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DIGITAL LEADERSHIP IN THE CONTEXT OF SOCIETY AND STATE 5.0: RECOMMENDATIONS FOR POLICYMAKERS BASED ON PUBLIC EMPLOYEES' PERCEPTIONS

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Abstract

It is evident that Society 5.0, which has become significant with its features that provide comfort and happiness to citizens, will be shaped by the decisions made by political authorities. The transformation of the state, the highest political authority within society, into a new format (State 5.0/Digital State) is now a reality. In this context, a quantitative study was conducted in public institutions located in Ortaköy district of Aksaray province to identify the leadership competencies of public administrators in guiding digital transformation. This study was designed using the general survey model, which is one of the quantitative research methods. The study's findings revealed that, while some differences emerged based on demographic variables, administrators and employees generally shared similar perceptions regarding digital leadership in the public sector. Although the level of digital leadership in public institutions has not yet reached the desired level for Society 5.0, the fact that the opinions of administrators and employees are closely aligned is significant as it reflects the most honest assessment of digital leadership within the public sector.

Keywords: *Society 5.0, State 5.0, Digital Leadership, Public Employees, Recommendations for Policymakers.*

TOPLUM VE DEVLET 5.0 BAĞLAMINDA DİJİTAL LİDERLİK: KAMU ÇALIŞANLARININ ALGILARI ÜZERİNDEN POLİTİKA YAPICILARA ÖNERİLER

Öz

Vatandaş için mutluluk ve konfor sağlayan özellikleri ile önemli hale gelen Toplum 5.0'ın, siyasilerin alacağı kararlara göre şekilleneceği açıktır. Toplumun en üst siyasi otoritesi olan devletin bugün yeni bir formatla dönüştürülmesi (Devlet 5.0/Dijital Devlet) söz konusudur. Bu bağlamda kamu yöneticilerinin dijital dönüşüme yön verecek liderlik yetkinliklerini tespit etmek için Aksaray ili Ortaköy ilçesinde bulunan kamu kurumlarında görev yapan çalışanlar ve yöneticilere yönelik nicel bir araştırma gerçekleştirilmiştir. Bu çalışma, nicel araştırma yöntemlerinden

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biri olan genel tarama modeli kullanılarak tasarlanmıştır. Araştırma sonucunda yöneticiler ve çalışanların kamuda gerçekleşen dijital liderlik konusunda -demografik değişkenler bazında bazı farklılıklar ortaya çıkmakla birlikte- genel itibari ile birbirlerine yakın bir algıya sahip olduklarına dair sonuçlar elde edilmiştir. Bu bağlamda kamu kurumlarında dijital liderlik düzeyi Toplum 5.0 için arzu edilen seviyede olmasa da yönetici ile çalışan kanaatlerinin yakın düzeyde gerçekleşmesi kamudaki dijital liderliği en dürüst şekilde yansıtması açısından ehemmiyetlidir.

Anahtar Kelimeler: *Toplum 5.0, Devlet 5.0, Dijital Liderlik, Kamu Çalışanları, Politikacılara Öneriler.*

Introduction

Society 5.0 represents the next step in socio-economic evolution and digital[1] transformation. Following the stages of hunter-gatherer (Society 1.0), agricultural (Society 2.0), industrial (Society 3.0), and information (Society 4.0) societies, the transition to the super-intelligent digital society, referred to as Society 5.0, has begun (Deguchi et al., 2020a, p. 120). The concept of Society 5.0 was first introduced in Japan in the "Fifth Science and Technology Basic Plan," conducted in April 2016, as a result of studies initiated in 2015. It emerged as a vision for a new human-centered society. Whereas the global recognition of the concept of Society 5.0 occurred in 2017 at CeBIT, one of the world's largest technology fairs held in Germany (Yılmaz and Mecek, 2021, p. 120).

The vision referred to as the "super-smart society" or "Society 5.0" by the Japanese government is defined as a new societal order in the fifth stage, following the previous four phases. After the hunter-gatherer society, agricultural society, industrial society, and information society, people have aimed to create a human-centered society where products and services are easily provided to meet various potential needs, while also reducing economic and social disparities, ensuring that all people can lead comfortable and active lives. As a result of the increasing pace of technological, economic, and social change, the business world and communities have had difficulty keeping up with this pace. In an era of such chaotic and profound transformations, Japan has looked beyond Germany's Industry 4.0 towards Society 5.0, striving to build a super-smart society in which new knowledge and values are continuously created, thereby contributing to both economic growth and social well-being (Doğan and Baloğlu, 2020; Fukuda, 2020).

Society 5.0 is a system that will possess cyber-physical systems capable of analyzing large, unstructured data collected by the internet, sensors, and digital technology through advanced artificial intelligence systems (Deguchi

[1] The term "digital," derived from the Latin word "digitus," meaning "finger," refers to the digitization of analog data, allowing for the processing, storage, and management of this data through devices developed by computers. This term forms the basis for the concepts of "digitization" and "digital transformation" (Yılmaz and Mecek, 2021, p. 103)

et al., 2020a, p. 120). Rather than ensuring each system operates within a limited scope, such as maintaining a comfortable room temperature, providing energy, or ensuring trains run on time, Society 5.0 will have systems that work in an integrated manner across all societal dynamics. Merely having comfortable room temperatures is not enough to ensure happiness and comfort. We need convenience in all aspects of life, including energy, transportation, healthcare, shopping, education, work, and entertainment. To achieve this, systems need to collect diverse and large-scale real-world data. These data must then be processed by artificial intelligence systems. The insights gained from such processing must subsequently be applied to the real world to make our lives happier and more comfortable. In summary, Society 5.0 is seen as a system that operates on a recurring cycle where data is collected, analyzed, transformed into meaningful information, and then applied to the real world (Deguchi et al., 2020b, pp. 2-3).

The philosophy of Society 5.0 is grounded in the view that "technology should be perceived by societies not as a threat, but as an aid" (Kent, 2023). Society 5.0, as defined by Japanese Prime Minister Shinzo Abe, can be simply described as a societal transformation philosophy that evaluates the impact of digital transformation worldwide from demographic, economic, ethical, and sociological perspectives, ensuring the most efficient interaction between humans and machines or robots. It is referred to as the "Digital Society," "Creative Society," or, most commonly, the "Super Smart Society" (Arı, 2021, p. 457). This philosophy rejects a centralized system in all areas; instead, it envisions a decentralized, distributed system that supports local governance and diversity. In particular, this presents a significant challenge for the public sector, known for its bureaucratic rigidity, and the political leaders coordinating this sector. It is inevitable that the public sector must change its entrenched habits and break away from its traditional ways of operating[2] (Arı, 2021, p. 475).

