptir. Çalışma, orta ölçekli bir kent olan Aksaray bağlamında az sayıda katılımcı ve nitel verilerin betimsel olarak analiz edilmesi ve araştırmaya katılan engelli bireylerin kişisel özellikleri ile sınırlıdır. Bu nedenle elde edilen sonuçlar, Türkiye’deki tüm engelli bireylere genellenemez. Dolayısıyla gelecekteki çalışmalarda bu çalışmanın farklı bir bağlam olarak büyükşehirlerde tekrarlanması, önemli sonuçlar elde edilmesini sağlayabilir. Nicel araştırmalar yürütülerek genellemelere ulaşılabilir. Ayrıca bu çalışmada elde edilen kavramsal boyutlar, bir ya da daha çok kentte ve daha fazla katılımcı ile yürütülecek nicel araştırmalar ile test edilebilir. Dahası yürütülecek ölçek geliştirme çalışmaları ile engelli bireyler özelinde bir kent deneyim ölçeği geliştirilebilir.

KAYNAKÇA

- Alhusban, A. A., & Almshaqbeh, S. N. (2024). Delivering an inclusive built environment for physically disabled people in public universities (Jordan as a case study). *Journal of Engineering, Design and Technology*, 22(6), 1980-1998.
- Beaton, M. (2005). Glasgow City Council: Library, information and learning services for disabled people in Glasgow. *Library Review*, 54(8), 472-478.
- Bogdan, R., & Biklen, S. (2007). *Qualitative research for education: An introduction to theory and methods* (5th b.). Pearson Education, Inc.
- Brantlinger, E., Jimenez, R., Klingner, J., Pugach, M., & Richardson, V. (2005). Qualitative studies in special education. *Exceptional Children*, 71(2), 195-207.
- Calder, A., Sole, G., & Mulligan, H. (2018). The accessibility of fitness centers for people with disabilities: A systematic review. *Disability and Health Journal*, 11(4), 525-536.
- Creswell, J. W., & Creswell, J. (2018). *Research design : Qualitative, quantitative, and mixed methods approaches* (3rd. b.). Sage.
- Eisenberg, Y., Heider, A., Labbe, D., Gould, R., & Jones, R. (2024). Planning accessible cities: Lessons from high quality barrier removal plans. *Cities*, 148, 1-13.
- Haytko, D. L., & Baker, J. (2004). It’s all at the mall: Exploring adolescent girls’ experiences. *Journal of Retailing*, 80(1), 67-83.
- Karimi, H. A., Zhang, L., & Benner, J. G. (2014). Personalized accessibility map (PAM): A novel assisted wayfinding approach for people with disabilities. *Annals of GIS*, 20(2), 99-108.
- Muschkiel, M., & Wulfert, T. (2022). Holistic customer experience in smart city service systems – A conceptual model. *The Human Side of Service Engineering*, 62, 271–278.
- Nykiforuk, C. I., Glenn, N. M., Hosler, I., Craig, H., Reynard, D., Molner, B., C. Jared, & Lowe, S. (2021). Understanding urban accessibility: A community-engaged pilot study of entrance features. *Social Science & Medicine*, 273, 113775.
- Park, J., & Chowdhury, S. (2018). Investigating the barriers in a typical journey by public transport users with disabilities. *Journal of Transport & Health*, 10, 361-368.
- Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd. ed.). Sage.
- Snepenger, D., Snepenger, M., Dalbey, M., & Wessol, A. (2007). Meanings and consumption characteristics of places at a tourism destination. *Journal of Travel Research*, 45(3), 310-321.
- Stafford, L., Novacevski, M., Pretorius, R., & Rogers, P. (2024). The makings of disability-inclusive sustainable communities: Perspectives from Australia. *Urban Governance*, 4, 113-121.
- Stocchi, L., Hart, C., & Haji, I. (2016). Understanding the town centre customer experience (TCCE). *Journal of Marketing Management*, 32(17-18), 1562-1587.
- Taecharunroj, V., & Stoica, I. (2024). Assessing place experiences in Luton and Darlington on Twitter with topic modelling and AI-generated lexicons. *Journal of Place Management and Development*, 17(1), 49-73.
- Wallendorf, M., & Belk, R. (1989). Assessing trustworthiness in naturalistic consumer research. E. Hirschman (Ed), *Interpretive consumer research içinde* (s. 69-84). Association for Consumer Research, Provo.



10th International CEO Communication, Economics, Organization & Social Sciences Congress
A Global History of Origin, Development and Distribution of Gunpowder

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ABSTRACT

This paper has largely made an attempt to explore the origin and evolution of gunpowder technology throughout the world. It could not be ignored that the infusion of this new technology not only bring a drastic change in the warfare world but also left a widespread impact on Human civilization as well as their socio-economic status, socio-political arena and cultural ambience. I have attempted to show the historical trajectories by which this new technology was originated in China and then to transmitted to the Central Asian atmosphere. I also have tried to show the history of several devastating battles that were taken place between the Mongols and the Chinese dynasties where in this newly innovated war technology had played a vital role. During the course of Mongol-Chinese wars, the evolution of the concept of using these gunpowder weapons has been discussed here in a nutshell. The significant effect of the incorporation of gunpowder weapons in Mongols' warfare has received a broad attention of the theme of my work. I have also studied the process of transformation of gunpowder from the Central Islamic lands to the medieval European one. Ultimately, I have summarized my observation by making a brief account on the arrival of this technology in Indian subcontinent with the hands of the Mongols and in which way this new war technique became discolored in from the later warfare environment.

Keywords: Central Asia, Mongol-Chinese wars, Gunpowder, Firearms

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INTRODUCTION

Since its onset of developmental trajectory, history is coruscating the human civilization through its wondrous excogitation, the emergence of gunpowder in the military world was a groundbreaking phenomenon in the world civilization. It could easily be argued that the apparition of gunpowder was one of the obstreperous deponent of technological prosperity in Human society. On one hand, this stunning reward of history had fluoridated its horrendous and fatal side and simultaneously embodied itself to contribute for the benefaction of the uplift of civilization. It is very difficult to find out the exact timeframe of this fascinating innovation. However, the speculation could be made regarding this on the basis of its earlier reference dated back to the 142 A.D. when the Eastern Han Dynasty were administering in China. It is genuinely being given the badge of four great innovations to China, gunpowder had secured its place among them in first millennium A.D. During this time, a renowned alchemist Wei Boyang who were belonging and entertaining to the Eastern Han made a breakthrough in the discipline of *Alchemy*. His epoch making creation '*Book of the Kinship of Three*' was inevitably been designated as the first-hand account on the gunpowder wherein he had written down its chemical formation, he was also ornamented with the title 'father of alchemy' for this astonishing work. At this great historical juncture, another two essential chemical elements sulfur and saltpeter had revolved the inventive wheel of making gunpowder. Meanwhile, Hanzhong (modern south-western city of Chinese province Shaanxi) were becoming a home of *Saltpeter* and subsequently it was transferred to the Gansu and Sichuan. However, in its initial phase, Gunpowder had not yet been disclosed its fulminant nature. In a later period, a momentous contribution left by Taoist alchemists led the foundation of the further advancement. Although, the initial inauguration of gunpowder was accomplished with the hands of the Hans, but their subsequent successor, the Mings as an imperialist figure were essentially considered as the original propagator and first gunpowder empire within the world. In order to make a statement on this newly invented weapon of war, Peter Lorge (an eminent military historian of the twentieth century) has pointed out in his outstanding composition '*The Asian Military Revolution: From Gunpowder to the Bomb*' that the ninth and tenth century's newly originated gunpowder weapons in China had corresponded to the early modern European warfare^{xliii}. Wujing Zongyao, a memorable Chinese creation of the eleventh century (which also had an English translation entitled as '*Chinese Essentials for the Military Classics*') had made a milestone in the military narrate as the first chemical abbreviation of gunpowder had been scribed.

The Disposal of Chinese Military Innovation to the Central Asian Ambience (Mongols):

The ascendancy of the Mongols in the central Asian polity could considerably claim as a solemn occurrence in the field of the trajectory of gunpowder technology, their antagonistic negotiations with the two crucial dynasties of the then China (Jin and Song) were to be referred as a vital role to accelerate its vitae. There was an intensified tendency among the Mongols to array the foreign expertise in their military forces rapidly erupted to the Chinese and then became more pervade to the Far East, predominantly in Japan and even up to the west. The inadequacy of the proper textual authenticity that was unwillingly forsaken by the Mongols had provoked the vacillation in the minds of twentieth century's scholars (like: Kate Raphael) regarding the substantial role of the Mongols in proliferating the newly invented technology throughout Pan Euro-Asian atmosphere. In contrary to this belief, several eminent scholarly figure like, Tonio Andrade and Stephen Haw had justified by ornamenting them as the first gunpowder empire^{xliv}. The first three decades of the thirteenth century had witnessed a

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formidable combat between the concatenated troops of the Mongols under the leadership of everlasting conqueror Chingiz Khan and the Jin dynasty, however the battle between them was commenced in 1211, but it was uninterruptedly lasted till 1234 A.D. After one year, Mongols had allusively grappled Kaifeng, the capital city of Jin and instituted gunpowder weapons. Along with this, the Mongols had made the Chinese and tremendously tortured them for maintaining the supplies of Haul and filling moats. A contemporary Jin historian, Liu Qi had gifted a stunning account cum memoir on this historical to the next generation. The Mongols realized the importance of strengthening the Jin capital of Kaifeng in terms of its military value, so they started constructing a hundred kilometer of stockades which cordoned the entire city. In order to make a counter challenge, the interpolation of gunpowder bombs was desperately accomplished by the Jins. In case of using the bombs in the battle field, Liu Qui immaculately provided a fascinating eye-witness account, he had uttered when the Mongols were strafing, the Jin forces were to ready to face it. They had made the gunpowder bomb popularly termed as heaven-shaking-thunder as their language of counter stroke. The enchanting explanation of this contemporary Jin scholar on Liu Qui made the later generation bewitched to acquaint about this historic war. Therefore, ' *History of Jin* ' (first and foremost work on the dynastic interpretation of Jin composed under the patronage of Yuan dynasty of China) had nicely and absolutely framed a rational cum factual illustration on the newly emerged heaven-shaking-thunder. Liu qui had also spoken about the detrimental character of these bombs by describing an amazing historic incident, a shivering narration giving by him in this regard. When he was in Shaanxi province due to official serve, he witnessed that the powder was detonated and the explosion of bomb took place and it was enough to put the people and horses in a destructive condition. Before the devouring of the Jin capital of Kaifeng by the Mongols in 1231, the ejection of heaven-shaking-thunder bombs as thunder-crash-bombs had come into existence and by downthrown it, a Jin military general made an attempt to demolish a Mongol warship. However, the Mongols had diplomatically made a hindrance against his step by utilizing elaborated screen of thick cowhide. The process of the exploration of the armored niches would become advantageous for the workers to dig it. On the other hand, Jins were to be considered as a contriver of another stunning gunpowder weapons flying fire lance, indeed they ameliorated a new imitation fire lance. It was more plausible and pregnant than the preceding one employed by Chen Gui which existed before a century. The first official account and dynastic chronicle, *History of Jin* had served as trustworthy account on this matter. At a first sight, the Jin weapons, flying fire lance and heaven-shaking-thunder bomb were becoming abominable to the Mongol armies. The abdication of the throne of Jin monarch made the socio-economic status of the Jin dynasty more egregious, the monarch was compelled to desert his regime. The circumstance became more lugubrious when a large number of people were being died due to malnourishment and was forced agonizingly to succumb. Meanwhile, the excellence of a Jin commander who successfully had taken the leadership of fire lance armed forces consisted of four hundred fifty soldiers and proficiently triumphed against the Mongol troops. The Mongol forces became disabled to build up a steady counter against them. However, the sudden self-violence of Jin monarch (1234) had counted the last days of the Jins while Mongols were drastically constructing their centrifugal strength. Due to this political aura the Jin regime came to an end and now the Mongols were becoming more aggressive in order to gratify their political motives,

10th International CEO Communication, Economics, Organization & Social Sciences Congress they had already shifted their attention towards the Song by ingurgitating two of the three mentionable states of the Song dynasty.

