

Digital Leadership Transformation for Enhancing Organizational Performance in the Society 5.0 Era: A Systematic Literature Review

Herman T*

Universitas Terbuka, Indonesia

Email: herman5586@gmail.com

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Corresponding author:

Herman T

herman5586@gmail.com

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ABSTRACT

Digital transformation has become a strategic agenda for organizations in responding to the increasingly complex challenges of the Society 5.0 era. The success of this transformation depends not only on technological adoption but also on leadership capability in effectively managing organizational change. This study aims to analyze the role of digital leadership transformation in enhancing organizational performance in the Society 5.0 era. A Systematic Literature Review (SLR) approach was employed by adopting the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Data were collected from scientific articles indexed in Scopus and Google Scholar published between 2021 and 2025. Following the selection process, 18 articles met the inclusion criteria and were analyzed using thematic analysis. The findings indicate that digital leadership serves as a strategic capability that drives organizational digital transformation through the development of digital vision, digital culture, and human resource capabilities. Digital transformation subsequently enhances organizational agility, operational effectiveness, innovation, and overall organizational performance. The study further reveals that, within the Society 5.0 context, organizational success is determined not only by technological advancement but also by leaders' ability to integrate technology with human-centered values. This study contributes to the development of digital leadership literature and provides practical implications for organizations in designing sustainable and human-centered transformation strategies.

INTRODUCTION

Over the past decade, advances in digital technologies have fundamentally transformed the way organizations create value, build competitive advantage, and sustain business performance (Agustian, et al. 2023). The integration of technologies such as Artificial Intelligence (AI), big data analytics, cloud computing, the Internet of Things (IoT), machine learning, and blockchain has facilitated the emergence of new business models that are more adaptive, data-driven, and interconnected in real time (Rane, et al. 2024). These developments have created increasingly complex, dynamic, and uncertain organizational environments, requiring organizations to enhance their adaptability to remain competitive

(Sidik, et al. 2024). In this context, organizational success is no longer determined solely by the possession of physical and financial resources but also by the ability to strategically leverage digital technologies to improve efficiency, foster innovation, and enhance decision-making quality. Consequently, digitalization has become a strategic imperative for organizations seeking to survive and thrive amid intensifying global competition (AlNuaimi & Singh, 2022).

The transformation of organizational environments has been further accelerated by the emergence of the Society 5.0 concept, introduced as a new development paradigm aimed at integrating technological advancement with human needs (George, A. S., & George, A. H. (2024). Unlike Industry 4.0, which primarily focuses on automation and industrial efficiency through intelligent technologies, Society 5.0 places human beings at the center of innovation and transformation (Mourtzis, et al. 2022). Within this paradigm, technology is not only utilized to increase productivity but also to address social challenges, improve quality of life, and promote sustainable development. Consequently, organizations are expected not only to adopt digital technologies but also to ensure that these technologies generate value for employees, customers, and society at large. This requirement highlights the need for leadership approaches capable of integrating technological advancement with human-centered values, which represent a core characteristic of Society 5.0.

In this context, digital transformation has become one of the most critical strategic priorities for modern organizations. Digital transformation extends beyond the implementation of new technologies and involves fundamental changes in business processes, organizational structures, workplace culture, and interactions with stakeholders (Christou, E., & Piller, F. (2024). Organizations that successfully undertake digital transformation are able to enhance organizational agility, accelerate innovation, expand market access, and improve decision-making effectiveness through the optimal use of data. Conversely, organizations that fail to transform face significant risks, including declining competitiveness, reduced productivity, and an inability to respond effectively to rapid environmental changes (Ly, 2023).

Despite the continuous increase in organizational investments in digital technologies, numerous studies indicate that the success rate of digital transformation initiatives remains relatively low (Reis, J., & Melão, N. 2023). Many organizations struggle to achieve their transformation objectives due to inadequate organizational readiness, resistance to change, weak innovation cultures, and limited leadership competencies in managing complex transformation processes. This phenomenon suggests that digital transformation is not merely a technological issue but also a leadership and change management challenge. In other words, while technology can serve as a catalyst for transformation, its successful implementation largely depends on leaders' ability to establish a digital vision, mobilize organizational resources, and cultivate a culture that supports innovation and continuous learning (Schiuma et al., 2024).

The role of leadership becomes increasingly critical as organizations confront uncertainties arising from rapid technological advancement (Jaafar, M., Khan, K. N., & Salman,

A. 2026). In a fast-changing environment, organizations require leaders who can not only manage traditional organizational operations but also understand, adopt, and strategically leverage digital technologies. This need has given rise to the concept of digital leadership, which refers to a leader's ability to utilize digital technologies to formulate strategic visions, manage change, drive innovation, foster collaboration, and create sustainable organizational value. Digital leadership has emerged as an essential competency because it bridges the gap between rapid technological development and organizations' need to maintain performance and competitiveness (Malik et al., 2024).

From a theoretical perspective, digital leadership encompasses more than technical expertise in technology. It also involves strategic, social, and cultural competencies that enable leaders to guide organizational transformation effectively. Digital leaders are expected to possess a digital mindset that allows them to perceive technology as a strategic opportunity for innovation and performance enhancement. Furthermore, they must be capable of cultivating organizational cultures that embrace change, support continuous learning, and encourage cross-functional collaboration in leveraging digital technologies. Therefore, digital leadership has become a crucial determinant in creating adaptive and future-oriented organizations.

