World Journal of Information Systems 3(4) 69-83
DOI: https://doi.org/10.17013/wjis.v3i4.72

Article

From Transformational Leadership to Digital Performance Management: An Information Systems Perspective on Organizational Performance

Vasco Santos [1,*], Filipa Martinho[1], Tiago Costa[1], Maria Liba[1], Domingos Martinho[1], Ricardo Marcão[1]

[1] ISLA Santarém, Portugal.

***** Correspondence: vasco.ribeiro@islasantarem.pt

(Article history: Received 10 September 2026; Received in revised form 11 October 2026; Accepted 13 November 2026; Available online 15 December 2026)

Abstract: Digital transformation is reshaping how organizations monitor performance, translate strategic objectives into operational outcomes, and support managerial decision-making. This study examines digital performance management from an Information Systems perspective, focusing on the relationship between transformational leadership, strategic alignment, digital technologies, data-driven decision-making, and organizational performance. Building on an integrative review of the literature, the paper extends the traditional understanding of performance management by examining the growing role of information systems, digital dashboards, business intelligence, data analytics, and artificial intelligence in enabling continuous and increasingly real-time performance monitoring. The analysis suggests that transformational leadership provides an important organizational foundation for aligning people and strategic objectives, while digital performance management systems provide the informational infrastructure through which such alignment can be monitored, evaluated, and translated into managerial action. Based on this synthesis, the study proposes a conceptual framework connecting transformational leadership and strategic alignment with digital performance management systems, data-driven decision-making, and organizational performance. The framework highlights that technology alone is insufficient to improve performance and that its organizational value depends on leadership, appropriate performance indicators, information quality, digital capabilities, and a culture supportive of learning and continuous improvement.

The study contributes to Information Systems research by integrating leadership and performance management perspectives with the digital infrastructures increasingly used to support organizational decision-making and performance improvement.

© 2026 ITMA. All rights reserved.

Keywords: Transformational Leadership; Digital Performance Management; Information Systems; Organizational Performance; Data-Driven Decision-Making; Business Intelligence; Artificial Intelligence; Strategic Alignment.

1. Introduction

Digital transformation has fundamentally changed how organizations formulate strategy, structure processes, use information, and create value. Digital technologies are no longer confined to supporting specific operational activities but increasingly shape organizational capabilities, business models, decision-making processes, and the relationship between business and information technology [1,2]. This transformation has also affected how organizational performance is conceptualized and measured, as digitally enabled environments require organizations to continuously evaluate outcomes, respond to changing conditions, and reconsider the metrics used to assess performance [2,3].

Within this context, performance management has evolved beyond periodic employee appraisal toward a more continuous and strategically integrated organizational process. Organizations increasingly depend on information systems to collect, integrate, analyze, and communicate performance-related data across different organizational levels. Digital dashboards, business intelligence, advanced analytics, and artificial intelligence (AI) provide new possibilities for monitoring key performance indicators (KPIs), identifying patterns and deviations, and supporting managerial decision-making. Research on big data analytics demonstrates that analytics capabilities can contribute to firm performance both directly and through organizational capabilities that transform data into actionable insights [4]. Consequently, performance management increasingly represents not only a managerial practice but also an Information Systems (IS)-enabled organizational capability.

Leadership remains an important component of this relationship. Transformational leadership has been associated with organizational performance through mechanisms such as organizational learning and innovation [5]. By articulating a shared vision, stimulating new ways of thinking, and supporting employee development, transformational leaders can create organizational conditions that facilitate adaptation and the implementation of strategic objectives. Nevertheless, leadership does not operate independently from organizational systems. As organizational processes become increasingly digital, the ability to translate strategic direction into measurable outcomes depends partly on the information infrastructures through which objectives are operationalized, performance information is generated, and organizational actors receive feedback.

This creates an important connection between transformational leadership, strategic alignment, and digital performance management. While transformational leadership can provide direction and mobilize organizational actors around shared objectives, digital performance management systems can provide the informational infrastructure necessary to translate those objectives into indicators, continuously monitor progress, identify deviations,

© 2026 ITMA. All rights reserved.

and support corrective action. From an IS perspective, this relationship is particularly relevant because digital technologies increasingly blur the traditional distinction between business strategy and IT strategy [1]. Information systems are therefore not merely technical instruments supporting an independently defined organizational strategy; they can become integral components of how strategy is implemented, monitored, adapted, and evaluated.

