

Digital Transformation in Information Management: Challenges and Strategic Implementation

Dedy Sofian MZ^{1*}, Sunardi², Angga Radlisa Samsudin³

^{1,2} Program Studi Sistem Informasi, Universitas Nahdlatul Ulama Nusa Tenggara Barat, Mataram, Indonesia

³ Doctoral Program, Faculty of Industrial Technology, Universitas Atma Jaya Yogyakarta, Yogyakarta, Indonesia

*Email Korespondensi: email.penulis@gmail.com

Sitasi: Contoh: Mz, D.S., Sunardi, S., Samsudin, A.R. (2025). Digital Transformation in Information Management Challenges and Strategic Implementation. *Varied Knowledge Journal*, 3(3), 146–156. <https://doi.org/10.71094/vkj.v1i1.172>

Diterima: 31-12-2025

Direvisi: 15-02-2026

Disetujui: 20-02-2026

Publish: 28-02-2026



Copyright © 2025, The Author(s). This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International.

Abstract Digital transformation has emerged as a strategic phenomenon driving substantial changes in organizational information management. This study aims to identify key challenges and analyze implementation strategies for digital transformation within information management practices. A qualitative approach was employed through a literature-based study, utilizing thematic analysis of relevant scholarly sources. The findings indicate that the primary challenges of digital transformation encompass structural, technological, and cultural dimensions, which interact dynamically and influence implementation effectiveness. On the other hand, digital transformation contributes positively to improving information quality, enhancing system efficiency, and enabling data-driven decision-making. However, these benefits are not automatic; they are highly contingent upon the quality of information governance and the organizational readiness to adopt digital technologies strategically. Furthermore, this study identifies several effective implementation strategies, including the integration of knowledge management, the strengthening of digital leadership, the application of change management practices, and the continuous evaluation of information systems. Based on these findings, a conceptual model is proposed, positioning information management and knowledge management as mediating variables in the relationship between digital transformation and organizational performance. This study contributes theoretically to the advancement of digital-based information management research and offers practical implications for organizations in designing more adaptive and sustainable digital transformation strategies.

Keywords: Digital Transformation, Information Management, Knowledge Management, Information Systems

Abstrak Transformasi digital telah menjadi fenomena strategis yang mendorong perubahan signifikan dalam pengelolaan informasi organisasi. Penelitian ini bertujuan untuk mengidentifikasi tantangan serta menganalisis strategi implementasi transformasi digital dalam manajemen informasi. Metode yang digunakan adalah pendekatan kualitatif berbasis kajian literatur dengan teknik analisis tematik terhadap berbagai sumber ilmiah yang relevan. Hasil penelitian menunjukkan bahwa tantangan utama transformasi digital meliputi aspek struktural, teknologis, dan kultural, yang saling berinteraksi dan memengaruhi efektivitas implementasi. Di sisi lain, transformasi digital memberikan dampak positif terhadap peningkatan kualitas informasi, efisiensi sistem, serta pengambilan keputusan berbasis data. Namun, manfaat tersebut sangat bergantung pada kualitas tata kelola informasi dan kesiapan organisasi. Penelitian ini juga mengidentifikasi strategi implementasi yang efektif, meliputi integrasi knowledge management, penguatan digital leadership, penerapan change management, serta evaluasi sistem informasi secara berkelanjutan. Berdasarkan temuan tersebut, penelitian ini mengusulkan model konseptual yang menempatkan manajemen informasi dan knowledge management sebagai mediator dalam hubungan antara transformasi digital dan kinerja organisasi. Penelitian ini memberikan kontribusi teoretis dalam pengembangan kajian manajemen informasi berbasis digital serta implikasi praktis bagi organisasi dalam merancang strategi transformasi digital yang lebih adaptif dan berkelanjutan.

Kata Kunci: Transformasi Digital, Manajemen Informasi, Knowledge Management, Sistem Informasi

INTRODUCTION

Digital transformation has evolved into a global phenomenon that not only alters the technologies and tools utilized by organizations but also fundamentally reconstructs how organizations think, operate, and make decisions. In this context, digital transformation cannot be reduced to a mere process of technology adoption; rather, it must be understood as a strategic agenda that permeates all organizational dimensions—ranging from structure and business processes to organizational culture. This shift compels organizations to transition from conventional operational models toward more adaptive, integrated, and data-driven systems. Consequently, digital transformation serves as a key catalyst for enhancing operational efficiency, accelerating innovation, and strengthening organizational competitiveness in increasingly dynamic and uncertain environments (Kraus et al., 2022; Zhang & Wang, 2024).

