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## Analysis of Implementing Digital Leadership Within Organizations

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**Abstract:** The purpose of this scientific article is to present a comprehensive review of current scientific literature as perceived by researchers. This reflection employs a graphic writing style, wherein analysts collect the requisite data from supplementary sources prior to doing a thorough analysis and improving it accordingly. Data for study is gathered through supplementary data collection methods, which involve obtaining additional information from sources such as books, articles, research papers, lecture notes, and the Internet. The literature review involves the careful selection, examination, and revision of a collection of relevant scientific articles. The variables presented in the results and discussion section fulfill the requirement of being accountable in line with the objective of this scientific article, which is to describe and provide perspective. These variables are followed by other variables that can serve as distinguishing factors, as well as the subject of research and the model used to analyse the study's findings.

**Keyword:** Businesses, Digital Leadership, Organization

### INTRODUCTION

Businesses are increasingly modifying their transactions to align with the digital realm due to the quick progress of technology. They persist in interacting with clients through websites and enhancing productivity by leveraging intelligent technologies and systems, such as AI. The profitability experienced by the businesses involved in these transactions has enabled the establishment of digitalization goals for other companies in the same sector, leading to the growth of rivalry in digitalization among corporations. The proliferation of competition among firms has gradually extended to the market, leading to consequential shifts in the market dynamics. The goal of digital transformation is to consistently improve as a company that can quickly detect and adapt to changes in the market. This type of shift is not fortuitous and is exceedingly uncommon to happen naturally (Maryanne, 2018: 66). The digitalization of businesses has led to the digitization of leaders and the birth of the concept of digital leadership. In order to achieve digitalization, it is necessary to have digital leaders who can effectively plan and implement systematic activities. These leaders must also

empower their employees to align with the goal of digitalization, be adaptable to changes, and develop strategies that effectively balance technology and human factors. Adopting disruptive technology is necessary to enhance productivity, create value, and improve social welfare. The traits of digital leaders can assist in facilitating digital transformation (Ebert, 2018). In order to incorporate disruptive technologies, a firm may have to build a durable digital learning culture. Digital leaders are those that prioritize the systematic development of a digital learning culture across the organization. Failure of digital transformation projects can be attributed to various factors, one of which is the neglect of crucial change management aspects concerning employees and customers who need to modify their work processes and interactions with the business (Correani, 2020).

Digital leadership, with its expertise and understanding of digital technologies, can effectively mitigate the risk of failure in such projects. The ongoing advancement of intelligent technology in the workplace, leading to an increase in digital workplaces, poses specific challenges in terms of effectively managing and resolving these novel business environments (Haddud, 2018). The notion of the digital leader is designed to tackle these concerns. The increasing speed of globalization and technological advancements have made the business environment more complex and uncertain. As a result, it is crucial to develop human resources with the necessary skills to help companies overcome the challenges that come with digital transformation (Sousa, 2019: 328). Businesses necessitate leaders that possess digital abilities in order to guarantee that proficient personnel can effectively adjust to the digital realm. There is a distinct division between process automation and optimization. Digital transformation approaches go beyond the process paradigm and have an impact on goods, services, and business models as a whole (Matt, 2015). These transformational processes have been more intense in recent years, particularly due to the Covid19 pandemic (Yıkılmaz, 2021a). The capacity to digitally transform enterprises is primarily influenced by a well-defined digital strategy that is endorsed by leaders who foster a flexible and inventive culture (Kane, 2015).

### **Digital leadership concept**

Leadership is the ability to direct a company towards attaining its goals and gaining a competitive edge. In order to keep a competitive edge, companies need to possess technical products and systems that enhance the speed and efficiency of production, communication, and cost reduction. Additionally, they must have the capability to utilize these products and systems to their fullest potential (Uğural et al., 2020). To summarize, companies must fully adopt digitization. In order to accomplish sustainable, effective, and economical digitalization, a robust digitalization plan necessitates leaders that can steer people towards digitalization. The notion of a digital leader has become crucial in assessing an organization's capacity to achieve its digitalization objective. The concept's first emergence can be ascribed to an essay written by Avolio (2000), as it is often used interchangeably with the notion of e-leadership. Nevertheless, in 2002, Peter Fisk introduced the concept of "digital leadership" as a distinct area of inquiry, separate from e-leadership. Fisk (2002) states that digital leaders possess a visionary mindset and are adept at driving change. They have the ability to integrate ideas within the organization to execute projects and facilitate partnerships, joint ventures, outsourcing, and other collaborative endeavors. The Upper Echelons Theory forms the basis for the notion of digital leadership. According to this concept, the qualities of a manager's background contribute to the predictability of organizational outcomes, such as strategic decisions and performance levels. The reference is from Hambrick and Mason's work published in 1984. Consequently, firms headed by persons who possess the essential qualities for digital leadership are also considered digital. Avolio's (2000) research on e-leadership is considered the defining work on Digital Leadership, as per the established standards. Avolio