A growing body of empirical research has demonstrated the significant influence of digital leadership on organizational transformation. AlNuaimi and Singh (2022) found that digital transformational leadership positively affects digital transformation through the enhancement of organizational agility. Their findings suggest that leaders with strong digital competencies can improve organizations' capacity to respond to environmental changes and accelerate the implementation of digital transformation strategies. These results reinforce the view that digital leadership is a critical factor in enabling organizations to navigate technological disruption successfully.

In addition to influencing digital transformation, digital leadership has been shown to contribute significantly to organizational performance. Shin et al. (2023) reported that digital leadership positively affects organizational performance through the strengthening of digital culture and the enhancement of employees' digital capabilities. Organizations led by digitally competent leaders are more likely to foster innovative work environments, improve employee productivity, and achieve sustainable organizational outcomes. These findings indicate that digital leadership serves not only as a driver of technological transformation but also as a key enabler of organizational value creation.

Similar findings were reported by Mollah et al. (2023), who argued that the impact of digital leadership on organizational performance is strengthened by organizational learning and information technology capabilities. Their study highlights that organizational success in the digital era depends not only on technology adoption but also on leaders' ability to develop learning-oriented organizations that enable employees to adapt continuously to technological changes. Likewise, Qiao et al. (2024) found that digital transformation plays a significant mediating role in the relationship between digital leadership and various organizational performance indicators. These findings suggest that the influence of digital

leadership on organizational performance is often indirect and operates through effective digital transformation processes.

Despite the growing body of literature on digital leadership, several research gaps remain. First, most previous studies have primarily focused on the direct relationship between digital leadership and organizational performance, while the mechanisms underlying this relationship have received relatively limited attention. Second, much of the existing research has been conducted within the context of Industry 4.0, emphasizing technological and operational efficiency aspects, and has not fully addressed the human-centered characteristics of Society 5.0. Third, studies examining digital leadership in organizations facing continuous transformation demands have produced mixed findings, indicating the need for more comprehensive conceptual models.

In response to these gaps, this study offers a different perspective by positioning digital leadership transformation as a strategic factor in enhancing organizational performance within the Society 5.0 era. The novelty of this study lies in its integration of digital leadership, digital transformation, and organizational performance within the Society 5.0 framework, which emphasizes a balance between technological utilization and human value creation. This study is expected to contribute theoretically to the advancement of digital leadership literature while providing practical implications for organizations seeking to design transformation strategies that enhance competitiveness, innovation, and organizational sustainability in the digital age.

METHOD

Research Design

This study employs a Systematic Literature Review (SLR) approach to identify, evaluate, and synthesize existing research findings related to digital leadership transformation in enhancing organizational performance within the Society 5.0 era. The SLR approach was selected because it enables the development of a comprehensive understanding of the evolution of digital leadership, digital transformation, and organizational performance based on empirical evidence published in the scientific literature. Furthermore, this method facilitates the identification of research gaps, emerging research trends, and opportunities for developing conceptual models that are relevant to organizational needs in the Society 5.0 era.

The review process was conducted systematically by following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure transparency, rigor, and consistency in the identification, selection, and synthesis of the articles included in this study.

Literature Search Strategy

The literature search was conducted using the Scopus and Google Scholar databases, which were selected due to their extensive coverage of publications in the fields of management, leadership, organizational studies, and digital transformation. The search

focused on articles published between 2021 and 2025 to capture the most recent developments in the research area.

Table 1. Literature Search Strategy

Component	Description
Databases	Scopus and Google Scholar
Publication period	2021–2025
Document type	Peer-reviewed journal articles
Language	English
Research focus	Digital leadership, digital transformation, organizational performance, Society 5.0
Search technique	Keywords and Boolean operators

The following keyword combination was used during the search process:

("digital leadership" OR "digital transformational leadership")

AND

("organizational performance" OR "organizational effectiveness")

AND

("digital transformation")

Additional searches were conducted using the keywords organizational agility, digital culture, digital capability, and Society 5.0 to broaden the scope of relevant literature and ensure comprehensive coverage of the research topic.

Article Selection Criteria

To ensure the quality and relevance of the literature included in this review, a set of inclusion and exclusion criteria was established, as presented in Table 2.

Table 2. Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Articles published between 2021 and 2025	Articles published before 2021
Peer-reviewed journal articles	Conference proceedings, editorials, and book reviews
Studies addressing digital leadership and organizational performance	Studies not related to the research variables
Full-text articles available	Articles without full-text access
Articles published in English	Articles published in languages other than English

The selection process involved a comprehensive examination of article titles, abstracts, keywords, and full-text content to ensure alignment with the objectives of the study.

Literature Selection Process

The initial search identified a total of 67 articles. After removing duplicate records and screening the articles based on their titles and abstracts, the number of eligible studies was reduced to 31 articles. Subsequently, a comprehensive full-text review was conducted to

assess the relevance and quality of each study. Following this evaluation, 18 articles met all inclusion criteria and were selected for the final analysis.