The state, as the highest political authority and public entity of society, has existed throughout the ages and undergone numerous transformations. These transformations can be categorized into key phases: the Property State, the Police State, the Rule of Law State, and the Welfare State, culminating in the present. Today, the state is undergoing a new transformation known as the "Digital State." If the Property State is considered "State 1.0," the Digital State can be positioned as "State 5.0". The rapid advancements in the world of

[2] The philosophy of Society 5.0, which impacts and reshapes the public administration system, or the state, both technically and politically/legally, has been reflected in several positive steps within the Turkish public administration system and political structures today. Particularly, steps have been taken to alleviate the burdens on society caused by bureaucratic bottlenecks. In this regard, centralized applications such as e-government and local applications like e-municipality systems represent the first implementations. These initiatives not only reduce costs but also provide citizens with welfare by offering a professional, rational, transparent, accountable, participatory, and efficient public administration approach. Strengthening these applications with smart city systems in the future will contribute to offering the public uninterrupted and reliable services 24/7. The rapid decision-making and implementation capabilities provided by digitization will also positively impact the country's prestige (Mecek, 2018, p. 2313, 2317).

information technology and the pervasive spread of "digitalization" are influencing the future of the state. "State 5.0," also referred to as the "Smart State" or "Digital State," represents a realistic and appropriate concept for the state of the future. In an era where everything is becoming digitalized and artificial intelligence is beginning to penetrate unimaginable areas, it seems unlikely that the state and public administration shaped by politicians will remain unaffected. In this context, the digital state proposes a decentralized, governance-focused system built on open frameworks, characterized by intensive data sharing, interactive multi-networks, transparency, full participation, and a prominent social character (Parlak, 2023, pp. 29-30, 32).

In an era where digital addiction[3] is increasingly prevalent (Teknoloji Bağımlılığı nedir?, 2023) and digital literacy[4] is becoming more critical (Teknoloji çağının olmazsa olmazı, 2023), the implementation of the digital state (State 5.0) and the societal accessibility of technology have become paramount. For Society 5.0 to become functional, technology must be fully utilized by both society and the state, particularly by the policymakers who govern the state. However, the success of this process necessitates a societal, cultural, and mental transformation. The individuals responsible for driving this transformation are the leaders—those who operate at every level of the state, following the directives and guidance of political authorities (Oktay and Turan, 2018). Given the various forms of leadership, it becomes evident that this digital transformation can only be achieved through digital leadership. Should the leader's behavior not align with the requirements of digital transformation, the motivation of public personnel may decrease, leading to techno-stress and, consequently, a decline in organizational efficiency and an increase in organizational stress. The concept of techno-stress, which has gained prominence during the technology adoption phase brought about by COVID-19 (Doğan, 2020), is defined as the stress caused by information and communication technologies (Türen et al., 2015, p. 3) and is commonly experienced during the adaptation phase in organizations. A critical aspect of leadership is the ability to manage stress (Tarhan, 2021). Thus, digital leadership, characterized by its emphasis on digital capabilities and attributes,

[3] Addiction is defined as spending excessive and unnecessary time on the internet (Güney, 2017, p. 209). Technology addiction is considered the situation where technology, which should be managed by the individual, begins to manage the individual, manifesting as an irresistible urge to use frequently encountered technological devices (Ünlü, 2020, p. 135). The primary types of technology addiction are classified as follows: - Internet Addiction- Gaming Addiction- Online Shopping Addiction- Smartphone Addiction- Social Media ddiction- Computer Addiction- Television Addiction (Ünlü, 2020, p. 136).The characteristics indicating that individuals are digitally addicted include an intense interest in the internet, anxious behavior in the absence of internet access, failure to fulfill responsibilities, excessive time consumption, a social life, continued use despite harm, and exhibiting severe reactions (Taşlıyan et al., 2021, p. 506).

[4] Digital literacy can be defined as the competence to access digital resources and use them effectively and accurately. This concept encompasses the complex cognitive, sociological, and emotional skills necessary for individuals to work efficiently in digital environments. Activities related to digital literacy include the ability to read instructions on graphical interfaces, produce new and meaningful materials in these environments, and evaluate the quality and validity of digital information (Information and Communication Technologies Authority, 2022).

becomes increasingly significant. The digital transformation of organizations and their success during this process are determined by the leadership and management style. Digital leaders who have succeeded in this process must convey this transformation to their teams first and then to the entire organization, guiding their teams towards digital initiatives (Dereli, 2022). In the public sector, it is the political leaders and their advisory teams, who understand the importance of digital leadership and value such development in the public sphere, that will ultimately enable public sector leaders to take action in this regard.

According to Wasono and Furinto (2018, p. 126), digital leadership is a concept that emerges from the integration of leadership abilities with digital competencies, aiming to optimize the benefits of digital technologies to enhance job performance. Digital leaders are flexible and open to innovation. They use digital technologies effectively, efficiently, and acceptably (De Waal et al., 2016, p. 53). Digital leaders distinguish themselves through a combination of skills, attitudes, and knowledge, as well as differences stemming from their professional and personal experiences. This leadership model argues that the transformation of organizational culture is not achieved through the direct intervention of the leader but rather through changes in individuals' attitudes and perceptions, starting with the leader themselves. Digital leaders possess qualities that are both humble and collaborative, as well as ambitious and creative. These leaders have a visionary perspective and possess deep knowledge in user-centered digital service development and agile working methods. Additionally, they support these tendencies with their ability to draw inspiration from, trust, and learn from the teams and experts around them. Digital leaders, who are adept at adapting to the process of change, can particularly help sustain the job motivation of new-generation employees and respond effectively to market challenges. Research on digital leadership indicates that digital leaders positively influence the successful integration of technology, business model transformation, and innovation management within organizations; furthermore, they enhance organizational learning levels and organizational performance. The success of digital transformation is contingent upon digital leaders' ability to integrate technology, vision, and culture within the context of digitalization, thereby fostering a collaborative and participatory digital transformation culture across the organization (Gürer, 2021, pp. 334-335).

Ahlquist (2014, p. 59) examined the competencies that digital leaders should possess within the framework of digital literacy and digital citizenship using the social change model. These competencies include being knowledgeable about emerging technological tools and platforms, conducting digital content analysis, developing personal awareness, establishing virtual boundaries, engaging in online branding, building a personal learning network, integrating digital technologies with leadership, resolving cyber

conflicts and mediating, formulating digital decision-making strategies, and using social media for social good.