Within this landscape, information management assumes an increasingly central role. Information is no longer viewed as a byproduct of organizational activities but as a strategic resource that shapes the quality of decision-making and policy direction. Organizations capable of managing information effectively tend to demonstrate greater agility in responding to change and anticipating risks. The transition toward digital-based systems necessitates more systematic and integrated information management practices, encompassing data collection, processing, storage, and real-time dissemination. The quality of these processes directly influences system performance and user satisfaction, as highlighted in the DeLone and McLean Information Systems Success Model, which identifies system quality and information quality as primary determinants of information system success (DeLone & McLean, 2003; Jeyaraj, 2020).

However, the practical implementation of digital transformation reveals that the process is neither linear nor free from challenges. Organizations encounter multidimensional barriers. Structurally, many remain constrained by rigid bureaucratic frameworks, limiting responsiveness to change. From a human resource perspective, insufficient digital competencies and low levels of technological literacy hinder the effective utilization of adopted systems. Meanwhile, from a technological standpoint, issues related to system integration, data quality, and information security often emerge as critical bottlenecks in achieving effective information management. These challenges are further intensified in public sector organizations, where regulatory constraints and administrative procedures frequently limit flexibility in decision-making and innovation (Farida, 2025; Nashikha et al., 2022; Mukroni & Sartika, 2025).

On the other hand, a growing body of literature suggests that the success of digital transformation is largely contingent upon an organization's ability to design appropriate and context-sensitive implementation strategies. Fragmented approaches—such as those focusing solely on technological adoption—tend to result in suboptimal outcomes. In contrast, integrative approaches that combine

knowledge management, digital leadership, and adaptive information governance have proven to be more effective in driving sustainable transformation. Knowledge management functions as a critical bridge between data and organizational learning processes, ensuring that information is not merely stored but transformed into actionable knowledge that supports decision-making (Hafeez, 2025; Schmitt, 2016). Furthermore, visionary and data-driven leadership plays a pivotal role in steering digital transformation efforts in alignment with organizational strategic objectives (Abdullah, 2024). Despite the growing discourse on digital transformation, a significant gap remains in the integration of digital transformation perspectives, information management, and context-specific implementation strategies. Much of the existing research tends to examine technological or organizational aspects in isolation, thereby limiting a comprehensive understanding of how digital transformation can be effectively implemented within an integrated information management framework. This lack of integration results in limited conceptual guidance for organizations in designing comprehensive transformation strategies.

In response to these challenges, this study seeks to address this gap by systematically examining the challenges faced by organizations in digital transformation and formulating relevant and applicable implementation strategies within the context of information management. The research questions guiding this study are: (1) What are the key challenges in digital transformation within information management? and (2) What implementation strategies are most effective in optimizing this process? Accordingly, the objectives of this study are to identify the challenges of digital transformation and to analyze implementation strategies that can be applied within the framework of information management.

Therefore, this study is expected to contribute not only to the theoretical development of digital-based information management research but also to provide practical implications for organizations in designing and implementing more adaptive, integrated, and sustainable digital transformation strategies.

RESEARCH METHODOLOGY

This study adopts a qualitative approach using a literature review method to identify, analyze, and synthesize scholarly findings related to digital transformation in information management. This approach is selected for its capacity to generate a comprehensive understanding of conceptual frameworks, the dynamics of challenges, and implementation strategies developed across prior studies, both theoretical and empirical. In this context, the literature review is not merely positioned as a compilation of information, but as a critical and analytical process aimed at integrating diverse perspectives into a more coherent body of knowledge. Such an approach aligns with contemporary research trends that recognize systematic review and thematic analysis as essential methods for examining complex and multidisciplinary fields, such as digital transformation (Zhang & Wang, 2024).

The data sources in this study consist of secondary data derived from relevant national and international scholarly journal articles. The selection of literature was conducted selectively based on source credibility, publication quality, and substantive relevance to the research focus. Academic databases such as Google Scholar, Scopus, and SINTA-indexed journals were used as primary references to ensure source validity. Inclusion criteria encompassed articles that directly address digital transformation, information management, or knowledge management, are published in reputable or accredited journals, and are relevant to issues of implementation challenges and

strategies. Furthermore, the selected literature primarily originates from recent publications within the past decade, while still incorporating foundational theoretical works, such as the DeLone and McLean Information Systems Success Model (DeLone & McLean, 2003). Conversely, articles lacking methodological clarity, substantive relevance, or originating from unverified sources were excluded from the analysis.