Data-driven decision-making represents a further component of this process. The organizational value of performance data depends on the capacity to transform data into information and information into managerial action. Analytics capabilities can improve organizational insights and performance, but their contribution depends on complementary organizational capabilities and processes [4]. Similarly, the increasing use of AI creates opportunities to automate analytical activities and augment managerial decision-making, while simultaneously introducing organizational and managerial challenges concerning the allocation of tasks and decision authority between humans and intelligent systems [6]. Digital performance management should therefore be understood as a socio-technical process rather than as the simple adoption of performance-monitoring technologies.

Despite extensive research addressing transformational leadership, digital transformation, analytics, and organizational performance, these streams have frequently developed from different theoretical perspectives. Digital transformation research emphasizes the strategic and organizational changes associated with digital technologies [2,3], while leadership research demonstrates the importance of transformational leadership for organizational learning, innovation, and performance [5]. At the same time, analytics research highlights the performance implications of organizational capabilities for extracting value from data [4]. Integrating these perspectives provides an opportunity to better understand how leadership and strategic objectives can be operationalized through digital performance management systems and subsequently translated into data-driven organizational action.

Accordingly, this study examines digital performance management from an Information Systems perspective and addresses the following research question: **How do digital performance management systems connect transformational leadership and strategic alignment with data-driven decision-making and organizational performance?** The study adopts an integrative literature review approach to synthesize research across Information Systems, digital transformation, leadership, analytics, and performance management. Based on this synthesis, a conceptual framework is developed linking transformational leadership, strategic alignment, digital performance management systems, data-driven decision-making, and organizational performance.

The study makes three primary contributions. First, it extends the relationship between transformational leadership and organizational performance by introducing an IS perspective and examining the digital infrastructures through which strategic direction can be operationalized and monitored. Second, it conceptualizes digital performance management systems as an organizational capability supported by information systems, analytics, digital

© 2026 ITMA. All rights reserved.

dashboards, and AI rather than merely as digital versions of traditional performance evaluation practices. Third, it proposes an integrative framework explaining how leadership, strategic alignment, information systems, and data-driven decision-making can interact in the pursuit of organizational performance. Overall, the analysis suggests that the performance value of digital technologies does not arise from technology alone but from their integration with leadership, organizational capabilities, strategic objectives, and decision-making processes.

2. Theoretical Background

Transformational leadership provides an important theoretical foundation for understanding how organizational actors respond to strategic and technological change. Rather than relying primarily on formal control and contingent rewards, transformational leadership emphasizes the articulation of a shared vision, intellectual stimulation, individualized consideration, and the development of commitment toward collective objectives. Previous research has associated transformational leadership with organizational learning and innovation, which can subsequently contribute to organizational performance [5]. This perspective is particularly relevant in digitally enabled environments, where organizations must continuously adapt processes, develop new capabilities, and encourage employees to engage with technological and organizational change.

The relevance of transformational leadership also extends to the Information Systems (IS) domain. Cho et al. [7] examined the relationship between transformational leadership and IS success and found that transformational leadership was positively associated with users' IS success, with perceived organizational support and system self-efficacy acting as mediating mechanisms. This relationship is important because it demonstrates that the organizational value of an information system cannot be understood exclusively through its technological characteristics. Leadership can influence how organizational members perceive, engage with, and ultimately derive value from information systems. In this sense, leadership and IS represent complementary dimensions of organizational performance: leadership can provide direction and facilitate engagement, while information systems provide infrastructures through which information is collected, processed, communicated, and incorporated into organizational activities.

This complementarity is particularly relevant to performance management. Transformational leaders may communicate strategic priorities, encourage learning, and mobilize employees around organizational objectives, but those objectives must ultimately be translated into measurable actions and observable outcomes. Performance management provides mechanisms through which this translation can occur. However, performance management should be distinguished from the narrower concept of performance measurement. While performance measurement primarily concerns the definition and use of metrics to assess results, performance management encompasses a broader organizational process involving objectives, strategies, targets, performance measures, information flows,

© 2026 ITMA. All rights reserved.

evaluation, and organizational learning. Ferreira and Otley [8] propose a holistic understanding of performance management systems in which organizational vision, key success factors, strategies, performance measures, target setting, evaluation, information flows, and system use are considered as interconnected components.