Ordu and Nayır (2021, p. 73) discuss the tools of digital leadership as follows: network leadership, which involves creating networks by including not only data and machines but also knowledge workers; open leadership, which ensures open communication and access to information; participatory leadership, which utilizes individual and collective intelligence in a participatory manner; agile leadership[5], which involves demonstrating agile thinking and behavior; and trust, which is emphasized as a crucial element in digital leadership. The competencies of "digital leadership (or e-leadership)" include: (1) the ability, knowledge, and experience to manage technology for strategic objectives to gain an advantage, (2) making technology decisions and managing risk, and (3) using technology to generate returns and demonstrate value (De Waal et al., 2016, p. 53).

Gök and Aydemir (2021, p. 199) define digital leadership through five fundamental characteristic traits: 1) Effective thought leadership in coping with market and competition changes; 2) Leadership with a creative and innovative mindset aimed at transforming ideas into tangible outcomes; 3) Visionary leadership that drives digital business transformation; 4) Curious leadership with the ability to overcome concepts such as transformation, change, uncertainty, and complexity; and 5) Deep leadership characterized by profound knowledge and understanding, effective decision-making, and the ability to interpret and synthesize information.

Successful digital leadership centers around the use of technology both in internal corporate processes and in meeting customer needs more effectively. The strategic decisions leaders make regarding technology determine how organizations will create awareness in their business plans. The essential qualities that leaders need to possess in the digital age can be summarized as follows: First, a clear strategy must be developed; this involves a consistent and planned approach that encompasses all aspects of the organization and supports corporate renewal. Second, effective communication skills are crucial; through technology, communication networks within the company can be established, enabling quicker resolution of team needs and solutions, which in turn increases employee engagement. Third, being an open-minded leader is necessary; it is critical for leaders and their teams to be eager to learn continuously and to stay updated with current developments. Additionally, leaders should be inspiring and willing to take risks (Çiçek and Arslan, 2023, p. 579); by encouraging employees and fostering new ideas, they support innovation and ensure progress in a competitive environment. Adaptability is also important; leaders must

[5] In the era of Industry 4.0 and digital transformation, it has become essential for businesses to adapt to change in an ever-evolving and increasingly complex environment. In this context, agile leaders can anticipate future adverse conditions and respond proactively to environmental changes in a rapid and flexible manner, turning risks and threats into opportunities. Consequently, the importance of agile leadership has grown in today's world (İçerli and Çelik, 2020, p. 87).

effectively integrate innovations across all levels of the organization. Finally, the ability to provide personal coaching is essential; by assessing their teams based on individual needs and offering mentorship, leaders can enhance corporate success (Dereli, 2022).

As can be understood from these definitions and characteristics, digital leadership is a crucial form of leadership for the transformation of society and the state. Particularly in public organizations, as observed in e-government applications, the importance of electronic transformation is evident both in terms of reducing bureaucracy (Metin, 2012) and enhancing citizen satisfaction (Can and Eke, 2020). Citizen satisfaction in receiving services contributes to the continuity of political leaders in power. In this sense, the implementation of the Digital State (State 5.0) clearly signifies a transition to a more efficient stage in terms of citizen satisfaction within institutions. Consequently, the functioning of digital leadership within organizations becomes increasingly significant.

Dr. Ali Taha Koç, President of the Presidency's Digital Transformation Office, emphasized the importance they place on digitalization by stating, "We will now transform e-Government into the Digital Turkey Portal. In other words, it will not only involve the public sector. We want to turn e-Government into a gateway where every digital process necessary for our citizens' lives can be accessed" (Koç, 2021). However, this does not necessarily mean that the digitalization of the state is fully embraced and supported by public administrators. The obstacles to Society 5.0 and consequently State 5.0 include "the legal system, gaps related to the digitalization of objects, socio-political biases, social acceptance, and a shortage of qualified personnel" (Bayramoğlu and Hasdemir, 2021, pp. 42-44). In this context, the acceptance and adoption of this new organizational culture become increasingly important.

In the context of technological advancement and societal transformation, technology should possess a quality that alleviates rather than strains society. Society 5.0 is crucial for the future and well-being of society, as it "aims to create a society where people can live comfortably by providing the goods and services they need at the right time, in the right amount, and with high quality; fully meeting various social needs; overcoming social and economic problems through the integration of innovations brought by digital transformations; seeking innovative and human-centered solutions to previously unanswered social problems to create a more livable world; focusing on solving social issues and creating value; preserving nature and ensuring sustainable development; and causing a paradigm shift that significantly affects all sectors, including culture and society" (Bayramoğlu and Hasdemir, 2021, pp. 39-40). Public institutions, along with the digital transformations they experience, aim to be more efficient in delivering public services. In this context, the realization of Society 5.0 also makes State 5.0 (Digital State) increasingly important. However, the adoption of digital

transformation by employees and the establishment of an organizational culture transformation in this direction are only possible through the effective exercise of leadership capabilities. In this regard, the presence of digital leadership skills in public administrators will enhance service efficiency. Therefore, it is essential to first identify the position of digital leadership and make its status visible to both employees and managers.

Digital leadership is crucial in public administration for ensuring sustainable efficiency and the effective use of resources, especially in an era where services are available 24/7. However, while Turkey's industrial digital maturity level remains between Industry 2.0 and Industry 3.0, and Industry 4.0[6] has not yet been implemented (Develi, 2017), the functional implementation of Society 5.0 and State 5.0 appears to be very challenging. Nevertheless, if this transformation is strongly advocated by the state through the ownership of political leaders and by achieving certain implementation successes to ensure citizen satisfaction, it could significantly alter the trajectory. In this context, it becomes essential to scrutinize the digitalization efforts and leadership of public administrators. Evaluating and questioning this situation from the perspectives of both personnel/employees and managers is crucial to understanding the current state of affairs.

Although the literature contains numerous studies on digital leadership, highlighting the importance placed on digitalization, it is surprising to find that there are limited studies aimed at measuring the current state of digital leadership. Some of the practice-oriented studies on digital leadership are related to this work. Vural et al. (2023), in their study titled "Teachers' Perceptions of Digital Leadership," examined the digital leadership aspect among teachers. In this context, the study found that teachers generally have a high level of digital leadership perception. While there were no significant differences based on gender, marital status, and level of technology use, differences were observed according to education level, career level, age, and seniority.