Data analysis was conducted using thematic analysis to identify patterns, themes, and conceptual relationships emerging from the reviewed literature. The process began with data reduction by grouping literature based on key focus areas, including digital transformation concepts, information management, implementation challenges, and organizational strategies. This was followed by categorization and coding to identify recurring themes, such as organizational resistance, digital literacy, system integration, and leadership roles. The next stage involved synthesis, where findings were integrated into a coherent conceptual framework explaining the relationship between digital transformation and information management. This process was further extended through interpretation to generate insights and formulate relevant and applicable implementation strategies. Through these stages, the study moves beyond mere description, offering critical analysis with conceptual value.

To ensure validity and reliability, several strategies were employed, including source triangulation through comparison of findings across different contexts and disciplines, the selection of high-quality peer-reviewed literature, and the use of well-established theoretical frameworks, such as the DeLone and McLean Information Systems Success Model. Additionally, a conceptual audit was conducted by re-examining relationships among key constructs to minimize interpretive bias. These measures ensure that the analytical outcomes maintain a high level of credibility and academic rigor.

Overall, this study employs an integrative analytical framework that combines three primary perspectives: digital transformation as the context of organizational change, information management as the core object undergoing transformation, and knowledge management as the mechanism mediating adaptation and innovation processes. These perspectives are analyzed simultaneously to identify causal and strategic relationships that determine the success of digital transformation implementation within organizations. Through this approach, the study is expected to provide a more comprehensive understanding and to propose a conceptual framework relevant to both scholarly development and practical applications of information management in the digital era.

RESULTS AND DISCUSSION

Identification of Digital Transformation Challenges

The literature analysis indicates that digital transformation in information management cannot be narrowly understood as a mere process of technology adoption; rather, it represents a comprehensive transformation involving complex dynamics across multiple organizational dimensions. This transformation encompasses structural change, technological readiness, and cultural adaptation, all of which are deeply interconnected and collectively determine the success of its implementation. In other words, the success or failure of digital transformation is not attributable to a single factor but emerges from the interaction of multiple elements within the organizational system.

From a structural perspective, a primary challenge lies in the organization's readiness to manage change in a systemic manner. Many organizations continue to operate within rigid and hierarchical structures originally designed for stability but increasingly misaligned with dynamic environments. Such structures tend to slow decision-making processes, limit cross-functional collaboration, and

hinder rapid responses to technological change. In contrast, digital transformation requires organizations to become more agile, adaptive, and data-driven, enabling faster and more transparent information flows across organizational units.

The lack of integration across organizational units further exacerbates this issue. Information systems developed in a fragmented and uncoordinated manner often result in *information silos*, where data is isolated within specific units without effective mechanisms for integration. This condition not only reduces operational efficiency but also risks generating suboptimal decisions due to incomplete information. This finding aligns with Kraus et al. (2022), who emphasize that digital transformation necessitates fundamental changes in organizational structures to support system integration and foster sustainable innovation.

From a technological standpoint, the challenges are equally complex. One of the most critical issues is the difficulty of integrating legacy systems with modern digital technologies. Many organizations rely on information systems developed to meet past needs, which were not designed for interoperability with contemporary digital infrastructures. Integration efforts often require substantial financial investment, extended timeframes, and carry risks of operational disruption. As a result, information flows that should ideally occur in real time are often constrained by the limitations of existing systems.

In addition, data quality emerges as a critical issue that cannot be overlooked. Digital transformation fundamentally relies on data as its core foundation; thus, the quality of data directly determines the quality of the information generated. Non-standardized, inaccurate, or outdated data can lead to biased and misleading information. In such circumstances, digital transformation may amplify errors, as automated systems replicate data inaccuracies more rapidly and extensively. Therefore, without robust data governance, digitalization risks creating an illusion of efficiency without genuinely improving decision-making quality.