Another crucial infliction of gunpowder bombs by the Mongols was a sever incursion on the Song city of Anfeng (modern location Shouxian, Province of Anhui). The destruction of the defensive towers of Anfeng was accomplished through the detonation of the bombs (huo pao). Military historian Tonio Andrade has portrayed in his work the bloodcurdling image of the city that was created by the exploded bombs^{xlv}. Du Gao, a military commander of song dynasty's armed force played a respectable role to reconstitute the vanquished towers and had taken a vengeance by using their bombs termed as 'Elipao'. A great military contemplation was framed in a significant delineation of this fight, the interpretation was that the military formation or strategy of the Anfeng forces was dressed by given a small arrow in order to make an internecine attack on the armor of the Mongols because the small kind of arrows were more efficient rather than the normal ones, Indeed, normal arrows often used to make an obstacle to encroach into the combat ground. The thirteenth century was consequential year for the advancement of Song military organization as they began to deploy a significant number of gunpowder weapons. The foundation of the Song military force was more strengthened due to the rapid apposition of these weapons. The crucial responsibility to keep an eye out on the frontier city of Arsenal was relied upon a Song military official, Li Zengbo in the year of 1257. The advantageous position for the installation of thousand numbers of iron bombshells had influenced Li Zengbo and he recognized an ideal arsenal city. Besides this, the manufacturing potentiality was also very acquirable. However, after completing the official inspection a tremendous despondency was consequently arose as the frontier city arsenals had not adequate war equipment. Tonio Andrade had mentioned that there was an urgent requirement for the Song government to take a preparatory break for revitalizing the process of fortification of the cities and to maintain a smooth flow of providing military equipment to fight strike back against the Mongols. However, the causal death of Khagan of the Mongol empire, Mongke Khan (1259) had transgressed the Mongol-song battle for at least ten years and it was during the year of 1269, when Mongol Khagan Kublai were heading the military strength, the imperialist aggression had started to continue. Xiangyang and Fancheng (two analogous fortified cities) had obstructed the Mongols' military journey to the south of Yangtze. This astonishing military impediment constructed by the Songs in front of the Mongols had to be regarded as one of the long-lasting seizure in the entire history of the World, it existed between the year of 1268 and 1273. In the year of 1273, the two new masterful Muslim engineers were cordially welcomed by the Mongols from Persia and Syria respectively, the instrumental role served as adjuvant in building up of counterweight trebuchets. The main purpose of making these weapons to eject comparatively large missiles to the preceding one. One such spectacular interpretation on this historical phenomenon was noted down to reveal sinister and demolishing nature of these gunpowder weapons. Ultimately, the year 1273 was marked or identified by the disintegration of the fortress city, Xiangyang. Another predominant incident in the military history of the Mongols as well as the gunpowder weapon was an incredible military expedition or enterprise conducted by the Mongol military commander Bayan, he had taken desperately the generalship of two hundred thousand soldiers wherein the Chinese armed force structured a major proportion of the entire troops. This military campaign was to be considerably referred

10th International CEO Communication, Economics, Organization & Social Sciences Congress as the greatest formation of the Mongols which they ever deployed. However, the arrangement of such a large military venture could not be able to make a strenuous stroke to the wall of the fortified city of the Songs as it could be experienced in the detention of Shayang. The combat which occurred in Shayang did not leave any records that talked about the application of this type of gunpowder bomb. The military official Bayan, started taking patience for switching the direction of northerly wind prior to giving instruction his artillery forces to conduct a bombardment or shellfire in the city by launching molten metal bombs which paved the way of the setting up of fire within the entire city. The Mongols had enabled to apprehend the city of Shayang and agonizingly exterminated its people. In a later phase of the Mongo-Song tussle, we can observe consciously that the Gunpowder bombs were successfully exercised while the Mongol had taken a significant step through the annexation of Changzhou in 1275. When Bayan Physically appeared in the city, he had given an admonishment to the citizens by saying that if the people would create any kind of obstacle in front of them, he was aggressively compelled to deracinate the blood from the mound of dead bodies and utilized it for making pillows. Though, the ultimatum of Mongol general had made no effect on the citizens, they forwarded to create a resistance against the Mongols' strength. Thereafter a terrible cannonade was happened with shell firing bombs prior to the tremendous inversion of the fortified walls of the city and this event was succeeded by a lugubrious massacre for snatching out the vitality of the inhabitants. However, the war had come to an end within four years, during this time the ruined condition of the Song dynasty had miserably kept their military arrangement. The Ramshackle status of the Song military was gradually being revealed, a suicidal attempt of the two hundred fifty defenders occurred under the supervision of Lou Qianxia. History of the Song had documented a tormenting account for explaining the predicament and awkward position of the Song regime of apparatus. As a matter of fact, that, the battle between Mongol and the Song dynasty had witnessed the intensification of the utilizing gunpowder weapons, it was the first time in military history as well as history in general Central Asian world became a deponent of the implementation of the gunpowder weapons on a wide scale. In a latter episode, the advent of guns had made the magnificence of Gunpowder arms toneless and palliated. The year 1280 became a voucher of contretemps which had come about at Weiyang in Yangzhou, a huge abundance of gunpowder was abruptly burned and approximately hundred guards were shredded due to the spacious detonation. The mid-fourteenth was recognized by a remarkable composition 'Hulongjing made an elucidation on the installation of gunpowder in military sector, the enhancement of the proportion of nitrate in gunpowder had made it more fulminant than its previous status. At this great historic juncture, Chinese had acclimatized the contrivance of making round shots by appending their hollow shell with newly proportionate gunpowder.

The Mongol incursion of Europe had also played a pivotal role in the process of the augmentation of installing gunpowder weapons. In order to gratify their military interests, the Mongols had commenced the military tactics of the annexation of four major Turkish nation (Volga Bulgaria, Cumania, Alania and the Kivan Rus Federation) to their territories. The Mongols' initiation of their attack was organized in Poland. The Mongols had thrown a considerable challenge to Poland in the Combat of Legnica which took place in the year of 1241. The severe attack conducted by the Mongols had deplorably defeated this western European country. The downfall of the Kingdom of Hungary in the battle of Mohi (April, in the year of 1241) was another outstanding achievement of the Mongols to seize the western

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European periphery. A crucial numbers of military expedition were also introduced by the Mongols in the Kingdom of Georgia, and eastern European nations of distinct linguistic group (Chechens and Ingush) who used to share similar language and culture. The blue print of this military enterprise was sketched by Mongol military general Subutai (1175-1248) and the entire operation was efficiently handled by Batu Khan and Kadan (the garndsons of Chingiz Khan). It is needless to say that, the above mentioned military annexation of the Mongols had consolidated their foundation or establishment in Eastern Europe and this served as a military gratification to the Mongols. There was a rapid growth of the perception of facing the Mongol threat unitedly among the European princes. Therefore, the Internal conflicts and isolated tussles had begun to discontinue in Central Europe. However, the disciplinary conquests arranged by the Mongols were being carried out until the thirteenth century. In these military exploration, we can find several words (for instances; *'fire catapults'*, *'pao'* and *'naphtha-shooters'*) which are usually suggesting that analogous application of Gunpowder weapons. In this regard, Timothy May (a renowned scholar, who had a large number of works on the Mongol empire) suspiciously disagreed that there was no palpable reference from which it could be said that apart from China, the Mongols spontaneously installed gunpowder throughout the world^{xlvi}. The military occupation of the Mongols in Japan was happened between the year of 1274 and 1281. After the completion of the Mongol attacks on Japan, the manufacture of gunpowder bombs began to appear, the bombs were genuinely termed as *'tetsuhau'*. It is essentially surmised that the Japanese bomb was conformable to the Chinese thunder Crash Bombs. A detailed explanation that was written down by the Japanese also spoke about iron and bamboo pao effecting light and fire and volleying two to three thousand iron bullets. An outstanding twelfth century Japanese text, *'The Nihon Kokujokushi'* noted down the appearance of *'huo tong'* (fire tubes) in the war of Tsushima which was taken place in the year of 1274 and another one was the second coastal stroke that occurred under the leadership of Holdon in 1281. Iron pao was responsible for a flash of light and monstrous clop while it was caught fire, this was well-documented in another significant work non the latter half of the twelfth century.