In his study, Peker (2022) focused on "school principals' views on technical skills," emphasizing areas such as digital program skills, self-development skills, and interaction skills. The findings indicate that school principals reported possessing the skills to use digital devices. Additionally, it can be said that principals expressed confidence in their ability to use programs like PowerPoint, Excel, and Word. Principals also frequently mentioned that they have developed themselves in these skills and have received training accordingly. The majority of school principals stated that they use information and communication technologies for social activities

[6] Banger (2018, p. 325) states that advancements in the fields of information and communication represent the integration of innovative approaches in automation, data collection, analysis, and evaluation processes with production technologies. The fundamental philosophy of Industry 4.0 is to create an interactive production process through rapidly learning and responsive robots and cobots (collaborative robots). The realization of such a process relies on the active use of the Internet of Things, big data analytics, and cyber-physical systems (Özdemir and Kılınç, 2019, p. 5).

through the school website and social media channels. Furthermore, principals often utilize technology for communication purposes and contribute to the digital culture by using and encouraging the use of digital tools and resources.

In her study measuring the digital leadership perception levels of employees at the Isparta Youth Services and Sports Provincial Directorate, a public institution, Başyiğit Gönendi (2024) found that this perception was high. The author also discovered that digital leadership perception varied according to the "professional group" variable, but did not vary based on the variables of "age, gender, professional experience, active sports participation, and management background" (Başyiğit Gönendi, 2024).

In his study, Bakalhan (2024) focused on determining the digital leadership levels of school principals. According to the author's findings, "teachers' perceptions of school principals' digital leadership do not differ based on age, education level, or subject area," but "in terms of gender, male teachers' perceptions of school principals' digital leadership, particularly in the innovative dimension, were found to be higher than those of female teachers." Additionally, it was observed that "in terms of marital status, married teachers perceived the supportive dimension of school principals' digital leadership levels as higher."

In their study, Aktaş and Karcıoğlu (2022) examined the technological leadership competencies of public administrators. The research concluded that "in the areas of technological leadership standards, administrators generally display the expected technological competency behaviors according to both the views of the administrators themselves and the perceptions of their personnel. However, the administrators' self-perceptions of their technological leadership competencies were found to be significantly higher than the views of their personnel." Additionally, the study found that "technological leadership competencies vary according to the type of task performed by the administrators, but do not differ based on their professional seniority or gender. For personnel, these competencies differ based on professional seniority but not on gender."

This study primarily aims to assess the outward manifestation of digital leadership levels in public institutions by utilizing a different scale and evaluating both employees' and managers' perspectives. By doing so, it seeks to create awareness among political decision-makers regarding the digital leadership competencies of public administrators and to contribute to the realization of the Society 5.0 and State 5.0 (Digital State) visions by implementing improvements that enhance citizen satisfaction. In other words, the study intends to examine the digital leadership levels of public employees and managers through demographic variables and employee-manager comparisons, identify deficiencies, and provide political decision-makers with guiding insights based on the foundations of Society 5.0 and State 5.0 (Digital State).

This study places importance on questioning the idea (problem) that public administrators in Turkey have weak digital leadership skills. Therefore, the sub-problems that this study will address are determined as follows:

1. What is the level of employees' perceptions of their managers' digital leadership competencies?

2. Do employees' perceptions of their managers' digital leadership competencies show significant differences based on gender, marital status, age, education level, public sector work experience, job type, managerial experience, and the institution where they work?

3. What is the level of managers' perceptions of their own digital leadership competencies?

4. Do managers' perceptions of their own digital leadership competencies show significant differences based on gender, marital status, age, education level, public sector work experience, years of managerial experience, and the institution where they work?

5. What is the actual level of digital leadership among managers?

6. What are the differences between the digital leadership perception levels of managers and employees?

1.RESEARCH METHODOLOGY

This study was designed using quantitative research methods and a general survey design was applied. The survey design is widely preferred in social sciences because it offers the opportunity to work on large groups. However, such studies do not allow for the intervention of the researcher on independent variables or scale factors. Survey researches provides the depiction of past or current situations as they are (Büyüköztürk et al., 2016). Additionally, it is used to illuminate the underlying aspects of a particular situation by examining changes over time. The fundamental characteristics of survey research in scientific studies can be summarized as follows (Fraenkel et al., 2009; Mazlum and Atalay, 2017):

- Research data is collected from a selected sample with the aim of describing the unique characteristics (perceptions, abilities, attitudes, knowledge, beliefs) of a large group or community.

- The data is obtained based on the responses given by the selected individuals to the questions posed to them.

In this study, the population and sample consist of managers and employees working in public institutions and organizations located in Ortaköy, a district of Aksaray province. To examine the digital leadership perceptions of public employees, the Digital Leadership Scale (DLS)[7], a unidimensional 5-point Likert scale consisting of 6 questions developed by

[7] This scale was designed and implemented to include both the self-assessment of the manager and the evaluation of the manager by the employee.

Oktaysoy, Topçuoğlu and Kaygın (2022), was used separately for both employees and managers. The data collected electronically through the scale were organized and subjected to analyses using SPSS 24 software.

2. RESEARCH FINDINGS

The findings related to the quantitative analyses conducted in line with the research objectives are examined under this section. The distribution of demographic information for the sample group, consisting of managers and employees working in public institutions and organizations (health Institutions, educational institutions, military, municipal institution, district governorate, religious affairs, judiciary, police, other institutions) in the Ortaköy district of Aksaray province, is presented in Table 1:

Table 1. Demographic Information Table

Demographic Characteristics	Groups	Employees (E)		Managers (M)	
		f	%	f	%
Gender	Female	134	39,2	13	14,0
	Male	208	60,8	80	86,0
Marital Status	Married	246	71,9	87	93,5
	Single	96	28,1	6	6,5
Managerial Experience	Yes	61	17,8	93	100
	No	281	82,2	0	100
Education	High School or Below	44	12,9	0	0
	Associate Degree	69	20,2	3	3,2
	Bachelor's Degree	190	55,6	71	76,3
	Graduate Degree	39	11,4	19	20,4
Age	35 and below	181	52,9	23	24,7
	36 to 45	102	29,8	30	32,3
	46 and above	59	17,3	40	43,0
Public Sector Experience	0 to 5 years	104	30,4	7	7,5
	6 to 10 years	83	24,3	21	22,6
	11 to 15 years	67	19,6	11	11,8
	16 to 20 years	32	9,4	11	11,8
	21 to 25 years	27	7,9	18	19,4
	26 years and above	29	8,5	25	26,9
Job Type	Office Employee	133	38,9		
	Educator	137	40,1		
	Law Enforcement	48	14,0		
	Other	24	7,0		