Such an integrated understanding becomes increasingly important in digitally enabled organizations because performance information is progressively generated, processed, and distributed through information systems. Key performance indicators (KPIs), dashboards, analytics, and reporting mechanisms are not merely isolated measurement instruments; they constitute part of an organizational information environment through which managers interpret performance, identify deviations from objectives, communicate priorities, and determine whether corrective or adaptive action is required. The effectiveness of performance management therefore depends not only on selecting appropriate indicators but also on the capacity to connect performance information with organizational strategy and managerial decision-making.

Strategic alignment provides an important theoretical connection between these dimensions. The relationship between organizational strategy and information technology has long represented a central concern within IS research. Henderson and Venkatraman [9] conceptualized strategic alignment through the interrelationships among business strategy, IT strategy, organizational infrastructure and processes, and IT infrastructure and processes. This perspective established that information technology should not be considered merely an operational support function but as an integral component of organizational transformation and strategic choice.

This principle has become even more relevant as digital technologies have progressively reduced the traditional separation between business and IT strategy [1]. Digital technologies can simultaneously support existing organizational objectives and enable new strategic possibilities, making alignment an increasingly dynamic process. Earlier research on continuous strategic alignment similarly emphasized the need to connect strategic management and information technology capabilities through organizational mechanisms involving governance, technology, human resources, and value management [10]. From this perspective, alignment is not a static organizational state but an ongoing process requiring continuous adjustment as strategic, organizational, and technological conditions evolve.

Performance management occupies an important position within this alignment process. Strategic objectives need to be operationalized through appropriate measures, while managers require information about whether organizational activities are producing the intended outcomes. Digital technologies can strengthen this process by enabling performance information to be collected, integrated, analyzed, and communicated at shorter intervals and across multiple organizational functions. Performance management can consequently evolve from a predominantly retrospective control mechanism toward a more continuous informational process that supports strategic monitoring, organizational learning, and adaptation.

© 2026 ITMA. All rights reserved.

This evolution also reinforces the role of data-driven decision-making. The availability of organizational data alone does not guarantee better decisions or superior performance. Organizational value emerges when data can be converted into relevant information, interpreted within an appropriate strategic context, and transformed into managerial action. Research on big data analytics capabilities demonstrates that the relationship between analytics and firm performance depends partly on organizational capabilities that enable firms to derive value from data [4]. Similarly, the increasing use of artificial intelligence introduces possibilities for automating analytical activities and augmenting human decision-making, while also creating new organizational challenges regarding the allocation of tasks, authority, and judgment between humans and intelligent systems [6].

These developments support a socio-technical interpretation of performance management. Digital technologies cannot be separated from the organizational contexts in which they are implemented and used. Leadership behaviors, strategic objectives, technological infrastructures, organizational capabilities, performance indicators, and human decision-making interact in determining whether performance information contributes to organizational outcomes. Transformational leadership can influence the conditions under which information systems are adopted and used [7]; strategic alignment connects technological capabilities with organizational priorities [9,10]; and performance management provides a structured process through which objectives, indicators, information, evaluation, and organizational action can be integrated [8].

Based on these theoretical foundations, this study conceptualizes **digital performance management systems (DPMS)** as IS-enabled organizational arrangements that integrate strategic objectives, performance indicators, digital technologies, data analysis, feedback, and managerial decision-making to support the continuous monitoring and improvement of organizational performance. This definition extends traditional performance management by explicitly incorporating the digital infrastructures through which performance information is generated, integrated, analyzed, and communicated. It also provides the theoretical basis for examining how business intelligence, digital dashboards, analytics, and artificial intelligence are transforming the informational architecture of organizational performance management.

3. Digital Performance Management Systems

The digitalization of performance management reflects a broader transformation in how organizations generate, process, and use performance information. While traditional systems rely largely on predefined indicators, periodic reporting, and retrospective assessments, advances in Information Systems (IS) enable data from multiple organizational sources to be integrated and analyzed with greater frequency and depth. Digital performance management systems (DPMS) therefore extend conventional performance management by embedding measurement, analysis, visualization, and feedback within an interconnected digital information infrastructure.

© 2026 ITMA. All rights reserved.