The literature selection process was carried out systematically following the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines, ensuring transparency, rigor, and methodological consistency throughout the review process. The final set of selected articles served as the primary source for synthesizing evidence on the role of digital leadership transformation in enhancing organizational performance within the context of Society 5.0.

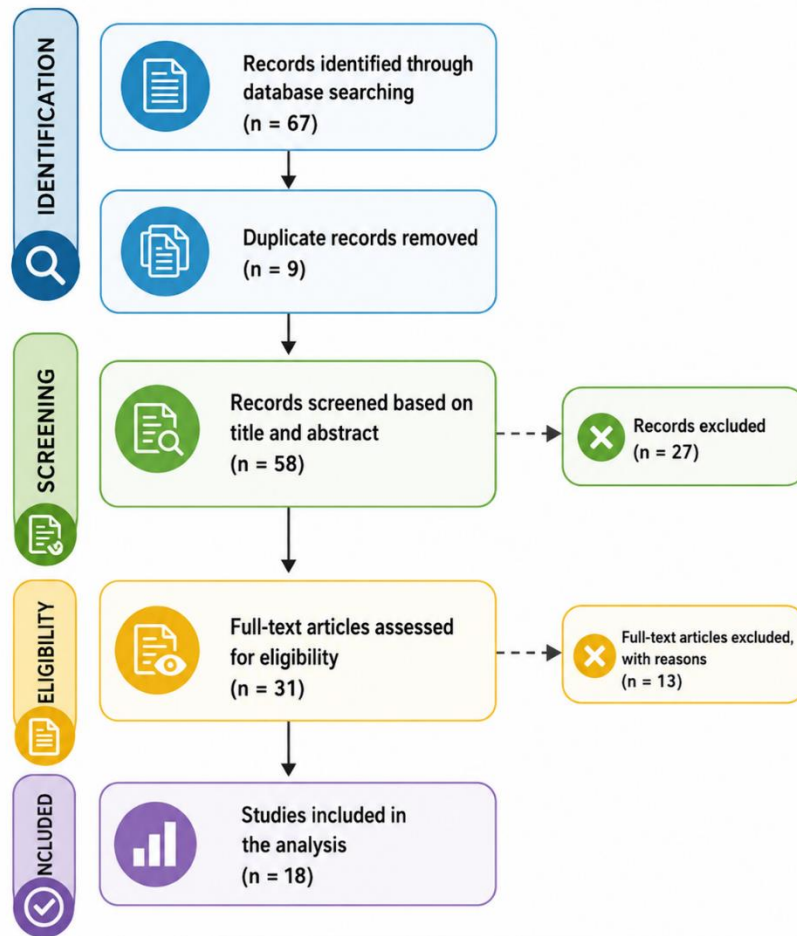


Figure 2. PRISMA Flow Diagram of Article Selection

Data Analysis Technique

The data were analyzed using thematic analysis to identify patterns, themes, and relationships among the concepts emerging from the selected literature. The analysis process was conducted in three stages.

1. Concept Identification

The first stage involved extracting key information from each article, including the research objectives, methodology, variables examined, and major findings. This process

enabled the identification of recurring concepts and provided a foundation for subsequent analysis.

2. Theme Categorization

Concepts that demonstrated conceptual similarities or interrelationships were grouped into broader thematic categories. The major themes identified in the literature included digital leadership, digital transformation, digital culture, organizational agility, digital capability, and organizational performance. This categorization facilitated a systematic understanding of how these concepts interact within the context of organizational transformation.

3. Findings Synthesis

The identified themes were subsequently synthesized to uncover patterns and relationships explaining how digital leadership contributes to organizational performance enhancement in the Society 5.0 era. The synthesis process enabled the development of a comprehensive understanding of the mechanisms through which digital leadership influences digital transformation and organizational outcomes.

Characteristics of the Reviewed Literature

To provide an overview of the studies included in this review, the characteristics of the selected articles are presented in Table 3.

Table 3. Characteristics of the Reviewed Literature

No.	Author(s)	Year	Method	Research Focus
1	AlNuaimi & Singh	2022	SEM	Digital leadership and digital transformation
2	Ly	2023	Survey	Organizational agility and digital transformation
3	Shin et al.	2023	SEM	Digital culture and organizational performance
4	Mollah et al.	2023	SEM	IT capability and organizational learning
5	Qiao et al.	2024	SEM	Digital leadership and employee performance
6	Schiuma et al.	2024	Mixed Methods	Leadership competencies for digital transformation
7	Malik et al.	2024	Literature Review	Business model innovation and digital leadership
...

Research Synthesis Framework

Based on the literature review, this study identifies digital leadership as the primary driver of organizational digital transformation. Digital transformation subsequently enhances organizational agility, strengthens digital capabilities, and contributes to improved organizational performance in addressing the challenges of the Society 5.0 era.



Figure 2. Research Synthesis Framework

The synthesis framework serves as the foundation for discussing how digital leadership transformation can create organizations that are more adaptive, innovative, and sustainable in the Society 5.0 era. Accordingly, this study not only maps the development of the existing literature but also provides a conceptual understanding of the mechanisms through which digital leadership enhances organizational performance. The framework highlights the strategic role of digital leadership in facilitating digital transformation and fostering organizational capabilities necessary for achieving sustainable competitive advantage in an increasingly digital and human-centered environment.