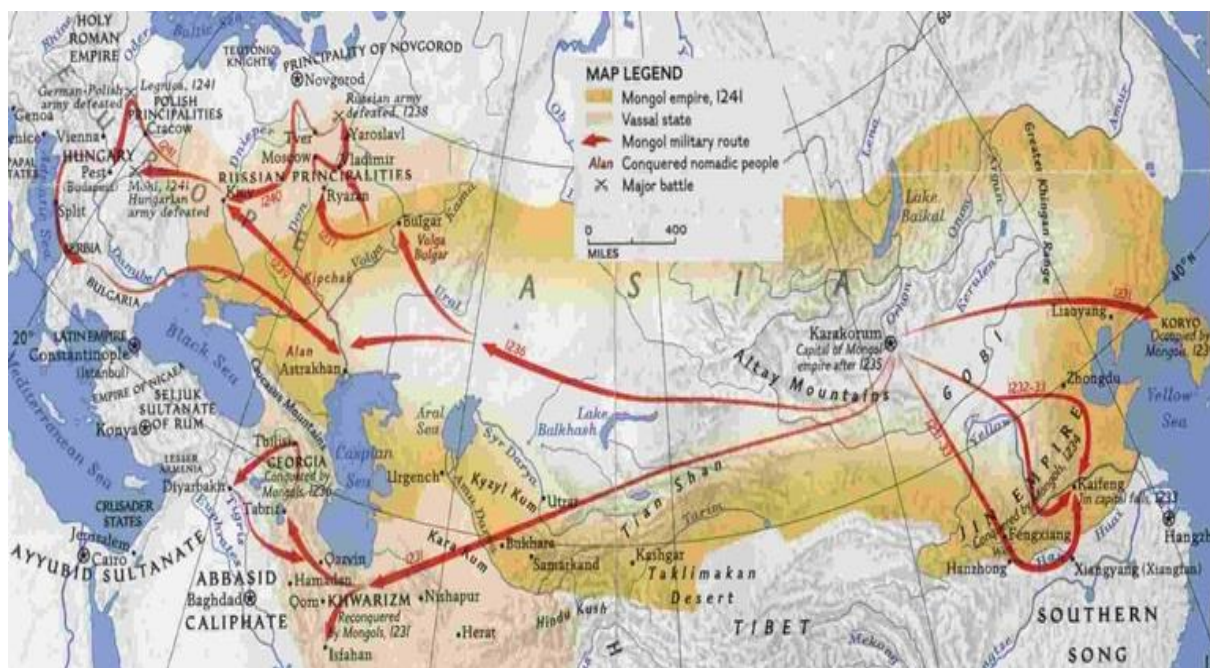


Illustration of the Distribution of Gunpowder Technology across the World

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Widespread Geographical Distribution of Gunpowder Weapons (Eurasian Land):**

The decades, after the year of 1240 were identified by the process of acclimatization of gunpowder formula in the Muslim martial world. A stunning Arabic composition of Hassan al-Rammah, which mainly consisted of the recipes for gunpowder, orders for the sanctification of saltpeter and a spectacular elucidation on the explosive of gunpowder had come into existence. The literary works and evidences had generally referred that the gunpowder technology had been assembled from China and it was hypothesized that the Mongols were the original inaugurator of this new military innovation by conducting expedition and ravage. The *saltpeter* used to be depicted in early Arabic literary works as ‘Chinese snow, fireworks could be viewed as ‘*Chinese flowers*’ and the rockets could usually be presented as ‘Chinese arrows’. These phrases were also correspondent to the Persians as the Saltpeter was denominated to them as ‘salt from Chinese salt marshes’. The *saltpeter* shaped a large percentage (68% to 75%) in the gunpowder formula produced by Al-Rammah. However, the high proportionate of saltpeter generated by Al-Rammah was not compatible for rocketry or we can say that the compatibility of the percentage of saltpeter was not carefully maintained in the gunpowder formula of Al-Rammah, but it was sufficiently consonant for making high detonation. The Book of the Military Horsemanship and Ingenious War Devices (*Kitab al-Furusiya wa'l Munasab- al-Harbiya*), an unbelievable creation of Al-Rammah had recorded fuses, incendiary bombs, naphtha pots, fire lances and a portrayal and delineation of the previous torpedo. The two striking chemical processes of solution and crystallization had played a crucial role in the sanctification of *saltpeter* and it was foremost illustrated or explained by Al-Rammah. Joseph Needham had remarkably pointed out that the utilization of fire lances could be traced back to the Muslim-Mongols wars which was occurred between the year of 1299 and 1303. An early fourteenth century Arabic manuscript had played a vital role for perceiving knowledge about the proximate exercise of canons in the Islamic arena. However, there was doubt in the name of the author, but it was supposedly reflected that he was Shams al Din Muhammad who had lost his life in the year of 1350. It was well-captured that the gunpowder arrows, bombs, fire tubes, fire lances or proto guns had to be acknowledged as the standard gunpowder weapons that were used between the year of 1320 to 1350. A form of gunpowder weapon that had to be designated as *midfa*, informatively accounted in this fourteenth century manuscript. However, there is debate which are existing among the scholars whether it was a canon or not. According to Joseph Needham, the medieval word *midfa* considerably suggested to a tube or a cylinder of a naphtha projector (flamethrower). Hereafter, it had begun to be treated as tube of fire lance while the process of making gunpowder technology was already innovated. There were enormous references of gunpowder weapons which significantly indicated the widespread of application of canons throughout the medieval Islamic world. Historian Paul E.J. Hammer said that the year 1342 was a major breakthrough for the Mamluqs as they indubitably propagated the use of canons. In the view of J. Lavin, when the Moors forwarded to annex Algeciras in the year of 1343, then the extensive apposition of canons had taken place there. There was a traditional hypothesis regarding the origin and advancement of Gunpowder in medieval Europe, it is commonly agreed that the gunpowder technology had engendered its journey to Europe by using the Silk road (a crucial and unforgettable Eurasian trading network). There is a presumption which has profoundly engrained in several scholastic mind that William of Rubruck, (an eminent Franciscan missionary and traveler) embodied himself as an ambassador to the court of the Mongols between the year of 1253 and 1255 and had to be denominated as an appreciable mediator in the process of the emanation of gunpowder. William’s travel anecdote had been nicely documented by Roger Bacon, who was the first European to raise a reference on gunpowder. However, the William’s traveling account did not provide any greater information on gunpowder. *Opus Majus*, a path braking composition cum treatise of Roger

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Bacon, had essentially served as a reliable testimony on the manifestation of gunpowder technology in Europe. In his creation, Bacon had noted down several facts on a firecracker toy that was yielded from different regions of the world. In European context, the illustration of a gun was figured in a fourteenth century manuscript of Walter de Milemete. A number of historians usually conceived that the decade of the 1320 was milestone for the advancement of guns in Europe.

Indian Background:

It is genuinely being inferred that the gunpowder technology and its apposition in numerous warfare in Indian subcontinent had come into scene in the middle of the fourteenth century. However, the initial propagation of this newly invented technology had successfully been ascertained by the Mongols in the mid-thirteenth century. As a matter of fact, that the Mongols had desperately achieved success in establishing their footholds in some border landscapes of Indian territory. The emanation of gunpowder technology had taken place in the Mongol occupied territories of the Indian subcontinent only due the successive consolidation of the Mongol domain. Nevertheless, the years between 1221 and 1327 had witnessed the striking raids, plunders that were launched by the Mongols and also the importation of the gunpowder weapons in Indian arena. An engrossing portrayal related to this historical phenomenon was delimited in one of the most illustrious medieval literary works, '*Tarikh-i-Firishta*' (composed by Firishta). This medieval text had stated that the apostle or delegate of the Mongol Khan, Hulagu Khan was plotted with a dazzling pyrotechnics while he had polished his way to the Delhi durbar in the year of 1258^{xlvi}. A rocket which could usually be named as '*hawal*' (popularly known as '*ban*') had to be avowed as the first gunpowder tool implanted in India during the second half of the thirteenth century and it was more advanced than the pyrotechnics based on naphtha. Another notable medieval chronicler, Amir Khusraw had mentioned in his work '*Khaza'in-ul-Futuh*' that the presentable dexterity of firing throwing conducted by the Mongols had occurred roughly in the year of 1300. Khusraw also recorded that in the north-western part of India, the origination of Huo Chiang was engineered by the Mongols. It was historically evidenced that the Sultans like Balban and Alauddin Khilji became more concern about the monstrousness of Mongol blow to the fortified cites of north-western India as the dilapidated fortification disabled to defend the powerful gunpowder techniques. Barani told that the Balban was compelled to reinvigorate the fortification of Bhatnir and towns and villages near the vicinity of Lahore. From the onset of the second half of the fourteenth century, Delhi and Bahamani Sultans had started the application of rockets in warfare with a broad competency. When Abdul Razzaq Samarqandi, an Islamic traveler cum chronicler had reached in India during the regime of Vijaynagar emperor Devaraya the second and provided an elaboration on the naphtha throwers sited on the back of the elephant and handing with the pyrotechnics. The use of *top-o-tufak* (firearms) was seen in the Vijaynagar empire dated back to the year of 1366. Even the series of wars which were happened between the Bahamani and Vijaynagar empire (1368 to 1369) had become a remarkable deponent of gunpowder weapons as well as pyrotechnics. The point could not be denied that the gunpowder weapons also played a momentous role in establishing the trading relations or networks between these medieval south Indian kingdoms and the Turkish territories.



So to conclude, we can say that, the advent of gunpowder technology and fire arms had reshaped the relations of political equation between the world's major empires. Even the era of Ottomans, Safavids, Uzbeks and the Mughals were essentially to be recognized as the gunpowder empires due to their wide scale implantation of gunpowder weapons and firearms in numerous warfare. As per the natural discipline about material experiments and explorations, no innovations are able to contain its own and ultimate supremacy. Gunpowder is not exception to that. The rapid disintegration of the usage of gunpowder weapons took place in the latter half of the nineteenth century as the astonishing excogitation of nitroglycerin, nitrocellulose and smokeless powders had jointly languished the monopoly of gunpowder in the area of warfare.

Bibliography:

1. Andrade Tonio. *The Gunpowder Age: China, Military Innovation and the Rise of the West in World History*. New Jersey: Princeton University Press, 2016.
2. Lorge Peter. *The Asian Military Revolution: From Gunpowder to the Bomb*. Cambridge University Press: New York, 2008.
3. May Timothy. *The Mongols Conquest in World History*. Reaktion Books: London, 2012.
4. Iqtidar Alam Khan. *Gunpowder and Firearms: Warfare in Medieval India*. Oxford University Press: New Delhi, 2004.
5. Chase Kenneth. *Firearms: A Global History to 1700*. Cambridge University Press: New York, 2003.