defines digital leadership as a "process of social transformation facilitated by modern information technology to impact individuals, groups, and/or the conduct, demeanor, sentiments, cognitions, and actions of individuals and/or groups". Fisk (2002) explores the connection between digital and revolutionary leadership in his article. Fisk (2002) defines a digital leader as someone who possesses creativity, drives for transformation, has the ability to align the organization's concepts and goals, and can establish connections between enterprises through partnerships, joint ventures, and outsourcing, thereby generating fresh chances for them (Fisk, 2002). According to Wilson III (2004), the digital leader is characterized by their leadership in key areas of the information society, such as information processing, communication and broadcasting, publication, and multimedia. They also play a significant role in facilitating the transition of the information society.

The leadership was established. Duan (2005) provides a definition for the core domains of information technology, which include internet service providers, online content providers, internet application providers, as well as other technology-based sectors such as data processing, communication, and content. Kurubacak (2006) focuses on the significance of digital leadership in social activism. He defines digital youth leadership as actively maintaining the necessary power partnerships, upholding democratic practices that involve citizens, maintaining consistency to effectively represent their policies, and autonomously engaging in online interactions for their own purposes. In Borins' (2010) study, digital leadership was analyzed via a political lens, specifically focusing on the acts of former US President Obama in the virtual world. The study concluded that a digital leader encompasses the selection of communication channels (such as the Virtual World), the procurement of information technology, and the integration of IT inside the firm. In his 2014 work, Sheninger explored the concept of digital leadership in education. He defined digital leadership as the ability to effectively guide and inspire others, while also leveraging information gathering and networking to proactively anticipate and implement necessary changes for the long-term success of the school. In his research, Altınay (2016) provided a definition of digital leadership as the ability to stay updated with the latest technology and use it to reshape knowledge based on its core principles. According to Van Wart (2016), digital leadership is equivalent to e-leadership and refers to the skill of efficiently choosing and utilizing information communication technologies to achieve individual and organizational objectives.

In his study on Pope Francis' social media actions, Narbona (2016) defined digital leadership as a leadership approach employed through digital methods in the virtual realm. Larjovuori (2016) defines digital leadership as the ability to recognize and cultivate the abilities and talents required to involve all individuals inside the organization in the process of digitalization. Omar A. El Sawy (2016) performed study on the LEGO Company's digital transformation and defined digital leadership as the act of exhibiting the necessary behaviors for firms and business ecosystems to strategically implement digitalization. Zhong (2017) defines digital leadership as the act of guiding and motivating the process of digital transformation, fostering a culture of digital learning, supporting and enhancing professional development using technology, and managing a digital organization. In their study, Oberer and Erkollar (2018) examined the essential characteristics that leaders need to have in the Industry 4.0 age. They found that digital leaders should be nimble, able to work across different levels of hierarchy, focused on teamwork, and have a collaborative approach with a strong emphasis on innovation. According to Tanniru (2018), digital leadership involves utilizing agile IT and business architecture to quickly implement ideas and foster an innovation culture. Stana (2018) defines digital leadership as a social influence method that use technology to alter the attitude, emotion, thinking, behavior, and performance of individuals, groups, or organizations at any level within the business. Contrary to popular

opinion, Mihardjo (2019) argues that digital leadership is a result of digital culture and skill. Antonopoulou (2019) defines digital leadership as the ability to achieve a certain objective in the field of information communication technologies, while effectively managing both human resources and the exploitation of information communication technology. Schiuma (2021) investigated the requisite competencies that leaders must possess in the context of digital literacy in the contemporary digital era. Peng (2021) asserts that in the era of digital technology, individuals or organizations have the ability to completely convert teams, entire organizations, and employees into digital thinkers. This can be achieved by utilizing digital insight, digital decision making, digital implementation, and digital guidance to ensure the accomplishment of their objectives. He defined digital leadership as the ability to persuade individuals to fully adopt it.