The limitations of human resource competencies further intensify these technological challenges. Proficiency in information systems, data analytics, and digital technologies remains a significant gap in many organizations. This gap not only results in the underutilization of adopted systems but also limits the organization's ability to fully leverage technological potential. Farida (2025) highlights that the digital skills gap constitutes one of the most significant barriers to digital transformation, as advanced technologies cannot deliver optimal value without adequate human capacity.

Beyond structural and technological dimensions, cultural factors represent the most complex and decisive challenges. At its core, digital transformation entails a shift in mindset rather than merely a change in tools. However, this transformation often encounters deeply embedded organizational cultures characterized by resistance to change, reliance on established procedures, and limited trust in digital systems. Resistance does not always manifest explicitly; it may appear in passive behaviors, subtle opposition, or a lack of commitment to adopting new systems.

Moreover, the transition toward data-driven management requires a shift from procedure-oriented practices to analytical and innovation-oriented approaches. Such changes cannot occur instantaneously, as they are rooted in long-standing values, norms, and habits. Consequently, many digital transformation initiatives fail not due to technological shortcomings, but due to the inability to effectively manage cultural change.

From this perspective, digital transformation should be understood as a socio-organizational process that requires sensitivity to human and cultural dynamics. Overly technocratic approaches tend to overlook these dimensions, resulting in unsustainable implementation outcomes. Therefore, the

success of digital transformation depends critically on an organization's ability to balance structural change, technological readiness, and cultural adaptation. Without such integration, digital transformation risks being reduced to a technological project rather than a strategic process capable of generating tangible organizational value.

Impact Analysis on Information Management

Digital transformation exerts significant implications for information management, not only at the operational level but also across the strategic dimension of organizations. These impacts are primarily reflected in improvements in information quality, enhanced system efficiency, and a fundamental shift in decision-making paradigms. To systematically understand these relationships, the DeLone and McLean Information Systems Success Model provides a relevant analytical framework, as it emphasizes the interconnections among system quality, information quality, system use, user satisfaction, and the net benefits generated by information systems.

One of the most notable impacts of digital transformation is the improvement in information quality. Through the automation of data collection, processing, and storage, organizations are able to generate information that is more timely, relevant to user needs, and higher in accuracy. Digital systems enable the integration of previously fragmented data sources, resulting in more comprehensive information that supports deeper analysis. In this context, digital transformation not only accelerates the flow of information but also enhances its value as a foundation for decision-making.

However, improvements in information quality are not inherent to technology itself; rather, they depend critically on the quality of the underlying data. Non-standardized, incomplete, or invalid data can produce biased and potentially misleading information. In highly automated digital systems, such inaccuracies may be replicated rapidly and on a large scale. Therefore, the effectiveness of digital transformation is closely tied to the quality of data governance practices within the organization. In this regard, information quality cannot be separated from the robustness of data management processes. Jeyaraj (2020) emphasizes that information quality is a primary determinant of information system success, directly influencing user satisfaction and overall organizational effectiveness.

In addition to improving information quality, digital transformation significantly enhances the efficiency of information systems. Processes that were previously manual, repetitive, and prone to human error can now be automated through digital technologies. This automation reduces operational time and costs while increasing the consistency and reliability of information processing. Consequently, organizations are able to allocate resources more effectively toward strategic activities, such as data analysis and innovation development.

This efficiency is further strengthened by the ability of digital systems to integrate multiple information sources into a unified platform. Such integration enables real-time access to information, thereby accelerating communication and coordination across organizational units. In complex organizational environments, the capacity to access accurate information rapidly constitutes a significant competitive advantage. However, it is important to note that such efficiency does not occur automatically without well-integrated system design and adequate technological infrastructure. Fragmented systems may instead create redundancy and new inefficiencies. Within the DeLone and McLean framework, system quality emerges as a critical factor influencing system use and the resulting organizational benefits.

Furthermore, digital transformation drives a fundamental shift in organizational decision-making processes. Decision-making paradigms are transitioning from intuition-based approaches to data-

driven models. Organizations capable of effectively managing information are better positioned to identify trends, recognize opportunities, and respond to risks in a timely and accurate manner. In this context, information evolves from a supporting element into a central foundation for strategic decision-making.

Nevertheless, the availability of abundant data and information does not automatically lead to high-quality decisions. A key challenge lies in the organization's ability to interpret data critically and contextually. The same dataset may lead to different decisions depending on the analytical approach and interpretive framework applied. Therefore, digital transformation requires not only advancements in technological systems but also the strengthening of analytical competencies among human resources. The integration of technological capabilities and human expertise becomes a decisive factor in producing rational, evidence-based, and contextually relevant decisions.