RESULTS

Characteristics of the Reviewed Literature

Based on the selection process following the PRISMA approach, a total of 18 articles met the inclusion criteria and were included in the analysis. The reviewed literature was drawn from reputable international journals focusing on digital leadership, digital transformation, organizational agility, digital culture, and organizational performance. Most of the selected studies were published between 2023 and 2024, reflecting the growing scholarly interest in digital leadership amid the rapid acceleration of digital transformation across various sectors.

The identification results indicate that research on digital leadership has expanded considerably in recent years, particularly following the COVID-19 pandemic, which accelerated the adoption of digital technologies within organizations. The focus of research has evolved beyond technological implementation to encompass leaders' capabilities in

managing organizational change, fostering digital culture, and enhancing organizational performance in a sustainable manner.

Table 4. Summary of the Reviewed Literature Characteristics

Aspect	Findings
Number of articles analyzed	18
Publication period	2021–2025
Databases	Scopus and Google Scholar
Dominant methods	SEM and Survey
Main focus	Digital Leadership
Supporting variables	Digital Transformation, Organizational Agility, Digital Culture
Main outcome	Organizational Performance

Trends in Digital Leadership Research

The analysis reveals that digital leadership has emerged as one of the most rapidly growing themes within the fields of management and organizational studies. Most studies conceptualize digital leadership as a strategic capability that enables leaders to integrate digital technologies with organizational objectives and long-term strategic priorities.

Several studies emphasize that digital leadership extends beyond technological competence and encompasses the ability to develop a digital vision, manage organizational change, enhance collaboration, and stimulate innovation. These findings suggest that digital leadership represents a combination of technological, managerial, and social competencies that enable organizations to adapt effectively to rapidly changing environments.

Furthermore, the literature highlights a shift in leadership paradigms from traditional managerial approaches toward more agile, technology-oriented, and innovation-driven leadership models. In increasingly digitalized environments, leaders are expected not only to understand emerging technologies but also to leverage them strategically to create value, strengthen organizational resilience, and sustain competitive advantage.

The distribution of themes identified in the reviewed literature demonstrates that digital leadership is the most frequently discussed topic, followed by digital transformation and organizational performance. This trend underscores the central role of leadership in guiding organizations through digital transformation initiatives and achieving superior organizational outcomes.

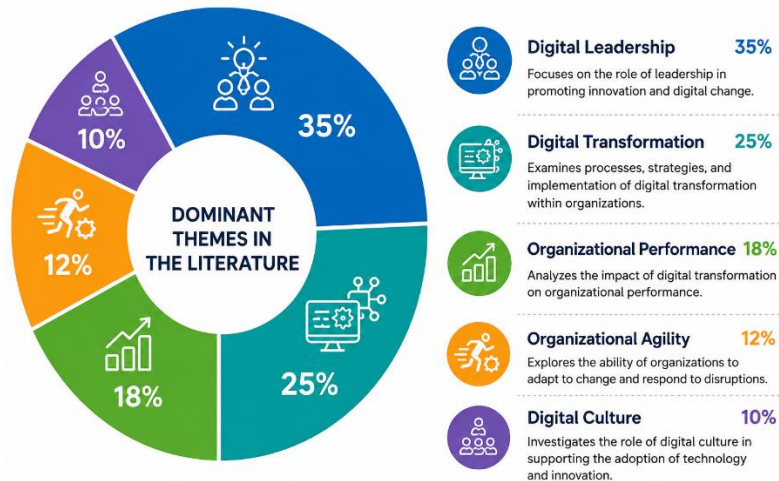


Figure 3. Dominant Themes in the Literature

The results show that digital leadership is the most discussed central theme in the research, followed by digital transformation and organizational performance.

The Role of Digital Leadership in Organizational Transformation

The synthesis of the reviewed studies indicates that digital leadership serves as a primary driver of organizational transformation. Digital leaders are capable of establishing a clear vision for transformation, enhancing organizational readiness for change, and promoting the strategic utilization of digital technologies.

AlNuaimi and Singh (2022) found that digital transformational leadership positively influences the success of digital transformation through organizational agility. Their findings suggest that an organization's ability to adapt to environmental changes acts as a crucial mechanism linking digital leadership to successful transformation outcomes. In other words, leaders with strong digital competencies are better equipped to prepare organizations for uncertainty and facilitate effective transformation processes.

Similar findings were reported by Ly (2023), who argued that organizational agility mediates the relationship between digital transformational leadership and digital transformation. Organizations led by digitally competent leaders tend to respond more effectively to technological changes and demonstrate greater capabilities in implementing digital innovations. These organizations are generally more flexible, adaptive, and responsive to market dynamics and technological disruptions.

The findings also suggest that digital leadership contributes to organizational transformation through several interconnected pathways. First, digital leaders articulate and communicate a compelling digital vision that guides organizational transformation efforts. Second, they foster adaptive organizational cultures that encourage experimentation, innovation, and continuous learning. Third, they invest in the development of employees'

digital capabilities, ensuring that the workforce possesses the skills and competencies necessary to support transformation initiatives.