## **METHOD**

Research is mostly divided into articles (65%), book chapters (15%), papers (10%), and reports/theses. Digital leadership, as described in the literature, refers to a leadership style demonstrated by individuals who possess innovative ideas in the digital realm, inspire their employees in the digital realm, maintain effective communication with their employees in the digital realm, and have the ability to formulate digital strategies. When categorising research in the literature, it is evident that the concept serves two separate objectives. These references cover various aspects of leadership, including the specific leadership style required to achieve objectives related to information and communication technology (Avolio, 2000; Altnay, 2016; Van Mart, 2016; Antonopoulou, 2019). They also discuss leadership in the context of digital transformation and the digital world (Duan, 2005; Kurubacak, 2006; Sheninger, 2014; Omar A. El Sawy, 2016; Narbona, 2016; Zhong, 2017; Oberer and Erkollar, 2018; Stana, 2018; Schiuma, 2021; Mihardjo, 2019; Peng, 2021). It may be stated that the definitions of digital leadership have been changed in the literature since the advent of the Industry 4.0 era. Since the advent of the Industrial Revolution 4.0, the notion of digital leadership has been included into literature as a strategy for attaining leadership in the digital domain and promoting additional digital transformation.

## **RESULTS AND DISCUSSION**

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### **Importance and characteristics of digital leaders**

In the modern business world, digitization is an inevitable reality. Organisations strive for digitization because it offers advantages such as enhanced communication and preservation of documents. Subsequently, digital transformation was defined as the utilisation of new digital technologies, including social media, artificial intelligence, and big data, in business processes. It also involved the development of new business models, going beyond the mere use of computers or the Internet in different business functions (Klein, 2020). Due to financial constraints, firms must carefully choose the technologies they invest in, ensuring that they connect with their business and strategic goals, including sales and marketing efforts (Andal Ancion, 2003: 34).

Organisations that lack the ability to innovate in order to prosper and compete will be more susceptible to the danger of failure (Prakasa, 2020). Leaders must recognise that technological advancements have the capacity to greatly enhance production and confer a competitive advantage (Lokam, 2015). The key takeaway is that digital transformation should be regarded as a comprehensive process of altering the organisational culture (Ehlers, 2020).

Leaders who fail to utilise internal digital platforms for effective communication within their organisations forfeit significant opportunities to enhance corporate culture and organisational performance (Cardon, 2019).

According to Dimitrov (2018), leaders will progressively influence and integrate virtual personas compatible with their own ideas and aims while online. According to Wasono (2018), digital leadership has a greater influence on digital disruption compared to innovation management. The sustainable competitive advantage provided by technology and digitalization empowers businesses to establish a digitalization aim and assists organisations in devising strategies to achieve this goal. Research has been conducted to address the challenges associated with leading digital transformation and formulating plans. This research focuses on identifying the actions that leaders should do to promote an organization's move to digital platforms and the specific qualities they should possess. After undergoing digital transformation, personnel in companies are compelled to search for solutions regarding the orientation of digital environments, as a result of the strategies that need to be developed for such environments (Sağbaşı, 2021). This circumstance has prompted the question of how the leaders entrusted with these obligations should address the issue. Guzman (2020) identifies several examples of leadership in the Industry 4.0 era, including responsive leadership, community leadership, learning and innovative leadership, open leadership, agile leadership, participatory leadership, network leadership, trust leadership, digital leadership, and collaborative leadership. The growing interest in digital leadership during the Industry 4.0 era stems from the recognition by companies and academia of the transformative effects and advantages of digitalization and digital environments for organisations.

Bennis (2013) claims that digital technology have transformed leadership and management.

Leaders in the digital era can emerge from any hierarchical position inside the organisation (Gudergan, 2021).

The crucial factors for a digital leader include agility, active participation, trustworthiness, effective networking, and a culture of openness (Petry, 2018). The digital leadership approach utilises four essential platforms to enable corporate transformations (Tanniru, 2018):

- a. A platform for innovation that motivates teams to generate ideas that create value through digital transformations;
- b. An agile system and business platform for efficiently designing and delivering IT applications;

- c. A learning platform that promotes thoughtful discussions and enhances organisational capabilities;
- d. They function as a platform for adopting digital transformations by determining the appropriate timing and approach.