Institution	Health Institutions	48	14,0	4	4,3
	Educational Institutions	132	38,6	46	49,5
	Military	19	5,6	6	6,5
	Municipality	33	9,6	13	14,0
	District Governorate	24	7,0	7	7,5
	Religious Affairs	28	8,2	3	3,2
	Judiciary	13	3,8	1	1,1
	Police	24	7,0	13	14,0
	Other Institutions	21	6,1	4	4,3
Managerial Experience	0 to 3 years			31	33,3
	4 to 6 years			19	20,4
	7 to 9 years			15	16,1
	10 to 12 years			10	10,8
	13 years and above			18	19,4
Total		342	100	93	100

Based on the demographic information presented in Table 1, the number of female public employees (39.2%) and female managers (14%) is relatively low in terms of the gender variable among participants. Among the public employee participants, 71.9% are married, while 93.5% of the managers are married. Additionally, 17.8% of public employees have managerial experience. When considering the education levels, it is noteworthy that all managers have a university education or higher, whereas only 12.9% of public employees have a high school or lower level of education. This suggests that the educational level of both public employees and managers in Ortaköy is relatively high.

In terms of age, more than half of the public employees (52.9%) are 35 years old or younger, indicating that the workforce in Ortaköy is predominantly young. An important point related to digital leadership is the expectation that 57% of managers and 82.7% of public employees, who are under the age of 46, would likely be more adept at using technology and adapting to digitalization. Approximately one-quarter (24.7%) of the managers can be considered young.

Regarding public sector experience, 30.4% of public employees have between 0 to 5 years of experience, indicating that a significant portion is relatively new to the public sector, while only 7.5% of managers have 0 to 5 years of experience. This suggests that 92.5% of those in managerial positions in Ortaköy have been working in the public sector for six or more years.

In terms of job roles, 38.9% of the participants are office employees, 40.1% are educators, and 14% are law enforcement personnel. When looking at the institutions where they work, the highest participation rate, both among managers and public employees, is from educational institutions, which can be attributed to the large size of the educational community. Finally, when

considering the experience levels of managers in Ortaköy, it is evident that 33.3% have 0 to 3 years of experience, indicating that they are relatively new to their managerial roles.

Considering the normality test, if the 'p' value is higher than 0.05, it indicates that the distribution is normal. On the other hand, if this value is less than 0.05, it is necessary to examine the kurtosis and skewness values of the data set. Tabachnick and Fidell (2015) stated that the assumption that the data obtained in cases where kurtosis and skewness values were between -1.5 and 1.5 should be accepted. In the data set, the skewness values of the average scores of digital leadership according to the variables of public employees and managers were determined as "-.528, -.471", while the kurtosis values were determined as "-.009, .543", respectively. In line with these findings, it was decided to apply parametric tests (descriptive analysis, t-test and ANOVA) for the analysis of the research. To test the reliability of the Digital Leadership Scale (DLS) used in the study, it was necessary to examine the Cronbach's Alpha coefficient. The authors who developed the scale, Oktaysoy et al. (2022), found the Cronbach's Alpha value to be 0.87 in their sample group. Reliability is calculated by determining the square of the correlation coefficient between the actual scores and the measured scores. The reliability coefficient ranges between 0 and 1, and it is argued that for the data to be considered reliable, this coefficient should be at least 0.70 (Büyüköztürk, 2007). On the other hand, it is stated that if the Cronbach's Alpha internal consistency coefficient falls between 0.60 and 0.80, the scale is considered "quite reliable"; if it falls between 0.80 and 1.00, the scale is deemed "highly reliable" (Özdamar, 1999:522; Çiçek and Taylan, 2023:429). The results of the Cronbach's Alpha reliability test for the 6-item DLS used in this study are presented in Table 2:

Table 2. Cronbach's Alpha Reliability Test Results

Digital Leadership Scale	Cronbach's Alpha Reliability Test	
Employees	Number of items	6
	Cronbach's Alpha	0,933
Managers	Number of items	6
	Cronbach's Alpha	0,890

As shown in Table 2, the Cronbach's Alpha value for public employees was found to be 0.933, while for managers, it was 0.890. This finding indicates that the Digital Leadership Scale (DLS) is statistically "highly reliable." The average scores of participants' perceptions of digital leadership, obtained according to demographic variables, can be examined in Table 3:

Table 3. Participation Averages of Public Employees and Managers Based on Demographic Variables

Demographic Characteristics	Groups	Employees			Managers		
		f	X̄	SD	f	X̄	SD
Gender	Female	134	*3,5336*	,87449	13	*3,3077*	,51750
	Male	208	*3,5497*	,92321	80	*3,6854*	,82974
Marital Status	Married	246	*3,5122*	,92120	87	*3,6111*	,80521
	Single	96	*3,6233*	,85472	6	*3,9444*	,75031
Managerial Experience	Yes	61	*3,4126*	1,02632			
	No	281	*3,5718*	,87360			
Education	High School or Below	44	*3,5076*	,90359	0	*0*	0
	Associate Degree	69	*3,5193*	,98872	3	*2,9444*	,41944
	Bachelor's Degree	190	*3,5579*	,86110	71	*3,6244*	,73771
	Graduate Degree	39	*3,5556*	,97733	19	*3,7719*	1,02622
Age	35 and below	181	*3,6179*	,88850	23	*3,8478*	,78321
	36 to 45	102	*3,4036*	,95309	30	*3,5500*	,74555
	46 and above	59	*3,5565*	,84396	40	*3,5708*	,84974
Public Sector Experience	0 to 5 years	104	*3,6442*	,87887	7	*3,7857*	,73102
	6 to 10 years	83	*3,5884*	,90629	21	*3,9048*	,74269
	11 to 15 years	67	*3,3682*	,95370	11	*3,6212*	,73064
	16 to 20 years	32	*3,5104*	,98003	11	*3,5000*	,89132
	21 to 25 years	27	*3,3148*	,73574	18	*3,6019*	,81877
	26 years and above	29	*3,7069*	,88378	25	*3,4467*	,85353
Job Type	Office Employee	133	*3,4724*	,91797			
	Educator	137	*3,6509*	,87094			
	Law Enforcement	48	*3,5521*	1,02979			
	Other	24	*3,3056*	,66968			
Institution	Health Institutions	48	*3,2083*	,94999	4	*4,4583*	,55067
	Educational Institutions	132	*3,6806*	,84509	46	*3,5507*	,73859
	Military	19	*3,0088*	1,26256	6	*3,6389*	,65334
	Municipality	33	*3,2929*	,82919	13	*3,9359*	,92180
	District Governorate	24	*3,8681*	,83403	7	*3,6190*	,68526
	Religious Affairs	28	*3,6607*	,78368	0	*0*	0
	Judiciary	13	*3,1026*	,81234	3	*3,6667*	,28868