From this perspective, high-quality information systems should no longer be viewed merely as operational tools but as strategic instruments that generate organizational value. Effective information systems are capable of linking data, information, and knowledge within an integrated flow, thereby supporting more adaptive and evidence-based decision-making processes. Consequently, digital transformation not only enhances efficiency and information quality but also repositions information management from an administrative function to a strategic function within the organization.

Implementation Strategies for Digital Transformation in Information Management

Based on the synthesis of the literature, the success of digital transformation in information management cannot be reduced to technological readiness alone; rather, it is largely determined by an organization's ability to design and execute integrative, adaptive, and sustainable strategies. Effective digital transformation requires an approach capable of simultaneously addressing structural, technological, and cultural challenges, ensuring that change extends beyond mere technology adoption and evolves into embedded and sustainable organizational capabilities. In this perspective, implementation strategy serves as the critical bridge between technological potential and the realization of organizational value.

One fundamental strategy is the integration of knowledge management into organizational digital systems. Digital transformation efforts that focus solely on data accumulation risk generating information overload without producing meaningful value. Therefore, organizations must establish mechanisms that convert data into information, and ultimately into actionable knowledge. In this context, knowledge management functions as a system that connects technology with organizational practices through knowledge sharing, collective learning, and continuous innovation. Digital systems supported by knowledge-sharing practices enable information to be actively processed and utilized in decision-making rather than merely stored. This aligns with Hafeez (2025), who demonstrates that knowledge management integration accelerates organizational adaptation during digital transformation. Additionally, personal knowledge management plays a crucial role in enhancing individual capacity to manage information independently, reflectively, and contextually (Schmitt, 2016), ensuring that transformation occurs not only at the system level but also at the individual level. At the same time, digital transformation requires leadership that extends beyond technical understanding and focuses on managing change strategically. Digital leadership plays a vital role in articulating a clear transformation vision, guiding organizations toward measurable objectives, and managing resistance throughout the transformation process. Effective leadership functions not only as a decision-making authority but also as a change agent capable of aligning technology, processes,

and people. In this regard, information governance becomes an inseparable component of digital leadership. Strong governance mechanisms are essential to ensure data quality, information security, and system standardization, all of which support integration and interoperability. Without clear governance structures, digital transformation risks creating information fragmentation and increasing data security vulnerabilities. Abdullah (2024) emphasizes that knowledge-based leadership supported by well-developed digital strategies is a key determinant of organizational transformation success. In the public sector context, digital governance also serves as a mechanism to enhance transparency and accountability, thereby strengthening organizational legitimacy (Meliana, 2025).

Furthermore, digital transformation is inherently a complex and multi-layered organizational change process, requiring systematic and structured change management approaches. The implementation of technology without adequate change management often leads to resistance, either in the form of explicit rejection or passive non-compliance that undermines system effectiveness. Therefore, change management strategies should include intensive communication, continuous training, and sustained support to ensure that individuals within the organization can adapt effectively to change. Participatory and inclusive approaches are particularly important in fostering a sense of ownership over the transformation process, ensuring that change is perceived not as an external imposition but as a shared organizational necessity. Mukroni and Sartika (2025) highlight that the effectiveness of change management strategies significantly influences digital transformation success, particularly in bureaucratic organizations that tend to exhibit higher resistance to change.

In addition, effective implementation strategies must incorporate continuous evaluation mechanisms. Digital transformation is not a one-time process but requires ongoing adjustment and refinement in response to evolving organizational needs. In this regard, the DeLone and McLean Information Systems Success Model provides a comprehensive evaluative framework to assess system quality, information quality, system usage, user satisfaction, and net benefits. This evaluative approach enables organizations to identify system weaknesses objectively and implement data-driven improvements. Consequently, digital transformation becomes a dynamic and adaptive process characterized by continuous improvement. This is supported by Rachman (2021), who demonstrates that systematic evaluation of information systems contributes directly to enhanced organizational performance.

Overall, effective digital transformation implementation strategies require strong integration among technology, people, and organizational structures. These three elements are inseparable, as each plays a complementary role in determining transformation success. Approaches that overemphasize a single dimension—such as technology—without aligning human resource readiness and organizational culture tend to result in suboptimal and unsustainable outcomes. Therefore, organizations must adopt a holistic and context-sensitive approach to ensure that digital transformation generates tangible strategic value.