Overall, the literature indicates that successful digital transformation requires more than technological investment; it demands leadership capable of aligning people, processes, and technology toward shared organizational goals. Consequently, digital leadership emerges as a critical organizational capability for navigating complex and rapidly evolving digital environments.

Table 5. Contributions of Digital Leadership to Organizational Transformation

Dimension	Contribution
Digital Vision	Provides strategic direction for transformation initiatives
Innovation	Encourages the development of new ideas, products, and processes
Adaptability	Enhances responsiveness to environmental and technological changes
Collaboration	Strengthens cross-functional coordination and knowledge sharing
Digital Capability	Improves employees' digital competencies and readiness for transformation

The findings presented in Table 5 demonstrate that digital leadership influences organizational transformation through multiple dimensions. By fostering digital vision, innovation, adaptability, collaboration, and digital capability, leaders create the conditions necessary for successful digital transformation and improved organizational performance in the Society 5.0 era.

The Influence of Digital Leadership on Organizational Performance

The findings of this review indicate that digital leadership has a positive relationship with organizational performance. This relationship is reflected in improvements in productivity, operational effectiveness, innovation, service quality, and organizational sustainability. As organizations increasingly operate in technology-driven environments, digital leadership has emerged as a critical capability for enhancing organizational performance and maintaining competitiveness.

Shin et al. (2023) found that digital leadership improves organizational performance both directly and indirectly through the development of digital culture and employees' digital capabilities. Organizations that successfully cultivate a strong digital culture tend to achieve higher levels of innovation and productivity than those that continue to rely on conventional work practices. A supportive digital culture encourages employees to embrace technological change, collaborate more effectively, and continuously develop new skills, thereby contributing to superior organizational outcomes.

Similarly, Mollah et al. (2023) demonstrated that organizational learning and IT capabilities are important factors that strengthen the impact of digital leadership on sustainable organizational performance. Their findings suggest that investments in technology generate optimal outcomes only when accompanied by continuous organizational learning and capability development. In this regard, digital leaders play a crucial role in fostering learning-oriented environments that enable employees to adapt to technological

advancements and organizational changes. Consequently, sustainable organizational performance is achieved not merely through technology adoption but through the effective integration of technology, knowledge, and human capabilities.

These findings collectively suggest that digital leadership functions as a strategic enabler of organizational performance by creating conditions that support innovation, agility, knowledge sharing, and continuous improvement. As a result, organizations led by digitally competent leaders are better positioned to achieve long-term growth and sustainability in increasingly dynamic and competitive environments.

Findings from the Society 5.0 Perspective

From the perspective of Society 5.0, the findings indicate that organizational success depends not only on the ability to adopt advanced technologies but also on the capacity to integrate technology with human needs and societal values. Therefore, digital leadership in the Society 5.0 era must balance technological advancement with human-centered considerations throughout the organizational transformation process.

Most of the studies reviewed emphasize that organizations capable of integrating technological innovation with human resource development tend to achieve better performance than those focusing solely on technological investments. This finding highlights the importance of aligning digital transformation initiatives with employee development, organizational well-being, and stakeholder needs. Technology alone cannot guarantee organizational success; rather, success depends on how effectively technology is leveraged to empower people and create meaningful value.

Furthermore, the Society 5.0 paradigm emphasizes the integration of cyberspace and physical space to address social challenges and improve quality of life. In this context, digital leaders are expected not only to facilitate technological transformation but also to ensure that technological innovations contribute to employee well-being, customer satisfaction, social value creation, and sustainable development. Consequently, digital leadership in the Society 5.0 era requires a human-centered leadership approach that places people at the core of digital transformation initiatives.

These findings suggest that the future of organizational transformation lies in the ability of leaders to combine technological capabilities with empathy, inclusiveness, and a strong commitment to human development. Such an approach enables organizations to maximize the benefits of digital technologies while maintaining a focus on social responsibility and long-term sustainability.

Conceptual Model of Digital Leadership Transformation for Enhancing Organizational Performance in the Society 5.0 Era

Based on the synthesis of the reviewed literature, this study proposes a conceptual model that explains the mechanism through which digital leadership transformation enhances organizational performance in the Society 5.0 era.



Figure 4. Conceptual Model Derived from the Literature Synthesis

The proposed model suggests that digital leadership serves as the fundamental driver of organizational digital transformation. Through strategic vision, technological competence, and change management capabilities, digital leaders facilitate the implementation of digital transformation initiatives across the organization. These transformation efforts subsequently foster the development of a strong digital culture and enhance organizational agility, enabling organizations to respond more effectively to environmental changes and emerging opportunities.

The model further illustrates that digital culture and organizational agility act as critical mechanisms through which digital transformation contributes to improved organizational performance. Organizations characterized by adaptive cultures, collaborative work environments, and agile structures are more likely to achieve higher levels of productivity, innovation, operational efficiency, and service quality.

Within the Society 5.0 context, these relationships are reinforced by the principle of human-centered technology, which emphasizes the balance between technological advancement and human development. Accordingly, organizational performance is not viewed solely in economic terms but also in relation to employee well-being, social value creation, and sustainable growth. The proposed conceptual model therefore provides a comprehensive framework for understanding how digital leadership can drive organizational success in an increasingly digital and human-centered era.