	Police	24	*3,9306*	,66833	1	*3,6667*	0
	Other Institutions	21	*3,6270*	,89893	13	*3,3590*	1,04935
Managerial Experience	0 to 3 years				31	*3,4409*	,82837
	4 to 6 years				19	*3,9474*	,94616
	7 to 9 years				15	*3,7000*	,70486
	10 to 12 years				10	*3,6000*	,58899
	13 years and above				18	*3,5926*	,73924
Total		342	*3,5434*	,90317	93	*3,6326*	,80216

Looking at Table 3, it is evident that the average digital leadership perception scores for male and female public employees are almost at the same level. However, among managers, the averages for males are higher compared to females. Both employees and managers were asked the same questions; employees provided their perceptions of their managers' digital leadership levels, while managers assessed themselves in terms of digital leadership.

When examining the gender variable, it was found that female managers rated themselves as possessing lower digital leadership qualities compared to their employees, whereas male managers viewed themselves as slightly more of a digital leader than their employees did. Regarding marital status, single employees rated their managers as slightly better digital leaders compared to married employees. Single managers also rated themselves higher in digital leadership, with an average score of 3.9444, compared to married managers.

Employees with managerial experience rated their managers lower in terms of digital leadership than those without such experience. Regarding education level, the digital leadership perceptions of public employees about their managers were above average, with little difference among the various education levels. However, when managers assessed themselves, the average digital leadership perception scores increased with higher education levels. For instance, the average score for associate degree managers was 2.9444, while it rose to 3.7719 among postgraduate managers, reflecting a higher self-assessment. This average was also higher than the assessment made by public employees with postgraduate degrees regarding their managers (3.5556).

When considering the age variable, it is observed that those who perceive their managers as the highest level of digital leaders are the employees aged 35 and under, with an average score of 3.6179. Similarly, managers who are 35 years old or younger also see themselves as higher-level digital leaders, with an average score of 3.8478, compared to those aged 36 and older. This could be attributed to younger individuals having adapted to technology from an earlier age. Given that a 35-year-old employee or manager would have been 11 years old when the year 2000 arrived, this level of participation in digital leadership seems meaningful.

When considering public sector experience, it is observed that employees with 0 to 5 years of experience (3.6442) and those with 26 or more years of experience (3.7069) perceive their managers as digital leaders at the highest level, compared to other experience ranges. Similarly, managers with 0 to 5 years of experience (3.7857) and those with 6 to 10 years of experience (3.9048) also exhibit a higher level of self-perception as digital leaders. Consequently, the digital leadership perception is higher among employees with the least and most experience and managers with the least experience.

In terms of job roles, educators rated their managers as digital leaders with a higher participation average (3.6509) compared to other groups. This could be due to the rapid digital transformation in the education sector during the pandemic, where teachers and school administrators quickly adapted to this transformation through intense learning experiences.

Regarding the institutions, although the digital leadership perception of educational employees regarding their managers is relatively high (3.6806), managers in law enforcement (3.9306) and district governorates (3.8681) are perceived as the highest-level digital leaders, with educational institutions ranking third. The higher perception in law enforcement might be attributed to a longer history of digital development in security, and the district governorates have strengthened their digitalization efforts, particularly through the e-Government experience since 2008 (Uraloğlu, 2023). Therefore, it can be understood that employees in these institutions tend to rate their leaders' digital capabilities highly.

However, when looking at the managers' self-perception of digital leadership, the highest average is observed in health institutions (4.4583). This creates a significant gap when considering that the average digital leadership perception among health employees is only 3.2083. Following health institutions, the next highest self-perception of digital leadership (3.9359) is found in municipalities, though municipal employees rated their managers with a much lower average of 3.2929.

Therefore, when evaluating all institutions, it is observed that the digital leadership perceptions of employees in educational institutions, district governorates, and law enforcement regarding their managers are higher than the managers' own self-assessments. In terms of managerial experience, although those with 0 to 3 years of experience rated themselves the lowest in digital leadership (3.4409), those with 4 to 6 years of experience rated themselves the highest (3.9474). After this, as experience increases, managers' self-perception of their digital leadership tends to decline.

Considering the findings presented in Table 3, the fact that the participation averages for both public employees (3.5434) and managers (3.6326) are above 3.5 across all demographic variables indicates that there is an awareness of digital leadership within public institutions. The digital leadership self-perception of managers (3.6326) is slightly higher than the employees' assessments of their managers (3.5434), albeit with a small difference.

The independent samples t-test findings related to the average digital leadership perception levels of participants based on the variables of "gender," "marital status," and "managerial experience" are presented in Table 4:

Table 4. Independent Samples t-Test Findings on the Average Digital Leadership Perception Levels Based on the Variables of "Gender," "Marital Status," and "Managerial Experience

Demographic Characteristics	Groups	Employees					Managers				
		f	X̄	t	df	p	f	X̄	t	df	p
Gender	Female	134	3,53	-,163	294,9	,871	13	3,31	-2,21	23,5	,037
	Male	208	3,55				80	3,69			
Marital Status	Married	246	3,51	-1,06	185,9	,292	87	3,61	-1,05	5,82	,336
	Single	96	3,62				6	3,94			
Managerial Experience	Yes	61	3,41	-1,25	340	,213					
	No	281	3,57								

As shown in Table 4, the independent samples t-test revealed that there was no significant difference in the average digital leadership perception levels of public employee participants based on the "gender" variable, as indicated by a p-value greater than 0.05 (p=0.871). Similarly, when considering the "marital status" variable, the average digital leadership perception levels of public employee participants did not show a significant difference (p=0.292). The same lack of significant difference was observed in the "managerial experience" variable (p=0.213) among public employee participants.

However, for managerial participants, the average digital leadership perception levels based on the "gender" variable did show a significant difference, with a p-value less than 0.05 (p=0.037). This is further confirmed by the fact that the average participation score for female managers was 3.31, while for male managers, it was 3.61. Additionally, no significant difference was found in the average digital leadership perception levels based on the "marital status" variable among managers (p=0.336).

In Table 5, the ANOVA test results are presented, indicating whether there is a significant difference in the mean digital leadership scores of public employees and administrators in relation to the variables of "education, age, public sector experience, job type, institution, and managerial experience."