Conceptual Model of Digital Transformation in Information Management

Based on the synthesis of the reviewed literature, this study proposes a conceptual model that aims to provide a more comprehensive explanation of the relationship between digital transformation, information management, and organizational performance. The model not only maps the relationships among variables but also clarifies the mechanisms through which digital transformation generates organizational value via systemic mediation processes.

Conceptually, the proposed model consists of four interrelated components. First, digital transformation is positioned as the primary driving force that initiates organizational change. This includes technology adoption, process digitalization, and the shift toward data-driven systems that form the foundation of modern information management. However, within this model, digital transformation is not treated as an end goal but rather as a starting point that enables broader organizational change.

Second, knowledge management functions as a mediating mechanism that bridges organizational adaptation to digital transformation. While digital technologies generate vast volumes of data, these do not automatically translate into value without effective knowledge management processes. Knowledge management facilitates the transformation of data into information, and subsequently into knowledge that can be strategically utilized. In this context, knowledge management plays a critical role in determining the organization's capacity to learn, adapt, and innovate within a digital environment.

Third, information management is positioned as the core operational system that integrates data and information management processes across the organization. It serves as the infrastructure that ensures effective, accurate, and relevant information flows. Within this model, information management represents the domain in which digital transformation is concretely implemented and where system quality and information quality are tested in everyday organizational practices.

Fourth, organizational performance is conceptualized as the ultimate outcome reflecting the overall success of the transformation process. Performance is not limited to operational efficiency but also encompasses the organization's ability to adapt, innovate, and make effective decisions in response to environmental changes. Thus, organizational performance is understood as the result of complex interactions among technology, information, and human factors.

The relationships among these components indicate that digital transformation does not directly lead to improved organizational performance. Instead, its effects are mediated by the effectiveness of knowledge management and information management. In other words, technology acts as an enabler that provides opportunities, but its strategic value depends on how organizations manage, interpret, and utilize the resulting information. Without strong mediating mechanisms, digital transformation risks remaining at the level of technical implementation without generating meaningful performance outcomes.

Furthermore, the model emphasizes that the success of digital transformation depends on a balanced integration of technology, people, and organizational structures. These elements are inseparable, as each plays a complementary role: technology provides tools and infrastructure, individuals act as agents who manage and utilize information, and organizations provide structural and cultural frameworks that shape the direction and effectiveness of implementation. Consequently, partial approaches—such as focusing solely on technology without addressing human capacity and organizational culture—are likely to result in suboptimal and unsustainable transformation outcomes. Overall, the proposed conceptual model functions not only as an analytical framework but also as a conceptual foundation for understanding and designing more comprehensive digital transformation strategies. By positioning information management and knowledge management as key mediating elements, the model offers a more integrative perspective on how digital transformation translates into organizational performance in the digital era.

CONCLUSION

This study confirms that digital transformation in information management is a multidimensional process that cannot be reduced to technological aspects alone, but instead involves complex interactions among organizational structure, technological readiness, and cultural dynamics. The challenges identified—ranging from rigid organizational structures and system integration complexities to cultural resistance to change—are interrelated and, if not managed systematically, may hinder the overall effectiveness of transformation.

At the same time, digital transformation demonstrates significant positive impacts, including improved information quality, enhanced system efficiency, and a shift toward data-driven decision-making paradigms. Information becomes more accessible, accurate, and relevant, while integrated systems enable more efficient and responsive workflows. However, these benefits are not automatic; they are highly dependent on the quality of information governance and the organization's readiness to strategically adopt and utilize digital technologies.

Furthermore, this study highlights that the success of digital transformation is strongly determined by integrative implementation strategies. Strengthening knowledge management enables the conversion of data into valuable knowledge, while digital leadership plays a crucial role in guiding transformation and managing organizational resistance. Simultaneously, systematic change management ensures effective adaptation, and continuous evaluation of information systems is necessary to maintain system relevance and performance. Within this framework, information management and knowledge management serve as key mediators linking digital transformation to improved organizational performance.