Key performance indicators (KPIs) remain central to these systems by translating strategic objectives into measurable dimensions of organizational activity. However, growing data availability shifts the challenge from obtaining information toward selecting strategically relevant indicators and presenting them in ways that support interpretation and action. Performance information has limited value when indicators are disconnected from strategic objectives, users face information overload, or data cannot be interpreted within organizational priorities.

Digital dashboards illustrate this transformation by integrating and visualizing performance information for monitoring and decision-making. Yigitbasioglu and Velcu [11] show that dashboard effectiveness depends on visualization, information presentation, flexibility, and alignment with users and tasks. Empirical evidence further indicates that dashboards can support problem solving, communication, and consistency, while contributing to perceived user productivity [12]. Their effectiveness therefore depends not simply on information availability but on providing accurate, relevant, timely, and understandable information that supports managerial action.

Business intelligence and analytics extend DPMS beyond descriptive reporting by helping organizations identify relationships, patterns, and explanations within complex datasets. Big data analytics capabilities can contribute to firm performance when organizations possess complementary capabilities that allow analytical insights to be incorporated into processes and decision-making [4]. The value of analytics therefore depends on both technological infrastructure and the organizational capacity to transform analytical outputs into managerial responses.

Artificial intelligence further extends these capabilities through automated analysis, pattern recognition, prediction, and decision support. Research on AI in performance measurement and management indicates that it can support more timely, predictive, and prescriptive approaches to organizational decision-making [13]. This shifts performance management beyond explaining historical outcomes toward anticipating deviations and identifying areas requiring managerial intervention.

AI should not, however, be interpreted as a substitute for managerial judgment. The automation–augmentation paradox indicates that intelligent technologies can simultaneously automate tasks and augment human capabilities [6]. Performance indicators and algorithmic recommendations still require interpretation within strategic and organizational contexts. Similarly, Modarelli et al. [14] emphasize that AI-enabled performance management can strengthen decision-making while requiring appropriate interaction between technological capabilities and human decision-makers.

DPMS should therefore be understood from a socio-technical perspective. Their effectiveness depends on the interaction between technological components—including integrated information systems, dashboards, analytics, and AI—and organizational components such as strategic objectives, governance, information quality, employee capabilities, managerial routines, and decision-making processes. Greater volumes of data do

© 2026 ITMA. All rights reserved.

not necessarily produce better performance management when information is fragmented, indicators are poorly defined, or users lack appropriate analytical capabilities.

Rather than functioning primarily as periodic mechanisms for evaluating past outcomes, DPMS can create a continuous informational connection between strategic objectives, organizational activities, observed results, and managerial decisions. Performance information can support the identification of deviations, resource allocation, organizational learning, and strategic adjustment. DPMS can therefore be understood as an information infrastructure connecting measurement with interpretation and interpretation with action.

Their contribution to organizational performance ultimately depends on integrating strategically relevant indicators, reliable data, analytical capabilities, and human judgment within organizational decision processes. Digital systems can make performance more visible and analytically accessible, but leadership and strategic alignment influence how that information is interpreted and translated into action. These relationships are examined in the following section.

4. Transformational Leadership, Strategic Alignment, and Data-Driven Performance

The organizational value of digital performance management systems (DPMS) depends on their integration with strategic priorities, managerial processes, and organizational action. Transformational leadership and strategic alignment are therefore central to digital performance management because they influence how performance information is interpreted and used in decision-making.

Transformational leadership provides strategic direction and encourages organizational members to engage with change, learning, and innovation. It can contribute to organizational performance through organizational learning and innovation [5] and influence IS success by strengthening organizational support and users' confidence in interacting with information systems [7]. Leadership and DPMS should therefore be understood as complementary: leadership provides the strategic context within which performance information acquires meaning, while DPMS provide evidence about progress toward organizational objectives.

Strategic alignment reinforces this relationship. Information Systems research emphasizes alignment between business and IS strategies [9], while empirical evidence associates alignment between business and IS strategic orientations with IS effectiveness and business performance [15]. This relationship has become increasingly important as information systems participate directly in business strategy execution and adaptation [1]. Within DPMS, strategic objectives must be translated into meaningful indicators, supported by appropriate data and systems, and communicated to decision-makers. Misalignment at any of these levels can reduce the strategic value of performance information.