Table 5. ANOVA Test Results for the Digital Leadership Perception Levels Based on the Variables of "Education, Age, Public Sector Experience, Job Type, Institution, and Managerial Experience" for All Participants

Digital Leadership		f		X̄		SD		Homogeneity Test		ANOVA	
								Sig		F	
		E	M	E	M	E	M	E	M	E	M
Education	High School and Below	44	0	3,5076	0	,90359	0	,849	,109	,058	1,407
	Associate Degree	69	3	3,5193	2,9444	,98872	,41944				
	Bachelor's Degree	190	71	3,5579	3,6244	,86110	,73771				
	Graduate Degree	39	19	3,5556	3,7719	,97733	1,02622				
Age	Under 35 years	181	23	3,6179	3,8478	,88850	,78321	,454	,652	1,853	1,108
	36-45 years	102	30	3,4036	3,5500	,95309	,74555			sig	
	46 years and above	59	40	3,5565	3,5708	,84396	,84974			,158	,335
Public Sector Experience	0-5 years	104	7	3,6442	3,7857	,87887	,73102			1,356	,862
	6-10 years	83	21	3,5884	3,9048	,90629	,74269				
	11-15 years	67	11	3,3682	3,6212	,95370	,73064	,647	,965	sig	
	16-20 years	32	11	3,5104	3,5000	,98003	,89132				
	21-25 years	27	18	3,3148	3,6019	,73574	,81877			,240	,510
	26 years and above	29	25	3,7069	3,4467	,88378	,85353				
Job Type	Office Worker	133		3,4724		,91797				1,483	
	Educator	137		3,6509		,87094		,256		sig	
	Law Enforcement	48		3,5521		1,02979				,219	
	Other	24		3,3056		,66968					

	Healthcare Institutions	48	4	*3,2083*	4,4583	,94999	,55067				
	Educational Institutions	132	46	3,6806	3,5507	,84509	,73859			4,031	1,172
	Military	19	6	*3,0088*	3,6389	1,26256	,65334	,085	,145		
	Municipality	33	13	3,2929	3,9359	,82919	,92180				
	District Governorate	24	7	3,8681	3,6190	,83403	,68526			sig	
	Religious Affairs	28	3	3,6607	3,6667	,78368	,28868				
	Judiciary	13	1	3,1026	3,6667	,81234	.			*,000*	,327
	Police	24	13	*3,9306*	3,3590	,66833	1,04935				
Institution	Other Institutions	21	4	3,6270	4,4583	,89893	,55067				
	0 to 3 years		31		3,4409		,82837				1,228
	4 to 6 years		19		3,9474		,94616		,810		
	7 to 9 years		15		3,7000		,70486			sig	
	10 to 12 years		10		3,6000		,58899				,305
Managerial Experience	13 years and above		18		3,5926		,73924				

Upon examining Table 5, it was concluded that there is no significant difference in the mean digital leadership perception levels among all participants (public employees and administrators) with respect to the variables of "education, age, public sector experience, job type, and managerial experience." However, when considering the "institution" variable, while no significant difference was found in the mean digital leadership perception levels of administrators, a significant difference was observed in the mean digital leadership perception levels of public employees ($p = 0.00$) specifically concerning "police, military, and healthcare institutions." In this context, it is evident from Table 5 that the digital leadership mean scores of police employees are higher compared to those of employees working in military and healthcare institutions.

The mean scores of each item/statement of the Digital Leadership Scale (DLS) for both public employees and administrators are presented comparatively in Table 6:

Table 6. Item Means of the Digital Leadership Scale

Employee Digital Leadership Scale Items	Employees			Managers			Manager Digital Leadership Scale Items
	f	X̄	SD	f	X̄	SD	
"1. My manager thinks using digital tools is fun ."	342	3,5848	1,06537	93	3,9032	1,01150	"1. I think using digital tools is fun ."
"2. I can say that my manager is an expert in digital devices and applications ."	342	3,3655	1,07670	93	3,4301	,96005	"2. I can say that I am an expert in digital devices and applications.."
"3. My manager constantly follows digital developments ."	342	3,5088	1,04653	93	3,7849	,88280	"3. I constantly follow digital developments ."
"4. My manager leads the digital transformation of the unit or institution I work in ."	342	3,5906	1,05382	93	3,4194	1,15460	"4. I am leading the digital transformation of the unit or institution I work in ."
"5. My manager guides my colleagues in digital transformation ."	342	3,6374	1,00006	93	3,7204	,95968	"5. I guide my colleagues in digital transformation ."
"6. My manager has a clear understanding of the structures and processes required for digital transformation "	342	3,5731	1,01841	93	3,5376	1,00606	"6. I have a clear understanding of the structures and processes required for digital transformation ."
Digital Leadership	342	*3,5434*	,90317	93	*3,6326*	,80216	

When the mean scores of the items/statements presented in Table 6 are evaluated overall, it is observed that the mean score for the digital leadership perception of public employees is 3.5434, while for managers, this figure is slightly higher at 3.6326. This indicates that, when all the questions are considered together, there is no significant difference between the perceptions of employees and the self-perceptions of managers. On the other hand, the lowest mean score was observed in the statement "I can say that my manager is an expert in digital devices and applications," which is a statement directed at public employees. Although employees rated their managers slightly above average (3.3655) regarding expertise in using digital devices and applications, this was still the lowest score compared to other statements. Similarly, managers also rated themselves above average (3.4301) in the statement "I can say that I am an expert in digital devices and applications," but still at a relatively low level. This suggests that managers are aware of their shortcomings in this area, as evidenced by the fact that their mean scores are considerably below the maximum value of 5. The closeness of these scores

may be considered an indication of the consistency of the responses provided to the scale. Additionally, when the statements are evaluated individually, it is noteworthy that both public employees and managers have nearly the same perception levels in the sixth statement. In this statement, both managers and employees acknowledge their shortcomings in "having a clear understanding of the structures and processes required for digital transformation," with employees recognizing the efforts of their managers in this regard by giving a score slightly above average (3). The differences in mean scores between employees and managers are particularly noticeable in statements 1 and 3. Although managers reported a higher mean score of 3.9032, indicating that they find using digital tools enjoyable, public employees perceived that their managers take less enjoyment from using these tools, with a mean score of 3.5848. This suggests that managers rate themselves more highly than their employees perceive them. Similarly, in statement 3, managers show a significant level of agreement with a mean score of 3.7849, indicating that they constantly follow digital developments. However, public employees rated their managers at a lower level, with a mean score of 3.5088, in following digital developments. In statement 4, while managers agreed with a mean score of 3.4194, public employees rated their managers higher with a score of 3.5906, indicating that employees perceive their managers as leading digital transformation more than the managers rate themselves. However, although managers had a mean score of 3.4194 for the statement "leading the digital transformation of the institution," they reported a higher level of agreement, with a mean score of 3.7204, regarding "guiding colleagues in digital transformation." Employees, on the other hand, gave a mean score of 3.6374, which closely aligns with the self-perceptions of their managers.