According to Temelkova (2018), digital leadership is based on the structured collaboration and mutual reliance of three key areas: strategic leadership, entrepreneurialism, and digital technology. Facilitating or promoting employees' affiliation with the organisation should be facilitated or encouraged through digital leadership (Meier, 2017). It involves examining one's online self-awareness and achieving a balance, addressing the ongoing discussion about cyber kindness, and developing the skills to be a responsible digital citizen who can motivate good social transformation (Ahlquist, 2014).

Governance refers to the systematic establishment of a digital organisation, encompassing its vision, values, structure, culture, and decision-making procedures. It also involves the management of personnel, virtual teams, knowledge, and individual communication and cooperation (Eberl, 2021). Collaborating on digitalization projects requires the cooperation of senior management and the information technology department to clearly establish roles and responsibilities (Larjovuori, 2016).

Digital leaders operate on three levels: they motivate individuals within the organisation to integrate knowledge acquired through their own activities, they consolidate and distribute knowledge within the team or group to promote a more profound comprehension, they facilitate the exchange of knowledge among members of the organisation or groups, and they introduce external knowledge into the organisation (Zupancic, 2016). Digital leaders have the responsibility of ensuring efficient communication with employees, the executive team, and the information technology team inside the organisation. They also need to coordinate and collaborate with these three groups to achieve digitalization or implement digital applications. In order to facilitate communication between these three groups and address inter-unit conflicts, digital leaders must possess transparency, impartiality, and empathy. Moreover, the digital leader's proficiency in business, digital literacy, and management science will augment the effectiveness of the open, impartial, and empathetic policies and behaviours that are anticipated from the digital leader.

The implementation of digital leadership and digital business strategy has made it necessary to evaluate the corporate information technology function and the role of the chief information officer (El Sawy, 2016). It has been shown that CIOs need digital leaders to enable and drive digital transformation. Boards that fail to effectively plan for their digital futures and oversee strategy, investment, and hazards related to business technology are at risk of an unclear future (Valentine, 2015). In order to create a digital workplace, CIOs need to persuade their organisations to assign a digital workplace or employee experience leader. They must also establish clear definitions for customer and employee experience, and design the digital workplace accordingly. This design should be guided by customer and employee experience, and implemented using an evidence-based approach to employee experience management. Dery (2017) argues that it is important to differentiate between systems that improve employee experience and systems that promote employee well-being.

The emergence of novel digital technology leads to the creation of inventive digital solutions (Joas, 2020). Digital leadership refers to a specific category of roles within the field of information technology that involve advanced innovation at a high level (El Attoti, 2016). Due to the interconnectedness of digital and IT capabilities, it is crucial for digital leaders to work together and establish productive collaborations that enhance the effectiveness of Digital Transformation programmes (Engesmo, 2020). Digital leaders advocate for an agile corporate environment that facilitates rapid innovation and heightened customer satisfaction (Bolte, 2018). The leader's personal competence, together with their ability to utilise different

approaches and tools such as mindset and design-based thinking, are crucial aspects for digital leaders (Oberer, Erkollar, 2018). Allowing for creativity, diversity, and openness leads to the advancement of technology. Individuals who regularly encounter innovations often experience a decline in their passion towards innovation. Their perspective on work may be negatively affected due to a dearth of knowledge on innovation. Employees possess the capacity to improve their attitude towards a new digital system or element, thereby motivating them. This is why the presence of digital leaders is essential. Digital leaders should have a mature perspective when it comes to employee errors in digital settings. They should report these failures in a way that is not disrespectful, and also foster a conviction among employees that they can develop competence in the digital environment by learning from their mistakes.

The full potential of digital innovations has not yet been realised. Changes in the digital realm are frequent and rapid, requiring digital leaders to adopt a responsive stance that can promptly adjust to these changes. It is crucial to assess the consequences when digital components that offer a competitive advantage over other organisations are no longer able to deliver that benefit, and how to adapt to a more sophisticated digital technology or system. To be effective digital leaders, individuals need to have a deep understanding of both emerging and established technical trends. They should also demonstrate strong leadership skills along the full value chain, which includes product development, process management, and people management (Bowen, 2021). The digital leader continuously develops plans and strategies for digital transformation since elements and systems that were once strategically superior due to rapid technical growth become less valuable over time. Conversely, a digital leader's capacity to accurately anticipate forthcoming transformations in the digital domain varies based on their engagement with digitalization and digital systems. Leaders who lack digital proficiency may encounter difficulties in understanding the reasons behind employees' challenges with a new digital system and providing support to their workforce.