**COMMUNICATION
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7-8 December 2024- India

10th

**INTERNATIONAL
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(Communication, Economics, Organization)
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CEO Congress Zoom Meeting Room 1
7 Dec 2024, Saturday

OPENING CEREMONY	
Saturday 7 Dec 2024 9:30-10:30	Opening Speeches Moderator: Dr. Anoljyoti BASU, India Speakers: National Anthem of the Republic of Turkiye National Anthem of the Republic of India Kerim KARADAL, Coordinator Prof. Ir. M. Aman Wirakartakusumah, Rector of IPMI International Business School (Sekolah Tinggi Manajemen IPMI) Indonesia, Co-Chair Ms. Alona Sliusar, Director of the Department of Scientific Research and Development Alfred Nobel University Prof. Dr. Sergii KHOLOD, Rector of Alfred Nobel University Dnipro, Ukraine, Co-Chair Prof. Dr. Sumer Singh Yadav, Vice Chancellor of Career Point University, India, Co-Chair Prof. Dr. Himmet KARADAL, Bolu Abant İzzet Baysal University, Türkiye, Co-Chair
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CEO Congress Zoom Meeting Room 1
7 Dec 2024, Saturday

<u>Keynote Speakers Session</u>	
Saturday 7 Dec 2024 10:30- 11:30	<p><u>Moderator:</u></p> <p>Assoc. Prof. Dr. Ashish Jorasia</p> <p><u>Keynote Speakers:</u></p> <p>Asst. Prof. Dr. Ir. Amelia Naim Indrajaya, MBA – Head of CSMSR, IPMI International Business School, Jakarta, Indonesia</p> <p>Prof. Dr. Siham EL-KAFAFI, Director of Arrows Research Consultancy, New Zealand</p> <p>Prof. Dr. Hernán E. Gil FORLEO, University of Buenos Aires, Argentina</p> <p>Dr. Dewi Puspaningtyas Faeni, MBA, MHT, Dean Faculty of Economics and Business, Universitas Bhayangkara Jakarta Raya, Indonesia</p> <p>Prof.Dr. Luís Miguel Cardoso, Polytechnic Institute of Portalegre, Portugal Carles Agustí i Hernàndez, International Governance Consultant & SDG Manager (Barcelona/Spain)</p>
<u>Room</u>	<u>https://us02web.zoom.us/j/81740119790</u>
<u>Link:</u>	



CEO Congress Zoom Meeting Room 1
7 Dec 2024, Saturday

<u>Guest Speakers Session</u>	
Saturday 7 Dec 2024 11:30- 12:00	<p><u>Moderator:</u></p> <p>Dr. Anoljyoti BASU, India</p> <p><u>Guest Speakers:</u></p> <p>Dr. Ir. Firdaus Basbeth, MM. PPM Manajemen, Indonesia</p> <p>Assoc.Prof. Murteza HASANOĞLU, Azerbaijan State Administration Academy, Azerbaijan</p> <p>Assoc. Prof. Dr. Bobur Sobirov, Samarkand branch of Tashkent State University of Economics, Uzbekistan</p> <p>Dr. Anurag Agnihotri, Delhi University, India</p>
<u>Room</u>	<u>https://us02web.zoom.us/j/81740119790</u>
<u>Link:</u>	

Research Methods Workshop



10th International CEO Communication, Economics, Organization & Social Sciences Congress

Saturday 7 Dec 2024 12:00- 12:30	Moderator: Dr. Rey TY, Payap University – Thailand Title: A Typology of Action Research for Scholar -Practitioners
Room Link:	https://us02web.zoom.us/j/81740119790

CEO Congress Zoom Meeting Room 1
7 Dec 2024, Saturday

Meeting Room 1	https://us02web.zoom.us/j/81740119790		
7 Dec 2024 Session 1	12:30- 14:00	Moderator	Assoc. Prof. Dr. Ashish Jorasia
<ol style="list-style-type: none"> 1. Assessment of The Effectiveness Governance, Risk and Compliance (GRC) Initiatives by Using Importance-Performance Analysis – An Alternative Method to Evaluate Integrated GRC in Organization - Catur PRIYONI, Wiwiek Mardawiyah DARYANTO 2. The Effect of Financial Performance, Stock Market and Foreign Exchange to Stock Return of an Indonesian Toll Road Company - Catur PRIYONI, Wiwiek Mardawiyah DARYANTO 3. Challenges and Opportunities of Conducting Renewable Energy Business in Emerging Market Focusing on Indonesia - Reza Perkasa ALAMSYAH 4. Addressing M&A and Revenue Challenges: Strategic Recommendations for PT XYZ in the Mining and Construction Sector - Adrius Sinuhaji, Prof. Ir. MBA, Ph.D, CSA, CIB, CIIM. Roy SEMBEL, Dr. SE, MM, CPA, CBV, CFRM, CFA. Melinda MALAU 5. Enhancing Telco Operator Revenue by Optimizing B2B Sales Processes - Hasudungan Perdana Cipta SIJABAT, Prof. Ir. MBA, Ph.D, CSA, CIB, CIIM. Roy SEMBEL, Dr. SE, MM, CPA, CBV, CFRM, CFA. Melinda MALAU 6. Factors That Influence Generation Z’s Purchase Decisions Towards Modern Kebaya in Indonesia - Diajeng Aulya SEKARTAJI, Wiwiek Mardawiyah DARYANTO 7. Climate Change in the Automotive Spare Parts Manufacturing Industry in Indonesia: Threat or Opportunity? - Mr. Renward Bangun SINAGA, Prof.Ir. Roy H. M. SEMBEL, MBA, Ph.D., CSA, CIB, CIIM, Dr. SE, MM, CPA, CBV, CFRM, CFA. Melinda MALAU, Dr. Amelia Naim INDRAJAYA 			



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Meeting Room 1	https://us02web.zoom.us/j/81740119790		
7 Dec 2024 Session 2	14:00- 15:30	Moderator	Kerim Karadal
<ol style="list-style-type: none"> 1. Profitability Ratio Analysis: Measure Profitability Based on Financial Statements PT. Siloam International Hospital Tbk. 2017 – 2023 - Abraham MARCELINO, Wiwiek Mardawiyah DARYANTO 2. Maintaining the Financial Performance of PT Aneka Tambang, Tbk During the COVID-19 Pandemic Era - Adilla Vemmari Putri, Wiwiek Mardawiyah DARYANTO 3. Financial Performance Analysis based on Financial Highlights of PT Japfa Comfeed Indonesia, Tbk during period of 2017-2023 - Andri MURSYID, Wiwiek Mardawiyah DARYANTO 4. A Dupont Analysis Approach: Impact of Government Restrictions Related to COVID-19 on Financial Performance of PT Blue Bird Tbk (2019 – 2023) - Antonius Michael George SURYA, Wiwiek Mardawiyah DARYANTO 5. The Intersection of Financial Performance and Sustainability Goals: Mayapada Hospital’s Financial Outcome Analysis from 2018-2023 - Fauzan AKBAR, Wiwiek Mardawiyah DARYANTO 6. Financial Performance Analysis and Evaluation of PT. Akasha Wira International TBK for the Period of 2019-2023 - Martio Orleigh PRAKASHA, Wiwiek Mardawiyah DARYANTO 7. Financial Performance Analysis of PT Pembangunan Jaya Ancol Tbk Due to Covid 19 Using the Common Size Method - Wahyu Rochman ADITAMA, Wiwiek Mardawiyah DARYANTO 8. Student’s Perception and Measure of Bloom's Taxonomy Cognitive Levels: an Integrated Analysis Based on HEC's Speaking Curriculum to Access in Career - Sadia AYUB, Lubna ALI MOHAMMED 			

Meeting Room 1	https://us02web.zoom.us/j/81740119790		
7 Dec 2024 Session 3	15:30- 17:30	Moderator	Dr. Souvik Dasgupta

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1. Assessing Financial Health : Pre-Covid-19 and Post-Covid-19 of PT. PP (Tbk) - **Teguh Pradana PUTRA, Wiwiek Mardawiyah DARYANTO**
2. Assessing Financial Health and Resilience: A Post-COVID-19 Analysis of PT Jasa Marga, Tbk - **Dhimas Surya NEGARA, Wiwiek Mardawiyah DARYANTO**
3. Financial Performance, Market Return, and Macro Economy: Study of Consumer Cyclical Industry in Indonesia Period 2016-2023. (Christine Ariani Kosnandar, IPMI, Indonesia) - **Christine Ariani KOSNANDAR, Prof. Ir. H. M. Roy SEMBEL, MBA., Ph.D., CSA., CIB., CIIM, Dr. Melinda MALAU, SE., MM., CPA., CBV., CFRM., CFA**
4. The Effectiveness Implementation of Robotic Process Automation in Financial Operation: Challenges & Opportunities in Indonesia - **Mr. Syahrul RAMADHAN, Yulita F.SUSANTI, Ph.D.**
5. Home Energy Storage System (HESS) Market In Indonesia - **M. Firmansyah, Yulita Fairina Susanti**
6. The Effect of Service Quality to Customer Loyalty Among Iqos User in Jabodetabek Area and The Mediating Role of Customer Satisfaction and Health Awareness - **T. Hen Ce, Yulita Fairina Susanti, Ph.D**
7. Human Resource: Leveraging Artificial Intelligence (AI) Role Play for Improving Employee Experience in Performance Management - **Alpha Romeo, Yulita Fairina Susanti**
8. Financial Performance Analysis and Evaluation of PT United Tractors Indonesia TBK Before and During Covid – 19 Era for Years 2018 – 2022 - **Cahyo Pudyadi WIWOHO, Wiwiek Mardawiyah DARYANTO**
9. Measurement and Analysis for Financial Performance PT Sumber Alfaria Trijaya TBK (Alfamart) Indonesia Period 2018-2022 - **Arrye Genap PARHUSIP, Wiwiek Mardawiyah DARYANTO**
10. Financial Performance Analysis of Toyota Motor Corporation Indonesia During the Period of 2019-2023 - **Egan Pradhana Falih PUTRA, Wiwiek Mardawiyah DARYANTO**
11. Mitigating Risks in Oil and Gas: The Role of Decision Trees in Enhancing Operational Efficiency - **Try RACHMAPUTRA, Muhammad Hafiyyan GHANI, Muhammad Taufiq FATHADDIN, Asri NUGRAHANTI, Rini SETIATI, Andriamifidisoa Miadana VOLOMIHAJA, Julien Aimé RAJOMALAHY, Hanitra Lalaina RAMEFIYOLOLONA**
12. The Influence of Brand Personality, Brand Experience, And Brand Image on Brand Loyalty with Brand Love as An Intervening Variable at PT. XYZ in JABODETABEK - **Erlando Simanjuntak, Yulita Fairina Susanti**