Based on these findings, organizations are encouraged to enhance human resource capacity—particularly in digital literacy and analytical capabilities—develop integrated information governance frameworks, adopt participatory change management strategies, and implement continuous system evaluation. Through these efforts, digital transformation can evolve beyond mere technology adoption into a strategic capability that enables organizations to manage information effectively and navigate the increasing complexity of dynamic environments.

REFERENCES

- Abdullah, H. A. (2024). The role of digital transformation strategy in knowledge leadership. *International Journal of Management Studies*, 31(2), 145–160.
- Ait-Bennacer, F. E., Aaroud, A., Akodadi, K., & Cherradi, B. (2022). Adopting digital transformation using knowledge management systems. *International Journal of Advanced Computer Science and Applications*, 13(9), 123–131. <https://doi.org/10.14569/IJACSA.2022.0130915>
- Al-Fraihat, D., Joy, M., Masa'deh, R., & Sinclair, J. (2020). Evaluating e-learning systems success: An empirical study. *Computers in Human Behavior*, 102, 67–86. <https://doi.org/10.1016/j.chb.2019.08.004>
- Chen, H., & Gao, Y. (2025). Digital transformation and organizational capability development. *Journal of Organizational Change Management*, 38(1), 55–72.
- Chen, M. (2025). Digital transformation in project management: Trends and implications. *Systems*, 13(8), 625. <https://doi.org/10.3390/systems13080625>
- DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems*, 19(4), 9–30. <https://doi.org/10.1080/07421222.2003.11045748>
- Egodawe, M., Sedera, D., & Bui, V. (2022). A systematic review of digital transformation literature. *arXiv*. <https://doi.org/10.48550/arXiv.2212.03867>
- Farida, F. (2025). Human resource management in digital transformation: Challenges and implications. *Jurnal Ilmiah Manajemen Kesatuan*, 13(1), 45–58.

- Hafeez, S. (2025). Knowledge management and SMEs' digital transformation: A systematic review. *Journal of Innovation & Knowledge*, 10(2), 100512. <https://doi.org/10.1016/j.jik.2025.100512>
- Irmawan, I. (2023). Literature review of information system success models in e-government. *Indonesian Journal of Operations Research*, 5(1), 1–10.
- Jeyaraj, A. (2020). DeLone and McLean models of information system success: Critical meta-review and research directions. *Information & Management*, 57(7), 103–140. <https://doi.org/10.1016/j.im.2020.103140>
- Jilek, C., et al. (2018). Managed forgetting to support information management. *arXiv*. <https://doi.org/10.48550/arXiv.1811.12155>
- Kraus, S., Durst, S., Ferreira, J. J., Veiga, P., Kailer, N., & Weinmann, A. (2022). Digital transformation in business and management research: An overview of the current status quo. *Journal of Business Research*, 139, 1–14. <https://doi.org/10.1016/j.jbusres.2021.10.028>
- Meliana, M. (2025). Digital governance and transformation strategy in public sector organizations. *Public Administration Journal*, 15(2), 210–225.
- Mukroni, M., & Sartika, I. (2025). Change management in digital transformation: Evidence from local government institutions. *Jurnal Studi Ilmu Sosial dan Politik*, 5(1), 77–90.
- Nashikha, A., et al. (2022). Anticipating knowledge management challenges in the digital age. *Explore: Journal of Information Systems*, 12(2), 89–101.
- Phan, A. C., Phan, T. C., & Trieu, T. N. (2022). Healthcare knowledge management systems in the era of big data. *Applied Sciences*, 12(9), 4512. <https://doi.org/10.3390/app12094512>
- Rachman, R. (2021). Analysis of e-government success using the DeLone and McLean model. *Sistemasi: Jurnal Sistem Informasi*, 10(2), 321–330. <https://doi.org/10.32520/stmsi.v10i2.1236>
- Rohim, R. (2025). Implementation of DeLone and McLean model in management information system evaluation. *Syntax Idea*, 7(1), 45–55.
- Schmitt, U. (2016). Designing personal knowledge management systems. *Informing Science: The International Journal of an Emerging Transdiscipline*, 19, 145–174. <https://doi.org/10.28945/3571>
- Widyaningrum, T. (2024). Evaluation of e-learning systems using DeLone and McLean model. *Journal of Education Technology*, 8(2), 150–162.
- Zhang, P., & Wang, Y. (2024). Digital transformation: A systematic literature review and bibliometric analysis. *arXiv*. <https://doi.org/10.48550/arXiv.2412.19817>