The digital leader must ensure that their goals and activities are promptly executed across the whole workplace. The success of plans and strategies relies on efficient communication with employees and precise evaluation of possibilities and capabilities. By employing diverse techniques including as surveys and digital competency exams, digital leaders can effectively gather employees' perspectives on digital transformation and guarantee that the digital strategy being formulated is firmly based on actuality. In order to devise alternative plans and strategies, digital leaders must possess the ability to think in several dimensions.

Digital leadership refers to a leader's role in facilitating the transition towards a knowledge-based community and their proficiency in technology (Shah, 2020). The primary goal of digital leaders is to implement digital transformation and enable organisations to fully use their capabilities in the digital realm. Having a strong command of digital skills and a wealth of experience is crucial in order to effectively accomplish these goals. Acquiring digital knowledge and expertise will help you identify the specific difficulties you can face in the digital realm and the necessary steps to overcome them. The digital leader must possess a repertoire of digital skills, which refers to the ability needed to understand, use, and utilise digital technology effectively and judiciously (Hensellek, 2020). Leaders must possess a predominantly digital perspective and strategy in relation to digital transformation (McCarthy, 2021). The competencies and attributes necessary for digital leadership primarily pertain to managing change and ensuring that both managers and organisations are adequately equipped for the transition to digitalization (Gfrerer, 2021). They have consistently steered the company in adjusting to evolving circumstances, fostering connections among individuals in open working environments, maintaining a balance between human and technological involvement in work, promoting innovative and

comprehensive thinking (Asri, 2020), encouraging the sharing of digital resources (Westerman, 2014: 148), and ensuring timely and transparent communication (Asri, 2020). (Abbu, 2020). Digital leaders has the capability to adjust and conform to evolving technological, political, and sector-specific demands. They should possess the capability to adjust their business operations in response to external factors. Alternatively, organisations that have successfully adjusted may risk lagging behind in the industry's rivalry.

Digital leaders exhibit digital literacy and expertise, foresight, the ability to develop customer-focused strategies, adaptability to changing market conditions, a willingness to take risks by fostering an experimental atmosphere, and the capability to collaborate effectively (Promsri, 2019). According to Kazim (2019), individuals who are going to spearhead digital transformation need to possess a strong willingness and aptitude for acquiring new technological knowledge and skills. Leaders who possess both willingness and talent are more likely to remain focused and determined despite encountering setbacks. Employees may see their boss's fervour and drive, which might enhance their own inclination and motivation. The individual has a visionary mindset, forward-thinking perspectives, proficiency in digital technology, and the ability to exhibit behaviours and strategies that promote change or adaptability (Kane, 2019). The individuals should demonstrate the following competencies: proficiency in knowledge management, advanced critical thinking skills, exceptional creativity, effective problem-solving abilities, strong cooperation skills, excellent communication skills, mastery of technique, self-direction, commitment to lifelong learning, ethical awareness, cultural sensitivity, and adaptability (Van Ee, 2020).

Leaders spearheading digital transformation must foster critical thinking, establish problem-based learning environments to enhance individuals' cognitive talents and information acquisition, and prioritise the advancement of individuals through personal and professional development initiatives and trust. They are unafraid to allocate challenging tasks that demand a strong sense of accountability and a readiness to embrace uncertainty (Schiuma, 2021). Digital leaders prioritise participatory behaviours over authoritarian behaviours to showcase the organization's understanding of digitalization. They actively strive to ensure their personnel remains actively involved in the process of digital transformation. The ability of an organisation to undergo a transformation or shift is facilitated by the vision and decision-making of its executives, who establish a connection between digitalization and the evolving corporate requirements (Sainger, 2018). Effective digital leaders consistently cultivate progressive objectives and strategies to ensure seamless operations in the digital domain or during the process of digital transformation. Proficiency, knowledge, and practical involvement in digital technologies are necessary for attaining the objectives and executing the plans with success. Organisations depend on leaders who are knowledgeable about digital transformation initiatives and exhibit emotional intelligence to identify when their skills in this domain are limited and assign responsibility for these difficulties to others (Sow, 2018).