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Meeting Room 1	https://us02web.zoom.us/j/81740119790		
7 Dec 2024 Session 4	17:30-19:00	Moderator	Ph.D. Monika Szczerbak
<ol style="list-style-type: none">1. Lean Management as a Catalyst for Changes Towards a Circular Economy – Benefits, Challenges and Good Practices - Ph.D. Monika Szczerbak2. The Role of AI in Managing Modern Organizations - Professor Iwona Przychocka3. The impact of economics on women's participation in elections in Poland - M.Sc. Agnieszka Orłowska, Ph.D. Anna Ciosek4. Economic analysis of motivations and costs related to the decision to get a tattoo among individuals - BA Sylwia Nowak, Gabriela Plodzień5. Judiciary in the Second Polish Republic - Ph.D. Bartosz Nieścior6. Management challenges and the role of managers in the era of the Green Economy and Artificial Intelligence - Ph.D. Artur Lis7. The Impact of Brand Visibility on Jerseys on the Valuation of Sponsoring Companies: The Case of Football Clubs Competing in UEFA Competitions in the 2024/2025 Season - M.Sc. Eliaasz Czajkowski8. Motivating and demotivating factors occurring in the work of selected employees of the health care system (based on the example of the professional group of nurses) - Professor Joanna Jasińska, Ph.D., Agnieszka Nowacka			

Meeting Room 1	https://us02web.zoom.us/j/81740119790		
7 Dec 2024 Session 5	19:00-21:00	Moderator	Dr. Anurag Agnihotri Dr. Souvik Dasgupta
<ol style="list-style-type: none">1. Persecution, Displacement and Reconciliation: Matua Migration from 1971-2000 - PhD. Research Scholar Mridul Banik2. The Origin and Diffusion of Gun Powder and Firearms: A Global Diaspora - Ms. Srijayee Das, Mr. Swapnava Mallick3. The Dynamics of Local-Global Interaction in Early Modern Historical Contexts - Supriya CHANDA4. Comparative Study of Economic Scenario for the period 2004-05 Vs 2009-10 and 2019-21 Vs 2022-24 - Maria Ishaque5. Empirical Analysis of Indian- African Trade Relationship - Prof. Dr. Dr. Pranav Mishra6. Displacement, Migration, and Social Transformation: Understanding the Resilience of Communities in the Context of Climate Change - Dr. Rajesh KUMAR7. Trends and Determinants of Mergers and Acquisitions in the Manufacturing Sector in India - Ekta Singh8. Online Public Service Utilities - Pragya Yadav, Subhana Tanweer, Sneha Gupta9. Effectiveness of online shopping pre and post covid - Aditya Kumar			



CEO Congress Zoom Meeting Room 1
8 Dec 2024, Sunday

Meeting Room 1		https://us02web.zoom.us/j/81740119790	
8 Dec 2024	08:00-10:00	Moderator	Wiwiek Mardawiyah DARYANTO
Session 6 <ol style="list-style-type: none"> 1. Navigating The Post Covid-19 Media Landscape: Analyzing MD Pictures TBK Financial Resilience during the Over The Top (OTT) Boom Post Covid (2017 – 2023) - Agelinda SARANGA, Wiwiek Mardawiyah DARYANTO 2. Financial Ratio Analysis and Evaluation: An Insight into PT. Sinarmas Agro Resources and Technology (SMART) Tbk's Performance in the Palm Oil Industry - Ambang WIJAYA, Wiwiek Mardawiyah DARYANTO 3. Financial Resilience and Growth: An Analysis of PT XL Axiata Tbk's Performance Before and During the COVID-19 Pandemic - Christian Widjaya, Wiwiek Mardawiyah DARYANTO 4. Financial Performance Analysis and Evaluation of PT Campina Ice Cream Industry Tbk using DuPont System from 2017 to 2023 - Fendra AGUSTA, Wiwiek Mardawiyah DARYANTO 5. Navigating Growth in Global Retail: Inditex's Financial Journey from 2017 to 2023 – Ferlan, Wiwiek Mardawiyah DARYANTO 6. Financial Performance of PT Chandra Asri Petrochemical Tbk Indonesia with Common Size Method for Period Year 2017-2023 and the Effect of COVID-19 Pandemic - Intan PUSPITASARI, Wiwiek Mardawiyah DARYANTO 7. Financial Ratio Analysis and Evaluation of PT Indo Tambangraya Megah Tbk to Measure Financial Performance for the Period of 2017-2023 - Iwan Tri PUTRANTO, Wiwiek Mardawiyah DARYANTO 8. Financial Performance Analysis and Evaluation Based on Profitability and Liquidity Ratios at PT Adi Sarana Armada Tbk Period 2017-2023 - Maria Wuri HANDAYANI, Wiwiek Mardawiyah DARYANTO 9. Financial Performance Analysis and Evaluation of Infrastructure Company PT Ciputra Development Tbk Pre-pandemic, Pandemic, and Post-pandemic COVID-19 in Indonesia - Rahayu Eko TINTRIYANINGSIH, Wiwiek Mardawiyah DARYANTO 10. Assessing and Evaluating the Financial Health of PT Unilever Indonesia, Tbk: A Comparative Analysis Using the Piotroski F-Score Across Two Periods (2014-2018 and 2019-2023) - Rangga SUSENO, Wiwiek Mardawiyah DARYANTO 11. Financial Analysis and Evaluation of the Potential Bankruptcy of PT. CIPTA KOPI 1690 using the Altman Z-Score Model - Sofwan Dedy ARDYANTO, Wiwiek Mardawiyah DARYANTO 12. The Influence of Erp Accounting System Benefits on System User Satisfaction from the Perspective of Auditors And Accountants - Nurhastuty Wardhani 			



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Meeting Room 1		https://us02web.zoom.us/j/81740119790	
8 Dec 2024	10:00-	Moderator	Dr. Nurhastuty Kesumo Wardhani
Session 7	11:30		Dr. Sekar Mayangsari
<ol style="list-style-type: none"> 1. Impelementation Of Transit Oriented Development (TOD) Concept In Area Arrangement On Plaza Indonesia Area - Herika Muhamad Taki, Ph.D, Bader Alanazi 2. The Effect of ERP Accounting System Benefits on System User Satisfaction from the Auditor's and Accountant's Perspective - Imanar Pratama Mulia Barus, Dr. Nurhastuty Kesumo Wardhani, Dr. Hasnawati, Dr. Sekar Mayangsari, Dr. Jia Jessica Xu 3. Tax Avoidance Determinants in Consumer Cyclical Companies Listed on The Indonesia Stock Exchange - Wahyu Wahyudin, Dr. Nurhastuty Kesumo Wardhani, Dr. Sekar Mayangsari, Dr. Jia Jessica Xu 4. The Impacts of Climate Change on the Hydrological Cycle at Semarang - Nyimas Hazel Lahfahdila Wahab, Endah Kurniyaningrum, Astri Rinanti, Liana Herlina, Hira Sattar 5. Neutron Tomography Technology for EOR Surfactant Flooding Performance Analysis as a Future Challenge in Indonesia - M. Furqon Haryono Bimantoro, Rini Setiati, Fahrurrozi Akbar, Iwan Sumirat, Muh. Taufiq Fathaddin, Ranggi Ramadhan 6. Sludge Management Technology at Onshore Field X to Mitigate Hazardous and Toxic Waste - Mugi Wiratomo WIDYABAKTI, Anton SOETIKNO, Asri NUGRAHANTI, Rini SETIATI, Muh. Taufiq FATHADDIN, Bayu HERVIANTO 7. Production Data Analyst and Waterflooding Surveillance Analysis as a Consideration of "X" Field Reactivation - M Akbar Hari SETIAWAN, Asri NUGRAHANTI, Muh. Taufiq FATHADDIN, Rini SETIATI, Dani PRATAMA 8. Field Development Study of Lgs Field With Sectorization Decline Curve Analysis To Increase Recovery Factor on "H" and "L" Field Structures - Natalia Christine, Ronald Susanto, Rini Setiati, Suryo Prakoso, Muh. Taufiq Fathaddin, Kofa Dewanda 			



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Meeting Room 1		https://us02web.zoom.us/j/81740119790	
8 Dec 2024 Session 8	11:30-13:00	Moderator	Endah NURAINI Liena PRAJOGI
<ol style="list-style-type: none"> 1. Study Prediction Development Scenario for Selected Layer to Determine Oil Remaining Using JJ ARPS Method and Simulation Reservoir : A Case Study of Field RSL - Ronald Susanto, Natalia Christine, Suryo Prakoso, Asri Nugrahanti, Rini Setiati, Muh. Taufiq Fathaddin, Kofa Dewanda 2. Realizing Economic and Political Democracy through YouTube - Muhammad Dzaki Imadudin, Akkapurlaura, Januar Ivan, Tommy Hari Prihatanto, Wegig Murwonugroho, Valerie Anak Michael 3. The Effect of Self Efficacy, Job Embeddedness, Happiness at Work on Organizational Citizenship Behavior - Justine TANUWIJAYA, Netania EMILISA, Deasy ASEANTY, Norzanah Mat NOR, Aisyah GAYATRI 4. The Effect of Green Marketing Mix Program on Green Consumer-Based Brand Equity & Word of Mouth in Oil & Gas Companies - Muhammad Alfis Budi Sanjaya, Kurniawati, Hermanto Yaputra, Renny Risqiani, Salut Muhidin 5. Sustainable Food Waste Recycling in Indonesia to Support a Circular Economy: Literature Review and Valorization Options - Elfira Febriani Harahap, Ratna Mira Yojana, Sucipto Adisuwiryo, Rina Fitriana, Fina Uzwatania 6. Spatial and Cultural Significance Study in Jakarta Old Chinatown: Urban Acupuncture Approach to Enhance Tourist Attraction of Glodok - Achmad Hadi PRABOWO, Nurhikmah Budi HARTANTI, Sambaitna MARKHOIR, Anggia MURNI, Rurin SITORESMI, Raden Ranggawuni Wishnu KUSUMAWATI, Andi Nasri HAMZAH, Adrian LO 7. Towards Sustainable Tourism: The Role of Architecture in Mitigating Environmental Impacts - Cut Sannas Saskia, Maria Immaculata Ririk Winandari, Inavonna, Akhlish Diinal Aziiz, Widia Yanti 8. Empirical Study on the Impact of Exports and Imports on Refinery Gas Production in Indonesia - Cahaya Rosyidan, Mustamina Maulani, Lisa Samura, Reno Pratiwi, Octarina, Wawan Kurniawan, Osama Jawaid Butt, Andry Prima, Widia Yanti 9. The Role of Nordic Walking in Supporting the Quality of Life: Evidence from Indonesia Nordic Walking Community - Endah NURAINI, Liena PRAJOGI, Wiwiek Mardawiyah DARYANTO, Dian Utami WULANINGSIH 			