DISCUSSION

Digital Leadership as a Strategic Organizational Capability in the Society 5.0 Era

The synthesis of the reviewed literature indicates that digital leadership is one of the most dominant factors influencing organizational success in responding to environmental changes characterized by rapid technological advancement, increasing market complexity, and growing demands for innovation. This finding suggests that digital transformation is not merely a matter of technology implementation; rather, it represents a comprehensive organizational change process that heavily depends on leaders' ability to direct, integrate, and manage organizational resources effectively. In this context, digital leadership emerges as a strategic capability that enables organizations not only to adapt to change but also to leverage change as a source of competitive advantage.

This finding is consistent with the study by AlNuaimi and Singh (2022), which demonstrated that digital transformational leadership positively influences the success of organizational digital transformation through the enhancement of organizational agility. Their findings reinforce the argument that successful digital transformation is determined not only by technological readiness but also by leaders' ability to establish a clear transformational vision and mobilize all organizational members toward achieving shared objectives. In increasingly uncertain environments, leaders act as key agents who reduce ambiguity, manage resistance to change, and ensure that adopted technologies generate tangible value for the organization.

From the perspective of the Resource-Based View (RBV), digital leadership can be regarded as a valuable intangible resource with significant strategic value. RBV suggests that sustainable competitive advantage stems not solely from physical assets or technological resources but from unique, valuable, difficult-to-imitate, and non-substitutable organizational capabilities. Within the context of digital transformation, leaders' abilities to understand emerging technologies, manage organizational change, and cultivate a culture of innovation represent capabilities that cannot be easily replicated by competitors. Consequently, digital leadership can be positioned as a strategic asset that contributes to the creation of long-term competitive advantage.

Furthermore, the findings reveal that the characteristics of digital leaders extend beyond the administrative and control-oriented competencies traditionally associated with conventional leadership paradigms. Digital leaders are expected to possess a digital mindset that enables them to perceive technology as a strategic instrument for creating new value and fostering innovation. According to Malik et al. (2024), effective digital leaders must integrate technological, social, and strategic competencies to successfully manage organizational transformation. These competencies complement one another and collectively contribute to building organizations that are resilient and responsive to environmental change.

From a technological perspective, digital leaders must understand the opportunities and implications associated with rapidly evolving technologies. Such understanding is essential to ensure that technology investment decisions are guided not merely by market trends but by organizational needs and strategic objectives. Numerous organizations have experienced digital transformation failures due to adopting technologies that were misaligned

with their strategic priorities. In such situations, leadership plays a critical role in ensuring that technology adoption supports organizational goals rather than serving merely as a symbol of modernization.

From a social perspective, digital leaders must be capable of fostering effective communication and collaboration within increasingly digitalized work environments. Digital transformation often alters organizational structures, coordination mechanisms, and interpersonal relationships within organizations. Therefore, successful transformation depends not only on technological infrastructure but also on leaders' ability to build trust, strengthen commitment, and enhance employee engagement throughout the transformation process. Without adequate human support, even the most advanced technologies are unlikely to produce sustainable organizational change.

Moreover, from a strategic perspective, digital leaders are responsible for shaping the overall direction of organizational transformation. Schiuma et al. (2024) identified the ability to integrate long-term strategic vision with rapidly evolving technological innovation as one of the most critical competencies for leaders in the digital era. Digital leaders are expected not only to achieve operational targets but also to anticipate future developments and prepare their organizations for challenges that may not yet be apparent. Such capabilities are becoming increasingly important in the Society 5.0 era, which is characterized by the convergence of physical and digital spaces.

Within the Society 5.0 framework, digital leadership acquires a broader meaning compared to leadership concepts associated with Industry 4.0. While Industry 4.0 primarily emphasizes automation, operational efficiency, and technological integration in production systems, Society 5.0 places human beings at the center of transformation processes. Consequently, digital leaders are responsible not only for ensuring the successful implementation of technology but also for ensuring that technology contributes to improving quality of life, employee well-being, and organizational sustainability. Therefore, the effectiveness of digital leadership in the Society 5.0 era should be assessed not only by the extent of organizational digitalization but also by its ability to balance technological advancement with human-centered values.

The findings also suggest that digital leadership serves as a critical enabler of organizational resilience. In environments characterized by volatility, uncertainty, complexity, and ambiguity (VUCA), organizations require leaders who can navigate disruption while maintaining organizational stability and strategic direction. Digital leaders facilitate resilience by promoting adaptability, encouraging innovation, and fostering continuous learning. These capabilities enable organizations to respond proactively to emerging opportunities and threats while maintaining long-term competitiveness.

Another important implication of the findings is that digital leadership contributes significantly to the development of innovation ecosystems within organizations. Innovation is no longer generated solely through research and development activities but increasingly emerges through collaboration, data utilization, and digital platforms. Digital leaders play a central role in creating organizational environments that encourage experimentation,

knowledge sharing, and cross-functional collaboration. As a result, organizations are better positioned to generate innovative solutions that address both market demands and societal challenges.