Data-driven decision-making provides the mechanism through which this information can be transformed into organizational action. Digitalization increases the availability and timeliness of data, enabling organizations to use analytical evidence more systematically in managerial decisions. Evidence from the automotive industry demonstrates a relationship

© 2026 ITMA. All rights reserved.

between digitalization and data-driven decision-making while highlighting the organizational and technological factors influencing firms' capacity to exploit data [16].

Analytics can support decision-making and forecasting, with empirical evidence linking analytical capabilities, decision processes, and firm performance [17]. More recent research indicates that business analytics can contribute to performance through improved decision quality, reinforcing the argument that analytical resources create value when they support better organizational decisions [18]. The value of DPMS therefore lies not simply in producing more data but in enabling relevant information to inform managerial action.

Data-driven decision-making does not, however, eliminate managerial judgment. Managers must interpret performance information within strategic and organizational contexts and determine whether intervention is required. As AI-enabled systems increasingly generate predictions and recommendations, human and algorithmic decision-making involve both augmentation and automation [6]. Organizations consequently require complementary managerial, technological, and human capabilities to translate analytical insights into performance improvements [18]. Data-driven decision-making itself has also been associated with firm performance, reinforcing its role as an organizational capability through which digital resources can contribute to value creation [19].

Taken together, these relationships suggest an interconnected process in which transformational leadership provides organizational direction, strategic alignment connects that direction with IS capabilities, and DPMS operationalize strategic objectives through indicators, data integration, analytics, and feedback. Data-driven decision-making subsequently translates performance information into managerial action, with organizational performance representing a potential outcome rather than an automatic consequence of digital technology adoption.

This relationship is also recursive. Performance outcomes generate information that can reveal strategic deviations, challenge assumptions, and stimulate organizational learning. Leaders and managers can use this feedback to adjust objectives, resources, processes, or performance indicators. DPMS can therefore support a continuous cycle connecting leadership and strategy with information, decisions, actions, and organizational outcomes, providing the foundation for the conceptual framework proposed in the following section.

5. Conceptual Framework

The literature reviewed indicates that the relationship between digital technologies and organizational performance cannot be explained through technological adoption alone. Organizational value emerges from the interaction between leadership, strategic priorities, information systems, analytical capabilities, and managerial decision-making. Accordingly, this study proposes an integrative framework in which digital performance management systems (DPMS) provide an informational bridge connecting transformational leadership and strategic alignment with data-driven decision-making and organizational performance.

© 2026 ITMA. All rights reserved.

Transformational leadership provides the starting point of the framework by articulating a shared vision, supporting learning, and mobilizing organizational members around collective objectives. These characteristics have been associated with organizational learning, innovation, and performance [5] and can also influence conditions associated with successful information systems use [7]. In digitally enabled organizations, transformational leadership can facilitate strategic alignment by communicating priorities and supporting the integration of technological capabilities with organizational objectives. Accordingly:

P1. Transformational leadership positively supports the strategic alignment required for digitally enabled performance management.

Strategic alignment concerns the coherence between organizational objectives and the technological capabilities supporting their implementation [9,15]. Within performance management, this requires strategic priorities to be translated into appropriate indicators, data requirements, analytical processes, and reporting mechanisms. Technological sophistication alone does not guarantee useful performance information when indicators are disconnected from strategic priorities. Dashboard effectiveness similarly depends on the relationship among information presentation, users, tasks, and organizational requirements [11]. Strategic alignment therefore enables DPMS to function as mechanisms for strategy execution and performance monitoring rather than as isolated technological tools.

P2. Strategic alignment positively influences the organizational effectiveness of digital performance management systems by connecting digital capabilities and performance information with strategic objectives.

DPMS provide the informational infrastructure required for data-driven decision-making by integrating KPIs, dashboards, business intelligence, analytics, and AI-enabled capabilities. These systems can improve the accessibility, timeliness, integration, and analytical usefulness of performance information. Analytics capabilities can contribute to organizational performance when data are transformed into actionable insights [4], while dashboard research highlights the importance of effectively presenting and incorporating information into managerial activities [11,12]. DPMS therefore create value by connecting organizational data with strategic objectives and facilitating the identification of deviations, patterns, and emerging performance issues.

P3. Effective use of digital performance management systems positively supports data-driven decision-making by improving the availability, integration, analysis, and interpretability of strategically relevant performance information.