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Meeting Room 1	https://us02web.zoom.us/j/81740119790		
8 Dec 2024 Session 9	13:00- 14:30	Moderator	Hamdan Kamil Syah Pudji Astuti
<ol style="list-style-type: none"> 1. Decision Support System for Railways Spare Parts Inventory Control - Hamdan Kamil Syah, Pudji Astuti, Winnie Septiani, Ratna Mira Yojana, Martino Luis 2. Sustainable Development in Educational Institutions: Implementation of the ISM (Interpretive Structural Model) Method in Promotional Aspect - Student Yunita Suryana, Lecturer Winnie Septiani, Lecturer Emelia Sari, Lecturer Triwulandari Dewayana, Lecturer Martino Luis 3. Implementation of Interpretative Structural Modelling for Water Resources Infrastructure Asset Data Processing Management Information System - Student Citra Puspita Rani, Lecturer Winnie Septiani, Lecturer Dedy Sugiarto, Lecturer Triwulandari Satitidjati Dewayana, Lecturer Martino Luis 4. The PSC Cost Recovery Analysis Comparison between Adding Infill Wells and Workovers Scenarios of a Remote Oil Producing Field in Indonesia - Mustamina Maulani, Osama Jawaaid Butt, Andry Prima, Asri Nugrahanti, Cahaya Rosyidan, Lisa Samura, Bayu Satiyawira, Widia Yanti, Wiwik Dahani 5. Predicting Studio Thermal Comfort Resulting from Window Design Using CFD Method - Ahmad Maulana S, Rosyida Permatasari, Popi Puspitasari, Khotijah Lahji, S Cahyati, Martinus Bambang Susetyarto, Kamarul Aizat Abdul Khalid, S Ahmad 6. A Measurement into Promoted Thermal Comfort Indoor Based on Skin Wettedness: Lessons for Sustainable Tourism Design in Tropics - Akhlish Diinal Aziiz, Maria Immaculata Ririk Winandari, Donny Koerniawan, Cut Sannas Saskia, Inavonna, Vebryan Rhamadana, Angela Upitya Paramitasari, Risa Kawakami, Hisashi Hasebe 7. Preserving the Durgā Statue at Prambanan Temple as Digital Heritage with AI-Aided Creaform - Wegig Murwonugroho, Yosua Reydo Respati, Januar Ivan Halimawan, Astri Rinanti, Nurhikmah Budi Hartanti, Ahamad Tarmizi, Mohammad Ischak 8. Artificial Intelligence (AI) Art Generator Technology: Analysis of Visual Construction of Reality and Post-Reality - Donny Prawira Sagala, Acep Iwan Saidi, Hasnul J. Saidon, Roziani Mat Nashir, Leonardus Aryo Gitoprakoso Widyarto, Wegig Murwonugroho 			

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8 Dec 2024 Session 10	14:30- 16:00	Moderator	Dr. Ir. Amelia Naim Indrajaya, MBA Dede Herdiansyah



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1. Determination of the Decision to Use Indonesian Islamic Bank Products Among the People of Jakarta - **Latifatus Salamah, Harmaini, Syofriza Syofyan, Wafiq Azizah, Siham El-Kafafi**
2. Perceptions Regarding Completion of Technical Requirements for Building License by Using ‘USG’ Analysis – **Rahmadita, Popi Puspitasari**
3. The Impact of Despotism Leadership, Job Crafting, and Perceived Manager’s Emotional Intelligence on Happiness at Work - **Tiarapuspa, Santika Bani Amanatullah, Rimajon Sotlikova, Desty Survia**
4. The Effects of Facebook Usage on Impulsive Buying - **Aneila Danika Suadi, Wegig Murwonugroho, Atridia Wilastrina, Ariani, Anita Armas, Susy Irma Adisurya, Muhamad Hafiz Bin Hassan, Ahamad Tarmizi Azizan**
5. Modular Footwear Design as a Way to Optimize Industrial Raw Materials and Preserve the Environment - **Tiko Prabhata Putro, Yan Yan Sunarya, Budi Yuwono, Ariani, Sangayu Ketut Laksemi Nilotama, Ishak Ramli, Wegig Murwonugroho**
6. The Effect of Work-Life Balance, Career Development Support and Pay Satisfaction on Employee Turnover Intention - **Irfan PRATAMA, Dr. Ir. Amelia Naim Indrajaya, MBA**
7. Impact of Service Quality and Perceived Value on Customer Satisfaction and Behavioral Intentions - **Dede Herdiansyah, Dr. Amelia Naim INDRAJAYA**
8. Transforming Business through Carbon Management Strategies in the Energy-Intensive Pulp and Paper Industry at PT BMS - **Richard CHANDRA, Dr. Ir. Amelia Naim INDRAJAYA**
9. Unveiling the Interactions of Digital Financial Literacy, Fintech Use, and Financial Behavior on Financial Wellbeing: Evidence from Accounting Students - **Bryan POALER, Marshanda Amelia ANDRYANI, Sherly MARGARETHA, Ivonne Helena PUTONG, Wirawan Endro Dwi RADIANTO**

Meeting Room 1	https://us02web.zoom.us/j/81740119790		
8 Dec 2024 Session 11	16:00- 17:15	Moderator	Assoc. Prof. Dr. Ihsan Yigit Assoc. Prof. Dr. Senem NART
<ol style="list-style-type: none"> 1. Profitability Analysis of Post-Transformational Seaports with Integrated Digital Ecosystems: A Case Study of PT Pelabuhan Indonesia (Persero) - Identifying New Revenue Streams and Value Creation While Preserving Employment - M Faby Rizky KARNADI, Dian Utami WULANINGSIH, Lusita VEBRIANTI, Pieter ANDRIAN, Raffly Brianta DEHAN 2. Strengthening Good Corporate Governance At Pt Xyz: A Case Study on Implementing ISO 37001 and Iso 37002 - Faiq Nur ZAMAN, Prof. Ir. MBA, Ph.D, CSA, CIB, CIIM. Roy SEMBEL, Dr. SE, MM, CPA, CBV, CFRM, CFA. Melinda MALAU 3. A Research on the Effect of Information Sharing on Organizational Power Distance - Assoc. Prof. Dr. Ihsan Yigit 4. Scientific Trends in Social Media Advertising: A Bibliometric Analysis - Asst. Prof. Muhammet Ali Aytac 5. Pedagogical Formation Program Students' Views on Their Artificial Intelligence Literacy Levels: A Quantitative Study - Prof. Dr. Mehmet Nuri GÖMLEKSİZ, Sibel ASLAN 6. Examining Turkey's Insurance System within the Framework of Silver Economy - PhD Lamia GUSEINOVA, Assoc. Prof. Dr. Hülya ER 			



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Meeting Room 1	https://us02web.zoom.us/j/81740119790		
8 Dec 2024 Session 12	17:15- 18:15	Moderator	Ph.D. Krzysztof Mucha Sandra COSTA
<ol style="list-style-type: none">1. Leveraging Augmented Reality and Spatial Presence in Team Collaboration: Bibliometric Analysis and Literature Review - William Ben GUNAWAN, Amilia WAHYUNĪ, Riza ARYANTO2. Evaluation of E-Learning in Society 5.0: Current and Future Perspectives with Exponential Technologies - Sandra COSTA3. The Influence And Onvovement of Organised Crime in Crime Related to Money Laundering Originating from Migration Crime - Ph.D. Krzysztof Mucha4. Enhancing Production Performance using Sustainable Lean Supply Chain: A Case Study in an Indonesian Shoes Manufacturer - Raditya Abyudaya Putra, Emelia Sari, Parwadi Moengin, Ridha Satria, Rahmi Maulidya, Mohd Yazid Abu5. Preparedness in Healthcare for the Impact of Severe Weather Events in Disaster Medicine - Kamila Mozga, Olga Synowiecka, Igor Rydzyk			

Meeting Room 1	Face to Face Presentation		
8 Dec 2024 Session 13 - Onsite	17:30- 19:00	Moderator	Hasan BAĞDADIÖĞLU
<ol style="list-style-type: none">1. Kasa Ödeme Sistemlerinde Dijitalleşmeye Geçişin Perakende Satış Fişi Kullanımının Azaltılmasına Etkileri - Selim CANER, Hasan BAĞDADIÖĞLU2. Evaluating the Effects of Economic Engagement with China on Iran's Economic Diversification and Complexity: An Empirical Analysis - Mohsen Mohammadi KHYAREH3. The Role of Culture, Education, and Regulation in Shaping Entrepreneurial Success - Mohsen Mohammadi KHYAREH			



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CEO Congress Zoom Meeting Room 2
7 Dec 2024, Saturday

Meeting Room 2	https://us02web.zoom.us/j/88949000686		
7 Dec 2024	12:00-	Moderator	Assoc. Prof. Dr. Mutlu UYGUN
Session 1	13:30		Assoc. Prof. Dr. Muhammet Ali ÇELEBİ
<ol style="list-style-type: none">1. Adolf Hitler ve Francisco Franco Arasında Gerçekleşen Görüşme: Hendaye - Eren Yiğitoğlu2. Pazarlamada Meta-Analiz Çalışmalarındaki Örüntülerin Ortaya Çıkarılması: Bibliyometrik Bir Yaklaşım - Research Assistant Dr. Seyfettin ANMAÇ3. Uluslararası Makale/Dergi Tanımlamaları Üzerine Bir İnceleme - Assoc. Prof. Dr. Muhammet Ali ÇELEBİ4. Political Power of Azerbaijanians in Georgia - Prof. Dr. Elnur Hasan MİKAİL, Assoc. Prof. Dr. Hakan ÇORA, Dr. Ali Nazmi ÇORA5. Kentte Engelli Olmak: Engelli Bireylerin Kent Deneyimlerinin Olgubilim Yaklaşımıyla Keşfedilmesi - Assoc. Prof. Dr. Mutlu UYGUN, Res. Asst. Dr. Ebru GÜNER VURGANER6. Günümüz Dünyasında Eğitim-Öğretimin Amaçları - Dr. Mukadder GÜNERİ			

Meeting Room 2	https://us02web.zoom.us/j/88949000686		
7 Dec 2024	13:30-	Moderator	Prof. Dr. Mehmet Nuri GÖMLEKSİZ
Session 2	15:00		Res. Asst. Ali TAGHIYEV
<ol style="list-style-type: none">1. Mevduat Bankalarının Paytech (Dijital Ödeme Teknolojileri) Performansı: Türkiye Örneği - Dr. Öğr. Üyesi Meltem ECE ÇOKMUTLU, Yüksek Lisans Öğrencisi Berkim ALYÜZ, Yüksek Lisans Öğrencisi Seda ÇAKIR2. Restoration of the Silk Road, China's One Road One Generation Project and the Importance of the Road for Nakhchivan - Res. Asst. Ali TAGHIYEV3. Endüstri 4.0 ile Engelli Girişimciliğinde Yeni Ufuklar: Teknolojik Fırsatlar ve Katılım Stratejileri - Dr. Öğr. Üyesi Ashı ÇİLLİOĞLU KARADEMİR, Hayrullah UZUN4. Endüstri 4.0 ve Vergi Sistemlerinde Büyük Veri Teknolojisinin Etkileri - Dr. Öğr. Üyesi Nergis Feride KAPLAN DÖNMEZ5. General Attitudes of Pedagogical Formation Program Students Towards Artificial Intelligence: A Quantitative Study - Prof. Dr. Mehmet Nuri GÖMLEKSİZ, Sibel ASLAN			