Leaders who possess the willingness to delegate authority to other employees in order to achieve the transformation aim, and who have the ability to respond to setbacks with comprehension and compassion, will be capable of preventing employee demoralisation and maintaining motivation in the digital realm. Future successful digital leaders will exhibit exceptional coaching skills, allowing them to cultivate vibrant, empowering, and high-achieving environments (Brett, 2019: 32). Digital leaders possess an innovative attitude, networking acumen, adaptability, motivational coaching skills, digital intelligence, democratic compromise behaviours, and a capacity to learn from their missteps. (Klein, 2020). Digital leaders possessing qualities such as vision, courage, inspiration, intellectual stimulation, passion, strategic thinking/planning, focus, collaboration, innovation, adaptability, communication, emotional intelligence, spiritual intelligence, responsibilities



and accountability, technology, entrepreneurial skills, and adaptive ideas have the ability to shape societies, solve problems, and engage in critical thinking (Daud, 2021). Based on the assessments, digital leaders exhibit a defined level of digital proficiency and experience, a clear vision for organisations to attain their digital objectives, and the capability to adapt their ideas and policies to evolving circumstances.

**Given the attributes of digital leadership, it is possible to draw comparisons with other styles of leadership.**

The techniques of digital leadership are closely connected to emotional intelligence and leadership styles such as transformational and transactional leadership (Aldawood, 2019). The leadership of the organisation should be entrusted to an individual with a forward-thinking mindset. The organisation should foster a culture of learning that is adapted to the digital era. It should prioritise the professional development of its members and implement systematic measures for improvement. Additionally, the organisation should promote digital citizenship among its members (Agustina, 2020). In order to surmount challenges and capitalise on favourable circumstances, digital leaders must exhibit a notable degree of achievement in entrepreneurial leadership (Kazim, 2019). Ensuring the efficiency of service workers in a virtual environment requires leadership behaviour that focuses on both tasks and relationships (Bartsch, 2020). Increased implementation of democratic leadership styles, greater adherence to consistent manager behaviour aligned with the firm's aim, and enhanced strategic management processes all foster the advancement of digital transformation processes (Porfrio, 2021).

## CONCLUSION

Digital applications and digital transformation have been rapidly implemented to address disrupted business processes and manufacturing procedures (Yıkılmaz, 2021a). Companies prioritise the benefits of digitalization. The Covid-19 pandemic has necessitated businesses to embrace remote work, online education, and training, hence escalating the need for executives that possess authority and expertise in the digital realm. During the epidemic, organisations preferred leaders who defined distinct responsibilities and goals, practiced shared leadership, maintained open communication with employees, prioritised the emotional well-being of their staff, safeguarded the financial stability of the company, and encouraged organisational resilience (Dirani, 2020).

Executives who do not participate in internal digital channels miss out on a valuable chance to show the credibility of their company (Wang, 2019). Digital leaders, positioned at the forefront of digitalization and digital industries, ensure that employees successfully attain digital objectives while also exerting a favourable influence on organisational performance. If the majority of employees widely embrace digital awareness, it can lead to the establishment of a digital learning culture and expedite the process of advancing to the next stage of digitalization.

Consequently, there has been a surge in research on digital leadership. The rise can be ascribed to the increasing significance of digital leadership in corporate environments. Based on the existing literature, the overall attributes of digital leadership can be summarised as follows: A leader who holds a clear vision for digital transformation, demonstrates the ability to create flexible and adaptable policies, exhibits digital expertise and intelligence, motivates their people, encourages them to learn from mistakes, and displays empathetic and conciliatory behaviours. Digital leadership bears similarities to previous leadership styles in multiple aspects. Visionary leadership, entrepreneurial leadership, transactional leadership, transformative leadership, and democratic leadership are all exemplifications of many leadership styles. The study is limited by insufficient investigation into digital leadership, a

dearth of business and management literature, and the reliance on materials written in English, Turkish, and German. Nevertheless, it illustrates the increasing use of the term "digital leadership" in academic publications as time progresses (Kokot, 2021). Despite its theoretical complexity and increasing appeal in practice, research on digital leadership is still in its early stages (Gfrerer, 2020). Within this framework, the study aims to enhance the understanding of digital leadership by examining managers' current leadership practices. By doing so, it is expected to make a substantial contribution to the adoption of digital leadership practices and facilitate digital transformation. The ultimate goal is to improve managerial effectiveness in practical settings.

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