Data-driven decision-making connects digital performance information with organizational action. Performance data alone do not improve organizational results; information must influence managerial decisions and subsequent actions. Empirical research demonstrates relationships between analytics capabilities, decision-making processes, and firm performance [4,17]. However, data-driven decision-making does not eliminate managerial judgment. AI and advanced analytics can augment decision processes, while strategic context and organizational priorities continue to require human interpretation. The

© 2026 ITMA. All rights reserved.

automation–augmentation perspective similarly suggests that intelligent technologies can simultaneously automate analytical activities and enhance human decision-making capabilities [6].

P4. Data-driven decision-making positively contributes to organizational performance by enabling managers to translate performance information into more informed and adaptive organizational action.

Together, the propositions describe an interconnected pathway in which transformational leadership supports strategic alignment; strategic alignment facilitates the effective configuration and use of DPMS; DPMS provide strategically relevant performance information; and data-driven decision-making translates this information into managerial action and potential performance improvements.

The framework is nevertheless recursive rather than strictly linear. Organizational outcomes generate new information that can reveal deviations, challenge assumptions, and lead managers to reconsider strategic priorities, indicators, processes, or digital technologies. DPMS therefore support a continuous feedback process connecting strategy, organizational activity, performance information, decisions, and outcomes. Transformational leadership can reinforce this process by encouraging performance information to be used not only for control but also for learning and adaptation.

Overall, the framework extends conventional performance management by positioning Information Systems as an active component of the relationship between leadership and organizational performance. DPMS are conceptualized not merely as digital reporting tools but as an organizational information infrastructure through which strategic objectives become measurable, performance becomes visible, data become actionable, and organizational outcomes inform subsequent strategic adaptation.

6. Discussion and Implications

The conceptual framework developed in this study explains how transformational leadership, strategic alignment, digital performance management systems (DPMS), and data-driven decision-making can interact to support organizational performance. Its central implication is that performance improvements cannot be attributed to technology alone. Organizational value depends on information systems being aligned with strategic priorities, embedded in managerial processes, and used to translate performance information into action. This interpretation is consistent with Information Systems research emphasizing strategic alignment [1,9,15] and complementary organizational capabilities in generating value from digital resources [4].

The framework extends the established relationship between transformational leadership and organizational performance. Transformational leadership can contribute to performance through organizational learning and innovation [5] and influence information systems success through organizational and individual mechanisms [7]. In digitally enabled environments, DPMS complement leadership by providing the informational infrastructure

© 2026 ITMA. All rights reserved.

through which strategic objectives become measurable and observable. This positions performance management as a socio-technical capability integrating objectives, measures, information flows, technological infrastructures, and managerial processes [8].

Strategic alignment is central to this relationship. The classical alignment perspective emphasizes coherence among business strategy, IT strategy, organizational infrastructure, and technological infrastructure [9]. As digital technologies become increasingly embedded in business strategy [1], DPMS can support continuous alignment by connecting organizational priorities with measurable indicators and operational data. Performance management thus becomes part of the feedback architecture of strategic execution rather than merely a retrospective evaluation mechanism.

The framework also distinguishes between data availability and the organizational capacity to derive value from data. Analytics capabilities can contribute to performance, but their value depends on complementary organizational processes and capabilities [4]. Analytical capabilities can also influence decision-making and forecasting associated with firm performance [17]. Data-driven decision-making therefore represents a critical mechanism through which digitally generated performance information can be translated into organizational action.

AI further strengthens the analytical potential of DPMS through pattern identification, anomaly detection, prediction, and decision support. However, the automation–augmentation paradox indicates that AI can simultaneously automate tasks and enhance human capabilities [6]. Greater analytical sophistication should therefore complement rather than automatically replace managerial judgment, particularly when performance information requires interpretation within strategic and organizational contexts.

These relationships also have practical implications. Organizations should design DPMS around strategic information requirements rather than technological functionality. KPIs, dashboards, analytics, and AI applications should reflect organizational objectives and managerial decision needs. Dashboard research demonstrates that usefulness depends partly on information presentation and alignment with users and tasks [11,12]. Data quality, analytical competencies, governance, and employee capabilities are equally important, since increasing the volume of performance information will not improve decisions when data are unreliable or organizational actors cannot effectively interpret them.

Leadership remains important throughout this process. Leaders influence strategic priorities, attitudes toward technological change, and how performance information is interpreted and used. Transformational leadership can complement digital visibility by encouraging performance information to be used not only for control but also for learning, problem solving, adaptation, and continuous improvement.