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Meeting Room 2	https://us02web.zoom.us/j/88949000686		
7 Dec 2024 Session 3	15:00- 16:30	Moderator	Assoc. Prof. Dr. Murteza HASANOĞLU Bilal KARGI
<ol style="list-style-type: none">1. Türkiye'de Zorunlu Deprem Sigortasının Yıllar İçindeki Gelişimi - Assoc. Prof. Dr. Hülya ER, Öğr. Gör. Murat Er, Prof. Dr. Remzi Altunışık2. İnsan Kaynakları Politikalarının Organizasyon Kültürü ve Üretkenlik Üzerindeki Etkisi (Azerbaycan örneğinde) - Assoc. Prof. Dr. Murteza HASANOĞLU, Zarife FERECİ3. Girişimcilik Eğitiminin Girişimcilik Eğilimi Üzerindeki Etkisi: Dezavantajlı Gruplar Üzerine Bir Araştırma - Dr. Öğr. Üyesi Hilal Tuğçe LAPÇIN, Arzu KARA4. Vatandaş Kent Mekân Deneyimleri: Türkiye Bağlamında Bir Ölçek Geliştirme, Geçerlik ve Güvenirlik Çalışması - Assoc. Prof. Dr. Mutlu UYGUN, Res. Asst. Dr. Ebru GÜNER VURGANER5. Sürdürülebilir Bir Geleceğe Güç Vermek: Çevresel Yenilenme İçin Gelişen Teknolojilerin Sosyoekonomik Bir İncelemesi - Bilal KARGI6. Sürdürülebilir Teknolojilerin Evrimsel Süreçleri: Yayınlar ve Patentler Üzerine Bir İnceleme - Dr. Researcher Bekir Cihan UÇKAÇ			

Meeting Room 2	https://us02web.zoom.us/j/88949000686		
7 Dec 2024 Session 4	16:30- 18:00	Moderator	Prof. Dr. Eyüp ARTVİNLİ Dr. Ramazan ÇİMEN
<ol style="list-style-type: none">1. Türkiye'deki Sosyal Bilgiler Dersi Öğretim Programı ile İngiltere Ortaokul Coğrafya Programında Harita Becerisi Nasıl Ele Alınıyor? - Prof. Dr. Eyüp ARTVİNLİ2. 2018 ve 2024 Türkiye Ortaöğretim Coğrafya Öğretim Programlarında Afet Risklerini Azaltma Eğitimi: Ne Değişti? - Prof. Dr. Eyüp ARTVİNLİ3. 2024 Türkiye Ortaöğretim Coğrafya Öğretim Programına İnovatif Bir Bakış: Bir İçerik Analizi - Dr. Ramazan ÇİMEN4. 2018 ve 2024 Türkiye Ortaöğretim Coğrafya Öğretim Programlarının Coğrafi Beceriler Açısından Karşılaştırılması - Dr. Ramazan ÇİMEN5. Kamu Diplomasisinde Yeni Dönem: Diplomasi 2.0 - Şahin KESKİN6. E – Ticaret ve Vergi Denetimi İlişkisi: Türkiye - Gamze GÖRGÜLÜ, Prof. Dr. Serpil AĞCAKAYA			

Meeting Room 2	https://us02web.zoom.us/j/88949000686
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7 Dec 2024 Session 5	18:00-19:30	Moderator	Assoc. Prof. Dr. İrfan TOSUNCUOĞLU Dr. Neslihan Latifoğlu
<ol style="list-style-type: none">1. The Importance of Forgotten Turkish Games in the Process of Cultural Transmission - Science Specialist, Rana ŞAT, Assoc. Prof. Dr. Ercan KARAÇAR2. Usability of Artificial Intelligence (AI) in Educational Dimension – Assoc. Prof. Dr. İrfan TOSUNCUOĞLU3. Digitalization communication in business flexibility - Pelin Ozkuzey4. How Evolutionary is Minsky? An Evolutionary Economic Perspective on “the Evolution of Capitalism” - Assoc. Prof. Dr. Burak Erkut5. The Mediating Role of Intrinsic Motivation in Innovative Work Behavior of Leadership Styles - Assoc. Prof. Dr. Ercan ERGÜN, Dr. Neslihan LATİFOĞLU, Graduate Student İbrahim Hakkı ERGİN6. Exploring Digital Trends in Maritime Education: A Bibliometric Perspective - Asst. Prof. Dr. Arda TOYGAR, Asst. Prof. Dr. Cemile SOLAK FIŞKIN, Assoc. Prof. Dr. Senem NART, Assoc. Prof. Dr. Sedat BAŞTUĞ7. Strategies for Improving Safety in Public Spaces of City Centers - Jan Kochanowski, University of Kielce, Poland			

CEO Congress Zoom Meeting Room 2

8 Dec 2024, Sunday

Meeting Room 2	https://us02web.zoom.us/j/88949000686		
8 Dec 2024 Session 6	07:00-8:30	Moderator	Sabire Tuğçe Karadal
<ol style="list-style-type: none">1. Brand Sustainability and Social Responsibility: Impact on Consumer Loyalty in the Local Beauty Sector Amidst Geopolitical Crises - Zharfa Miranda Paramesti2. How Marketing Mix Strategy Can Influence The Purchasing Decision Of Prospective Household Customers For PT PGN In Jakarta - Sonny Rahmawan Abdi, Yulita Fairina Susanti3. Interpersonal Service Quality and Its Influence on Self-Service Technology Adoption in Dine-in Restaurants - Teddy Darmadi Suwadji, Prof. Dr. Dedi Fardiaz, M.Sc.4. The Effect of Work-Life Balance and Work Discipline on Employee Performance through Job Satisfaction as Intervening Variables at PT Tri Mustika Cocominaesa (TMC) South Minahasa - Paulman Stevanus Runtuwene, Yulita Fairina Susanti5. A Comparative Study Between Before and After Refinancing of PT Celebes Railway Indonesia - Mr. Endy Gunawan TURKİ, Prof. Ir. Roy H. M. SEMBEL, MBA, Ph.d., CSA, CIB, CIIM6. Empowering Women Weavers in Nusa Tenggara Timur: How the Role of LeViCo Boutique’s on Economic Independence Sector - Maria Yohana MEO7. Measurement and Analysis of Financial Ratio and Bankruptcy Risk Prediction of PT Indofood Sukses Makmur TBK for 2018-2023 Period - Adianto Juniardi PRAKOSO, Wiwiek Mardawiyah DARYANTO8. Indonesia’s Energy Future: A Deep Dive into Financial Performance of Pertamina Gas Negara (PGN) - Andra Noor SATYO, Wiwiek Mardawiyah DARYANTO			



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8 Dec 2024 Session 7	8:30-10:00	Moderator	Wiwiek Mardawiyah DARYANTO
<ol style="list-style-type: none">1. Financial Performance Analysis of Pt. Salim Ivomas Pratama, Tbk During Periode Of 2018- 2022 - Alfa Lik HENDRADI, Wiwiek Mardawiyah DARYANTO2. Analysis of Key Financial Performance and Financial Health Of Tobacco Company Using The Du Pont System Method And Altman Z – Score Evidence of PT HM Sampoerna Tbk Indonesia for Period 2018 – 2022 - Yulitari Flora Theresa Br. HUTAPEA, Wiwiek Mardawiyah DARYANTO3. The Healthiness Measurement of Financial Performance of PT Gudang Garam, Tbk Using Altman Z-score - Ahmad Robiton, Wiwiek Mardawiyah DARYANTO4. Analytical Study of Problem that Occur in State-Owned Enterprise of Pharmaceutical, PT Kimia Farma Tbk, using Financial Ratio Analysis and Altman Z-score - Henny Taurina ISNAWATI, Wiwiek Mardawiyah DARYANTO5. Financial Performance Analysis and Evaluation of PT Telkom Indonesia for Global Investors for the Period of 2018-2023 - Jin YEEUN, Wiwiek Mardawiyah DARYANTO6. How does PT Indocement Tunggul Prakarsa Tbk Survive in the Oversupply Era? - Wahyu Madyo BASUKI, Wiwiek Mardawiyah DARYANTO7. Strategic Investment Decision and Evaluation to Acquire 1.000 Ton Launcher Gantry for Toll Road Harbour Road Project of PT Wijaya Karya (Persero), Tbk. Indonesia - Alfi TRIANTO, Wiwiek Mardawiyah DARYANTO8. Financial Performance Analysis and Evaluation of PT Industri Jamu dan Farmasi Sido Muncul Tbk Year 2019 – 2023 - Sri Handayani, Wiwiek Mardawiyah DARYANTO			

Meeting Room 2	https://us02web.zoom.us/j/88949000686
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8 Dec 2024 Session 8 -	10:00- 11:30	Moderator	Lecturer Sergio Quiroga
<ol style="list-style-type: none"> 1. Assessing the Debt-to-Equity Management PT. Mitra Adiperkasa Tbk: Balancing Profitability and Financial Flexibility in the Retail Sector - Valentina Lugo ARIAS, Wiwiek Mardawiyah DARYANTO 2. The Fintech-Mental Accounting Nexus: Bridging Financial Inequality Across Indonesia - Kenley Maccauley RIYONO, Nicklaus STANLEY 3. Mental Accounting and Financial Competence: The Key to Improving Startups' Financial Well-Being - Wirawan Endro Dwi RADIANTO, Tommy Christian EFRATA, Yoseva Maria Pujirahayu SUMAJI, Ika Raharja SALIM, Agatha MAYASARI 4. The Nexus of Financial Literacy, Fintech Use, and Digital Financial Literacy in Driving Financial Inclusion - Rafael Savio EASTER, Justin Matthew THEBEZ, Heru KRISTANTO, Rizki RAMADHAN, Wirawan Endro Dwi RADIANTO 5. Rethinking Determinants of Financial Inclusion - Kelvin DANENDRA, Wakana Ryo TAMBAANI, Yulita Milla PAKERENG, Wirawan Endro Dwi RADIANTO 6. Reevaluating the Role of Fintech Use: Insights on Digital Financial Literacy, Financial Inclusion, and Financial Well-being Among Management Students - Kyoko SOUKOTTA, Sandra Regina TUMEWU, Janssen Evan SUGIONO, Bryan Julius KUKENZIE, Wirawan Endro Dwi RADIANTO 7. Peer-to-Peer (P2P) Lending: Disruptive and Complementary Dynamics in Banking - Cliff KOHARDINATA, Luky Patricia WIDIANINGSIH 8. Optimizing Digital Financial Literacy and Fintech for Student Financial Well-Being - Yulian Tri AULIAH, Eleanor Jocelyn THE, Lim Angelica Putri SANTOSO, Ruben Putranto PURNOMO, Wirawan Endro Dwi RADIANTO 9. Knowledge Mobilization in Argentine Universities. Towards a Platform - Lecturer Sergio Quiroga 			