From a strategic management perspective, the findings further indicate that digital leadership functions as a dynamic capability that enables organizations to sense, seize, and transform opportunities arising from technological change. Leaders with strong digital competencies can identify emerging trends, allocate resources effectively, and redesign organizational processes to maximize the benefits of digital technologies. Such capabilities are particularly important in the Society 5.0 era, where technological advancement and human-centered development must be pursued simultaneously.

Ultimately, these findings demonstrate that digital leadership constitutes a fundamental foundation for organizational success in the Society 5.0 era. Organizations led by digitally competent leaders are more likely to cope effectively with environmental uncertainty, adapt rapidly to technological change, and sustain innovation over time. Conversely, organizations that fail to develop digital leadership capabilities may struggle to manage digital transformation initiatives, thereby limiting their ability to enhance performance and maintain competitiveness. Therefore, the development of digital leadership should be regarded as a strategic priority for organizations seeking to survive, grow, and create sustainable value in an increasingly complex digital landscape.

Digital Transformation as a Mechanism for Enhancing Organizational Performance

The findings of this study indicate that the relationship between digital leadership and organizational performance is not always direct. Instead, digital transformation serves as a critical mechanism that bridges the influence of digital leadership on organizational performance outcomes. This finding suggests that the effectiveness of digital leaders should not be assessed solely based on their ability to manage technology but also on their capacity to transform business processes, organizational structures, and workplace cultures into more adaptive systems capable of responding to technological advancements.

Qiao et al. (2024) found that digital transformation mediates the relationship between digital leadership and various organizational outcomes, including employee performance and organizational commitment. These findings demonstrate that the impact of digital leadership becomes stronger when organizations successfully implement digital transformation initiatives. In other words, digital transformation functions as the mechanism through which leaders' strategic visions are translated into tangible organizational outcomes.

From the perspective of Dynamic Capability Theory, digital transformation can be understood as an organization's ability to integrate, build, and reconfigure internal and external resources in response to environmental changes. Digital leaders play a pivotal role in developing these capabilities through data-driven decision-making, fostering innovation-oriented cultures, and enhancing employees' digital competencies. Therefore, digital transformation not only improves operational efficiency but also strengthens organizational

adaptability and innovation capabilities, enabling organizations to sustain their competitive advantage in rapidly changing environments.

Furthermore, digital transformation should not be viewed merely as the adoption of new technologies. Rather, it represents a comprehensive organizational change process that encompasses strategic realignment, process redesign, workforce development, and cultural transformation. Organizations that successfully implement digital transformation are often characterized by greater flexibility, stronger innovation capabilities, and improved responsiveness to customer needs. Consequently, digital transformation serves as a strategic pathway through which digital leadership contributes to sustainable organizational performance.

The findings also suggest that digital transformation enhances organizational performance by improving information accessibility, accelerating decision-making processes, and increasing operational transparency. Through the effective utilization of digital technologies, organizations can leverage real-time data to support strategic decisions, optimize resource allocation, and improve service delivery. As a result, digital transformation becomes a key enabler of organizational effectiveness and long-term competitiveness in the Society 5.0 era.

The Role of Organizational Agility in Creating Adaptive Organizations

The findings further reveal that organizational agility is one of the most consistently identified factors in the literature on digital leadership and organizational transformation. Organizational agility refers to an organization's ability to respond to environmental changes rapidly, flexibly, and effectively. In the Society 5.0 era, characterized by continuous technological disruption and increasing environmental uncertainty, agility has become a critical determinant of organizational success.

Ly (2023) found that organizational agility mediates the relationship between digital transformational leadership and digital transformation. This finding suggests that effective digital leaders create organizational environments that are highly responsive to change, thereby accelerating the implementation of digital transformation initiatives. Agile organizations are not only capable of responding quickly to market shifts but are also able to capitalize on new opportunities arising from technological advancements.

The significance of organizational agility can be explained by the increasing complexity of contemporary business environments. Organizations must continuously adapt their strategies, structures, and operational processes to remain competitive. Digital leaders facilitate this adaptability by promoting flexibility, empowering employees, and encouraging collaborative problem-solving. Through these efforts, organizations become better equipped to navigate uncertainty and respond proactively to emerging challenges.

The findings strengthen the argument that digital leadership should focus on developing organizational adaptability. In practice, this can be achieved through enhancing cross-functional collaboration, streamlining decision-making processes, and cultivating organizational cultures that encourage experimentation and innovation. Agile organizations

tend to embrace change rather than resist it, enabling them to implement digital transformation initiatives more effectively and achieve superior performance outcomes.

Moreover, organizational agility contributes to resilience by enabling organizations to recover quickly from disruptions and continuously adjust to changing circumstances. In the context of Society 5.0, where technological innovations emerge at an unprecedented pace, agility becomes a strategic capability that allows organizations to maintain relevance and sustainability. Therefore, organizational agility serves as a critical bridge connecting digital leadership to improved organizational performance.

Digital Culture and Human Resource Capabilities as Reinforcing Factors

Beyond digital transformation and organizational agility, the synthesis of the literature indicates that digital culture and human resource digital capabilities are important factors that strengthen the influence of digital leadership on organizational performance. Technology alone cannot generate optimal benefits unless it is supported by an organizational culture that promotes learning, collaboration, and innovation.