From an IS perspective, DPMS success should consequently be evaluated beyond technical implementation or system usage. Relevant outcomes include strategic visibility, information and decision quality, organizational responsiveness, and performance. Future empirical research should test the four propositions developed in this study and examine

© 2026 ITMA. All rights reserved.

whether data-driven decision-making mediates the relationship between DPMS and organizational performance and whether digital capabilities, information quality, organizational culture, or environmental dynamism moderate these relationships.

Future research should also investigate AI-enabled DPMS, particularly how predictive and prescriptive capabilities affect managerial authority and the balance between automation and human judgment. Transparency, accountability, algorithmic bias, privacy, and responsible use of organizational data will become increasingly relevant as these technologies develop.

Overall, the framework contributes to the intersection between Information Systems and organizational management by conceptualizing digital performance management as a mechanism connecting strategic intent, organizational information, managerial interpretation, decision-making, and performance outcomes. It extends the transformational leadership–performance relationship into a digitally enabled context and shifts attention from technology adoption toward the organizational mechanisms through which information systems create value.

7. Conclusion

Digital transformation has changed how organizational performance is managed, shifting performance management from a predominantly periodic and retrospective activity toward a more continuous, data-driven, and strategically integrated capability. This study examined this evolution from an Information Systems perspective by integrating transformational leadership, strategic alignment, digital performance management systems (DPMS), data-driven decision-making, and organizational performance within a common conceptual framework.

The analysis suggests that technology alone is insufficient to improve organizational performance. Transformational leadership provides direction and supports learning and adaptation, while strategic alignment connects organizational priorities with technological capabilities. DPMS provide the informational infrastructure for monitoring and analyzing strategic objectives, and data-driven decision-making enables this information to be translated into managerial action. Organizational performance therefore depends on the interaction among leadership, strategy, information systems, organizational capabilities, and human decision-making.

The study contributes theoretically by extending the relationship between transformational leadership and organizational performance into a digitally enabled context. By conceptualizing DPMS as an IS-enabled organizational capability, the proposed framework connects leadership and strategic alignment with digital infrastructures and positions data-driven decision-making as a critical link between performance information and organizational outcomes. From a practical perspective, organizations should consequently approach digital performance management as an organizational transformation rather than simply as a technology implementation. Effective DPMS require strategically relevant

© 2026 ITMA. All rights reserved.

indicators, reliable data, appropriate analytical capabilities, and managers capable of interpreting and acting upon the information generated.

As a conceptual study, the proposed relationships have not been empirically tested and may vary according to organizational size, industry, technological maturity, and environmental context. Future research should therefore empirically examine the four propositions and investigate the mediating role of data-driven decision-making and the potential influence of digital capabilities, information quality, and organizational culture. Further research should also examine how AI-enabled DPMS affect managerial judgment, particularly regarding transparency, accountability, privacy, algorithmic bias, and the allocation of decision authority between humans and intelligent systems.

Ultimately, digital performance management should be understood as a socio-technical capability connecting strategic intent, organizational data, information systems, managerial decisions, and performance outcomes. This perspective moves beyond the digitalization of traditional performance measurement toward systems capable of supporting continuous learning, strategic adaptation, and informed organizational action.

References

[1] Bharadwaj, A.; El Sawy, O.A.; Pavlou, P.A.; Venkatraman, N. Digital business strategy: Toward a next generation of insights. *MIS Q.* **2013**, *37*, 471–482. DOI: 10.25300/MISQ/2013/37:2.3.

[2] Vial, G. Understanding digital transformation: A review and a research agenda. *J. Strateg. Inf. Syst.* **2019**, *28*, 118–144. DOI: 10.1016/j.jsis.2019.01.003.

[3] Verhoef, P.C.; Broekhuizen, T.; Bart, Y.; Bhattacharya, A.; Dong, J.Q.; Fabian, N.; Haenlein, M. Digital transformation: A multidisciplinary reflection and research agenda. *J. Bus. Res.* **2021**, *122*, 889–901. DOI: 10.1016/j.jbusres.2019.09.022.

[4] Wamba, S.F.; Gunasekaran, A.; Akter, S.; Ren, S.J.-F.; Dubey, R.; Childe, S.J. Big data analytics and firm performance: Effects of dynamic capabilities. *J. Bus. Res.* **2017**, *70*, 356–365. DOI: 10.1016/j.jbusres.2016.08.009.