Meeting Room 2	https://us02web.zoom.us/j/88949000686		
8 Dec 2024 Session 9	11:30- 13:00	Moderator	Assoc. Prof. Dr. Gizem ÖZGÜREL Assoc. Prof. Dr. Esengül SALİHOĞLU
<ol style="list-style-type: none"> 1. Erişilebilir Turizm Konulu Çalışmaların Bibliyometrik Analizi Prof. Dr. Işıl ARIKAN SALTİK, Arş. Gör. Doğan ÇAPRAK 2. Örgüte Uyum Konusunda Önemli Bir Kavram: Örgütsel Sosyalleşme - Öğr. Gör. Dr. Nilüfer ŞAHİN TEZCAN, Prof.Dr. Nezire Derya ERGUN ÖZLER 3. Post-Bürokrasi Kavramına Dair Eleştirel Bir Değerlendirme - Kübra MALKOÇ YILMAZ, Prof.Dr. Hayrettin ÖZLER 4. UNESCO Yaratıcı Gastronomi Şehirlerine Yönelik Bir İnceleme - Assoc. Prof. Dr. Gizem ÖZGÜREL, Science Expert Alper Can KARAYAZ 5. Gastronomi Temelli Kültür Rotaları Edremit Körfezi Örneği - Assoc. Prof. Dr. Gizem ÖZGÜREL, Science Expert Kübra Ürkün 6. Örgütsel Stres, Örgütsel Tükenmişlik ve Örgütsel Psikolojik Sermaye Arasındaki İlişkiler - Assoc. Prof. Dr. Ayşegül DÜZGÜN 7. Bitcoin ve Altın Fiyatları ile VIX Korku Endeksinin Volatilite Modelleriyle Karşılaştırmalı İncelenmesi - Assoc. Prof. Dr. Esengül SALİHOĞLU, Dr. Ayşegül HAN 8. Endüstri 4.0'ın İnsan Kaynakları Yönetimine Etkisi ve Dijital Dönüşüm Uygulamaları Üzerine Bir Araştırma - Emrah ÇOBAN, Prof. Dr. Muhsin HALİS 			



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Meeting Room 2	https://us02web.zoom.us/j/88949000686		
8 Dec 2024 Session 10	13:00- 14:30	Moderator	Dewi Puspaningtyas Faeni Firdaus BASBETH
<ol style="list-style-type: none"> 1. The Influence of Workload, Burnout and Autocratic Leadership on Employee Performance Mediated by Work Life Balance at Pt Distri-versa Buanamas Branch Jakarta 1 - Salma Klarissa S, Dewi Puspaningtyas Faeni, Tutty Nuryati, Hadita 2. Self-Efficacy, Competency Certification, and Digital Literacy on Work Readiness of Grade XII Otkp Expertise Program Students Mediated by Field Work Practices in The Islamic Concept (Case Study: Smks Pk Tridaya) - Annisa Tamara, Dewi Puspaningtyas Faeni, Amor Marundha, Kardinah Indrianna Meutia 3. A Systematic Literature Review on Social Capital and Economic Mobility on the Tourism Industry - Ratih Puspitaningtyas Faeni, Farida, Dewi Puspaningtyas Faeni 4. Digital Transformation and eHRM: A Systematic Analysis of Their Influence in Improving Organizational Performance - Faika Amanda Rahadian, Farida, Dewi Puspaningtyas Faeni 5. Cooperative Business Model and Digital Marketing Assistance for MSMEs of Squid Processed Products in Bangka Island - Firdaus BASBETH, Nanda Alifia PUTRI 6. Identification of Entrepreneurial Intention of PPM School of Management Students: A Theory of Planned Behavior Study in the Context of Entrepreneurship Education - Alyssa RUSTAM, Zahroh YUSUF, Firdaus BASBETH 7. Identifying Gen Z Consumer Loyalty in Buying Coffee in Jakarta - Alyssa RUSTAM, Mariana Ardhyani PERMATASARI, Siti Aliza NURJANAH, Zahroh YUSUF, Firdaus BASBETH 			

Meeting Room 2	https://us02web.zoom.us/j/88949000686		
8 Dec 2024 Session 11	14:30- 15:30	Moderator	Firdaus BASBETH
<ol style="list-style-type: none"> 1. Moving Towards a Successful Cooperative: The Significance of Cold Chain Logistics - Firdaus BASBETH, Sugeng Hari WISUDO, Mohammad IMRON 2. Sustainability in Action: Squid Attractor and Solar Portable Chillers in Central Bangka Regency - Firdaus BASBETH, Sugeng Hari WISUDO, Mohammad IMRON, Mulyono BASKORO, Ratih KUSUMASTUTI 3. Intention to Enhancing Cooperative Growth Through Digitization: An Urgent Call for Quad Helix's Participation - Firdaus BASBETH, Sugeng Hari WISUDO, Joko TRIADHI 4. Acceptance of Technology in Furniture Company the Role of Perceived Risk in Emerging Country - Firdaus BASBETH, Andrianto WIDJAJA 5. Social Capital, Cooperative, and Poverty Alleviation in Central Bangka, Indonesia - Firdaus BASBETH, Sugeng Hari WISUDO, Mohammad IMRON, Mulyono BASKORO 6. Business Strategy Formulation: A Case in PT Waspada Karsa - I Gede Nyoman WINDU, Firdaus BASBETH 			

Meeting Room 2	https://us02web.zoom.us/j/88949000686		
8 Dec 2024 Session 12	15:30- 17:00	Moderator	Dr. C. Niurka Tellez Rodriguez Alaattin DURMAZ



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1. Determining Growth Drivers in Container Shipping: A Causality Analysis Between Container Throughput and Liner Shipping Connectivity - **Alaattin DURMAZ, Assoc. Prof. Dr. Abdullah AÇIK**
2. The Relationship Between Social Support and Resilience Among Women Survivors of Sexual Violence in Jakarta - **Rizky Purnomo Adji Churnawan, Siti Sachiroh Uswatun Chasanah**
3. The Impact of Fintech and E-Banking on Financial Inclusion and Resilience - **Sophia MOSHAVI, Nur FITRIANA, Trisha BARRYCHELLA**
4. Description of Services of Pt. Asdp Indonesia Ferry (Persero) Kupang Branch (Case Study of Bolok Ferry Port) - **Melkisedek N.B.C Neolaka, FISİBBAPA**
5. Socio-educational Management of the Teacher for the Social Inclusion of Students with Disabilities - **Dr. C. Deysi Turcás Robert, Dr. C. Niurka Tellez Rodriguez, MsC. Mayra Vinent Bonne**
6. History of the Idea of the Union of Turkish States - A Retrospective View - **Məmmədova Günay**
7. The Role of Ideology in Foreign Policy: A Case Study of Armenia - **Ph.D. Candidate Fidan Khalilova**
8. Rural Transformation: The Challenge of Sustainable Agriculture, Environmental Pollution, Urban-Rural Income Inequality and Ageing Rural Population - **Adj. Professor John C G LEE, Prof. Dr. Eko Ganis SUKOHARSONO**

Meeting Room 2	https://us02web.zoom.us/j/88949000686		
8 Dec 2024 Session 13	17:00- 18:30	Moderator	Aimee Osamudiamen CHRIS
<ol style="list-style-type: none"> 1. Unpacking the Social Determinants of Mental Health Outcomes in Nigeria: A Sociological Analysis - Aimee Osamudiamen CHRIS 2. Leveraging Artificial Intelligence for Climate Change Mitigation: Opportunities and Challenges in Developing Countries - Prof. Assoc. Dr. Safet Krasniqi, Researcher Valeri Qatani 3. Types of Landscapes in the Epic “Lison Ut-Tayr” By Alisher Navoi - Assoc. Prof. Dr. Shamsieva Manzura Bababekovna (PhD) 4. Application of Artificial Intelligence in Management of Construction Projects in Ethiopia - Dr. Name Bewuketu Bitew Ayalew 5. Achieving Sustainable Development Goal Fifteen (15) in Sub-Saharan African Countries: Role of Tax Revenue, and Governance Quality - Bamidele Comfort Olaitan, PhD, Olubiyi, Timilehin Olasoji, PhD 6. An Appraisal of the Role of International Law in Protecting Land Rights of Indigenous People Vis-A-Vis the Right of Foreigners to Own Land Ownership Under the Nigerian Land Law - Dr. King JAMES Nkum, Dr. Julius Onivehu BEIDA 7. The Future of Education: New Changes to Align with Global Standards - Quách Thị Nhài (Jasmine Quach) 8. Nicolaus Copernicus-Thomas Gresham's Law in relation to local currency systems – epistemological approach - Dr hab., prof. UR (associate professor) Nina Štepnicka, PhD, Alena Novák Sedláčková, prof. Ing. Andrej Novak, PhD. 9. Sustainable transport models in Poland and Slovakia - Dr Paulina Wiączek, Doc. Ing. Martin Bugaj, PhD, doc. Alena Novák Sedláčková 			



10th CEO Congress English Room
8 Dec 2024, Sunday

Meeting Room 1	https://us02web.zoom.us/j/81740119790		
<u>8 Dec 2024</u> <u>Closing Session</u>	19.00- 19.30	Moderator	Prof.Dr. Wiwiek Mardawiyah DARYANTO Prof. Lamia Hammad Jordan Prof. Dr. Şevki ÖZGENER
Closing Session All congress participants are required to attend this session. The best paper award will be given.			

^{xliii} Peter Lorge, *The Asian Military Revolution: From Gunpowder to the Bomb*, (Cambridge University Press: New York; 2008), pp-32.

^{xliv} Tonio Andrade, *The Gunpowder Age: China, Military Innovation and the Rise of the West in World History*, (Princeton University Press: New Jersey, 2016), pp, 29.

^{xlv} *ibid*, pp, 30.

^{xlvi} Timothy May, *The Mongols Conquests in World History*, (Reaktion Books: London, 2012).

^{xlvii} Iqtidar Alam Khan, *Gunpowder and Firearms: Warfare in Medieval India*, (Oxford University Press: New Delhi, 2004), pp, 9-10.