Conclusion

The shift from traditional public service to digital public service is taking place in Turkey, as it is globally. Through national-level "e-government" and local-level "e-municipality" initiatives, the constraints of time and space have been relaxed (Mecek and Yılmaz, 2021, pp. 235-236). However, unless these developments are further advanced, the full implementation of the State 5.0 model and the realization of the Society 5.0 vision will not be possible. This transformation is likely to accelerate as politicians recognize that remaining passive observers in the digitalization process could jeopardize their chances of re-election. This new model of public service, brought about by digitalization, not only enhances the well-being of citizens but also contributes to the Society 5.0 vision by aiming to build a more prosperous societal structure. The increased welfare provided by digital public services raises citizen satisfaction while more effectively meeting the needs of modern society. Therefore, digitalization should be seen not merely as a technological innovation but as a fundamental component of social development and sustainable growth.

While there are similarities among studies on digital leadership in the literature, it is observed that the study most closely aligned in terms of logic and scope with this research is the one conducted by Aktaş and Karcıoğlu (2022). These authors approached public employees and administrators within general and special budget administrations in Erzurum and its districts from a broad perspective, posing various questions and propositions. Their study concluded that "the self-perceptions of administrators regarding their technological leadership competencies were significantly higher than the opinions of their staff about them." However, this study found that the difference between the perceptions of public employees and administrators was negligible, which significantly differs from the findings of Aktaş and Karcıoğlu (2022). Moreover, Aktaş and Karcıoğlu (2022) found that "technological leadership competencies varied according to the type of role administrators held, but did not differ based on seniority or gender; while for staff, these competencies varied according to professional seniority but not by gender." In contrast, this study identified perception differences between administrators based on gender and differences in perceptions among employees depending on the institutions they worked for. Furthermore, by addressing the issue within the frameworks of Society 5.0 and State 5.0, this study distinguishes itself from other works in the literature and offers unique contributions to the field.

Although this study aimed to investigate the assumption (problem) that the digital leadership aspects of public administrators in Turkey are weak, the data obtained indicate that digital leadership, from both the employees' and administrators' perspectives, is realized at a level slightly better than expected, with an average of 3.5. While some differences were observed between employees' perceptions of their administrators' digital leadership skills and the administrators' self-perceptions of their digital leadership skills according to demographic variables, these differences have been presented in detail within the study. Overall, it can be stated that these perceptions are generally quite close in level.

Although public employees rated their administrators' digital leadership above the 3.5-point mark, this rating shows that the digital leadership levels of public administrators are not at an advanced level. Both employees and administrators confirm this situation through the scores they have given. While this average suggests that digital leadership is feasible within institutions, it cannot be considered sufficient to achieve the goals of Society 5.0 and State 5.0. Administrators themselves acknowledge their shortcomings in digital leadership, highlighting the need for digital leadership training for public administrators to embed the concepts of Society 5.0 and State 5.0 within institutions. This can be considered as a recommendation for public policymakers.

Although it is anticipated that the average score will rise above the 3.5 level in the coming years with the repeated application of this scale, and this

increase can be monitored, it should not be forgotten that the realization of Society 5.0 and State 5.0 requires not only technical advancement but also a cultural shift. This cultural transformation clearly necessitates a mental shift, which must first occur in the minds of policymakers. Therefore, another key recommendation is that the welfare brought by the philosophy of Society 5.0 and State 5.0 should be fully understood by policymakers. In this way, it will also be possible to enhance the digital leadership capacity of public administrators.

On the other hand, it is essential to recognize that public administrators are also human, and public employees must understand that following a digital leader and embracing the Society 5.0 and State 5.0 approach is beneficial for both society and the state. Policymakers must first guide the leaders and then the public employees to take action in this regard, ensuring that the well-being of public employees and administrators is prioritized so that they, in turn, can focus on the well-being of society. In this context, the success of digital transformation depends on digital leaders' ability to integrate technology, vision, and culture within the framework of digitalization, creating a collaborative, participatory digital transformation culture across the organization (Gürer, 2021, pp. 334-335). It should not be forgotten that fostering human values within the organization and ensuring that digital leaders draw from these values to realize the transformation are crucial. Therefore, it is necessary to consider employees' rights, address their demands, maintain salary balance, and support this change with technological tools. Continuous training will enable the more active use of such tools.

Society 5.0 aims to provide the goods and services people need at the right time, in the right amount, and with high quality, to fully meet various social needs, and to create a society where people can live comfortably. Additionally, it seeks to overcome social and economic problems by integrating the innovations brought by digital transformation, finding innovative and human-centered solutions to previously unresolved social issues, and creating a more livable world, focusing on solving social problems and creating value. It is defined as a paradigm shift that greatly impacts culture and society, where all sectors interact, ensuring the preservation of nature and sustainable development (Bayramoğlu and Hasdemir, 2021, pp. 39-40). In this context, it is important to emphasize the significance of Society 5.0 for social welfare and the future. However, this welfare can only be achieved through the realization of State 5.0 and its ability to guide Society 5.0. This is because societal transformations are achieved through the state mechanism employed by politicians. Therefore, since the functioning culture of the state will shape society, the implementation of Society 5.0 is primarily dependent on the realization of the state and State 5.0. Without this mental transformation being reflected in public administrators and without administrators instilling this transformation in their employees, the realization of the Society 5.0 system seems unlikely. Hence, it is of great importance that public employees are

well-educated individuals; in other words, either educated people should prefer to work in the public sector, or the public sector should become attractive enough to draw educated people. Accordingly, public policymakers urgently need to implement legislation and financial regulations related to education to encourage educated individuals to be willing to work in the public sector. In this transformation, universities need to transform their technological infrastructure and carry out social studies that can convince citizens and employees of this change. In this context, universities should be provided with the resources to develop projects in this regard and necessary improvements should be made. As in the case of South Korea, it should not be forgotten that this country's great progress in a short time has been due to the fact that the largest share in the budget is allocated to education (Koç, 2023; Time Traveler-Aways, 2019). (Koç, 2023; Zaman yolcusu-uzaklar, 2019). In this framework, it is of utmost importance to give universities the value they deserve and to encourage intelligent, successful, and productive individuals to remain in academia.

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