[5] García-Morales, V.J.; Jiménez-Barrionuevo, M.M.; Gutiérrez-Gutiérrez, L. Transformational leadership influence on organizational performance through organizational learning and innovation. *J. Bus. Res.* **2012**, *65*, 1040–1050. DOI: 10.1016/j.jbusres.2011.03.005.

[6] Raisch, S.; Krakowski, S. Artificial intelligence and management: The automation–augmentation paradox. *Acad. Manag. Rev.* **2021**, *46*, 192–210. DOI: 10.5465/amr.2018.0072.

[7] Cho, J.; Park, I.; Michel, J.W. How does leadership affect information systems success? The role of transformational leadership. *Inf. Manag.* **2011**, *48*, 270–277. DOI: 10.1016/j.im.2011.07.003.

[8] Ferreira, A.; Otley, D. The design and use of performance management systems: An extended framework for analysis. *Manag. Account. Res.* **2009**, *20*, 263–282. DOI: 10.1016/j.mar.2009.07.003.

[9] Henderson, J.C.; Venkatraman, N. Strategic alignment: Leveraging information technology for transforming organizations. *IBM Syst. J.* **1993**, *32*, 4–16.

[10] Venkatraman, N.; Henderson, J.C.; Oldach, S. Continuous strategic alignment: Exploiting information technology capabilities for competitive success. *Eur. Manag. J.* **1993**, *11*, 139–149. DOI: 10.1016/0263-2373(93)90037-I.

© 2026 ITMA. All rights reserved.

[11] Yigitbasioglu, O.M.; Velcu, O. A review of dashboards in performance management: Implications for design and research. *Int. J. Account. Inf. Syst.* **2012**, *13*, 41–59. DOI: 10.1016/j.accinf.2011.08.002.

[12] Yigitbasioglu, O.M.; Velcu-Laitinen, O. The use of dashboards in performance management: Evidence from sales managers. *Int. J. Digit. Account. Res.* **2012**, *12*, 39–58. DOI: 10.4192/1577-8517-v12_2.

[13] Sardi, A.; Modarelli, G. Integrating artificial intelligence into performance measurement and management: A systematic literature review. *Int. J. Product. Perform. Manag.* **2026**, *75*, 1979–2022. DOI: 10.1108/IJPPM-05-2025-0362.

[14] Modarelli, G.; Amelio, S.; Gazzola, P.; Sardi, A. Unlocking human power: How artificial intelligence can transform performance measurement and management systems enhancing organizational decision-making. *Int. Entrep. Manag. J.* **2026**, *22*, Article 100. DOI: 10.1007/s11365-026-01234-5.

[15] Chan, Y.E.; Huff, S.L.; Barclay, D.W.; Copeland, D.G. Business strategic orientation, information systems strategic orientation, and strategic alignment. *Inf. Syst. Res.* **1997**, *8*, 125–150. DOI: 10.1287/isre.8.2.125.

[16] Colombari, R.; Geuna, A.; Helper, S.; Martins, R.; Paolucci, E.; Ricci, R.; Seamans, R. The interplay between data-driven decision-making and digitalization: A firm-level survey of the Italian and U.S. automotive industries. *Int. J. Prod. Econ.* **2023**, *255*, 108718. DOI: 10.1016/j.ijpe.2022.108718.

[17] Chatterjee, S.; Chaudhuri, R.; Gupta, S.; Sivarajah, U.; Bag, S. Assessing the impact of big data analytics on decision-making processes, forecasting, and performance of a firm. *Technol. Forecast. Soc. Change* **2023**, *196*, 122824. DOI: 10.1016/j.techfore.2023.122824.

[18] Mamakou, X.J. Linking business analytics to firm performance: A mixed-method analysis of capabilities, decision quality, and firm size. *J. Bus. Res.* **2026**, *212*, 116219. DOI: 10.1016/j.jbusres.2026.116219.

[19] Xu, M.; Lu, B. The data-driven decision-making, sustainable value creation, and international firm performance: Micro-level evidence based on AI language models. *PLoS One* **2026**, *21*, e0340731. DOI: 10.1371/journal.pone.0340731.

© 2026 ITMA. All rights reserved.