Shin et al. (2023) found that digital culture and employees' digital capabilities mediate the relationship between digital leadership and organizational performance. These findings suggest that the success of organizational transformation largely depends on leaders' ability to create work environments that support the effective utilization of technology. Digital leaders are responsible not only for implementing technological solutions but also for ensuring that employees possess the competencies necessary to adapt to technological changes and leverage digital tools effectively.

A strong digital culture encourages openness to change, knowledge sharing, and continuous improvement. Organizations that cultivate such cultures are more likely to achieve successful digital transformation because employees are willing to embrace innovation and actively participate in organizational change initiatives. Consequently, digital culture serves as a foundational element that facilitates the integration of technology into everyday organizational practices.

Consistent with these findings, Mollah et al. (2023) emphasized that organizational learning and IT capabilities contribute significantly to sustainable organizational performance. Organizations characterized by strong learning cultures are generally more prepared to cope with environmental changes and better positioned to utilize technology for value creation. Organizational learning enables employees to continuously acquire new knowledge and skills, thereby enhancing their ability to adapt to evolving technological demands.

Therefore, investments in developing employees' digital competencies should be considered an integral component of organizational transformation strategies. Training programs, digital literacy initiatives, and continuous professional development opportunities are essential for ensuring that human resources remain aligned with technological advancements. Without adequate investments in human capital, organizations may struggle

to realize the full benefits of digital transformation despite significant technological investments.

Digital Leadership in the Context of Society 5.0

One of the primary contributions of this study is its positioning of digital leadership within the context of Society 5.0. Unlike the Industry 4.0 paradigm, which emphasizes efficiency, automation, and technological integration, Society 5.0 highlights the importance of balancing technological advancement with human values and societal well-being. Within this framework, digital leaders are expected not only to manage technology effectively but also to ensure that technology is utilized to enhance human welfare and create broader social value.

The findings indicate that organizations that successfully integrate technological innovation with human resource development tend to achieve superior and more sustainable performance outcomes. This suggests that successful digital transformation in the Society 5.0 era requires a human-centered leadership approach that places people at the core of organizational change initiatives. Technology should serve as a tool for empowering individuals, improving quality of life, and fostering inclusive growth rather than being pursued solely for efficiency gains.

Furthermore, digital leaders in the Society 5.0 era must balance technological orientation with human capacity development, digital ethics, and organizational sustainability. As organizations increasingly rely on artificial intelligence, automation, and data-driven systems, ethical considerations become increasingly important. Digital leaders must ensure that technological innovations are implemented responsibly and aligned with organizational values and societal expectations.

The Society 5.0 perspective also expands the role of digital leaders beyond organizational boundaries. Leaders are expected to contribute to social innovation, environmental sustainability, and stakeholder well-being while pursuing organizational objectives. Consequently, digital leadership in the Society 5.0 era involves managing the intersection of technology, humanity, and sustainability in a manner that creates value for both organizations and society.

From a theoretical perspective, this study strengthens the literature on digital leadership by demonstrating that the influence of digital leadership on organizational performance operates through the mechanisms of digital transformation, organizational agility, digital culture, and human resource digital capabilities. These findings provide a more comprehensive understanding of the pathways through which digital leadership contributes to organizational success in the Society 5.0 era.

From a practical perspective, the findings suggest that organizations should prioritize the development of digital leadership competencies as part of their transformation strategies. Such efforts may include digital leadership training programs, technology literacy initiatives, the reinforcement of digital culture, and the establishment of continuous organizational learning systems. By investing in these areas, organizations will be better equipped to address

the challenges of digital transformation, enhance their performance, and achieve sustainable growth in an increasingly complex and technology-driven environment.

CONCLUSION

The findings of this Systematic Literature Review (SLR) demonstrate that digital leadership serves as a strategic capability that plays a critical role in enhancing organizational performance in the Society 5.0 era. Digital leadership extends beyond leaders' ability to understand and utilize digital technologies; it also encompasses the capacity to establish a digital vision, manage organizational change, foster a culture of innovation, and develop human resource competencies. The findings indicate that organizations led by digitally competent leaders tend to be more adaptive to environmental changes, more responsive to technological developments, and more capable of creating sustainable organizational value.

The literature synthesis further reveals that the influence of digital leadership on organizational performance is not entirely direct but operates through several important mechanisms, including digital transformation, organizational agility, digital culture, and employees' digital capabilities. Digital transformation acts as a mechanism through which leadership vision is translated into changes in business processes, organizational structures, and work systems. Organizational agility enables organizations to respond rapidly and effectively to environmental changes, while digital culture and digital capabilities strengthen the organization's capacity to leverage technology for innovation and performance improvement.

Within the context of Society 5.0, organizational success is determined not only by the adoption of advanced technologies but also by the ability to integrate technology with human-centered values. Consequently, digital leadership in the Society 5.0 era should embrace a human-centered leadership approach that places people at the core of digital transformation initiatives. This study contributes to the literature by explaining the mechanisms through which digital leadership enhances organizational performance via digital transformation, digital culture, organizational agility, and digital capabilities. Practically, the findings provide valuable insights for organizations in designing transformation strategies that promote innovation, sustainability, and long-term competitiveness in the digital era.

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