Formosa Journal of Science and Technology (FJST)
Vol. 4, No. 11, 2025: 3585-3600

Orchestrating Organizational Resilience through Digital Leadership and Artificial Intelligence Capability in the Age of Disruption

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A R T I C L E I N F O

Keywords: Orchestrating, Organizational Resilience, Digital Leadership, Artificial Intelligence Capability, Age of Disruption.

Received : 6, October
Revised : 20, October
Accepted: 25, November

A B S T R A C T

This study investigates the influence of digital leadership and artificial intelligence capabilities on organizational resilience in Jambi Province and examines how both factors interact to shape strategic orchestration in the disruption era. Using a mixed-methods sequential explanatory design, the research first conducted a survey of 40 leaders and managerial staff from government agencies, universities, and private organizations that have adopted digital systems. This was followed by in-depth interviews with five key informants. Quantitative analysis using multiple linear regression and qualitative thematic analysis reveal that digital leadership significantly enhances organizational resilience through improved adaptability and data-driven decision-making, while AI capabilities strengthen operational efficiency and innovation. The integration of both elements creates more resilient and sustainable organizations. The study contributes conceptually to technology-based organizational resilience theory and offers practical insights for developing digital managerial strategies at the regional level.

ISSN-E: 2964-6804
DOI: https://doi.org/10.55927/fjst.v4i11.312
https://traformosapublisher.org/index.php/fjst

INTRODUCTION

The rapid development of digital technology has changed almost all aspects of organizational life, from operational systems, communication patterns, to decision-making strategies. In a global context, digital disruption has created immense pressure on organizations to adapt through innovation and strategic resilience. Organizations that fail to adapt to technology-based changes tend to experience stagnation and lose competitiveness in the market (Ghobakhloo, 2022). In Indonesia, this phenomenon can be seen in various sectors, such as education, government, and industry, which have begun to transform digitally but are not fully prepared to face the uncertainty of the business environment (Wicaksono & Hartati, 2023). This condition shows the need for leadership that is able to effectively orchestrate digital transformation to maintain organizational sustainability.

Digital leadership has emerged as an important element in building organizational resilience in the era of disruption. Leaders who have high digital literacy are able to drive innovation, accelerate technology adoption, and build an organizational culture that is adaptive to change (Westerman et al., 2021). In the context of public and private organizations in the region, digital leadership not only plays a role in strategic decision-making, but also in shaping a vision of sustainable technology-based transformation (Purwanto, 2022). This kind of leadership is a determining factor in the success of the implementation of digital systems in an organizational environment that is still adapting to structural and cultural changes.

In addition to digital leadership, artificial intelligence capabilities are also an important pillar in strengthening organizational resilience. AI technology is able to help leaders and managers identify patterns, analyze risks, and support data-driven decision-making quickly and accurately (Dwivedi et al., 2021). In practice, organizations that successfully integrate AI into their management strategies tend to have higher competitiveness and stronger resilience in the face of external shocks (Huang & Rust, 2023). However, the implementation of AI in many organizations in Indonesia still faces challenges in the form of limited human resources, infrastructure, and system integration that is not optimal (Satria & Nugroho, 2022).

Organizational resilience is a key concept in facing an era of disruption marked by uncertainty and rapid change. A resilient organization is not only able to survive crises, but also able to transform to be more adaptive and innovative after facing challenges (Duchek, 2020). This resilience includes the ability to predict disruptions, prepare responsive strategies, and build continuous organizational learning (Lengnick-Hall & Beck, 2021). In local contexts such as Jambi Province, organizational resilience is an important issue for government agencies, universities, and the private sector that are trying to accelerate digital transformation, but often do not have an integrated leadership and technology strategy.

A number of previous studies have addressed the relationship between digital leadership and organizational resilience. For example, research by Kane (2021) emphasizes that the effectiveness of digital leadership is highly dependent

on the leader's ability to manage technology-based change. However, most of the research still focuses on large organizations in developed countries, while the context of regional organizations in developing countries such as Indonesia is still poorly explored (Marques & Ferreira, 2023). Similarly, studies on the role of AI capabilities on organizational resilience have focused more on the technological aspect, rather than the integration between leadership and organizational strategy (Rahim et al., 2022). This condition shows that there is a research gap that needs to be filled with more contextual and empirical studies.

The research gap is also evident in the lack of studies that directly link the orchestration between digital leadership and artificial intelligence capabilities in shaping organizational resilience at the local level. Many studies have examined the two variables separately without looking at how the interaction between the two creates synergistic effects on the organization's ability to adapt (Chen & Lin, 2023). In the context of organizations in Jambi, the integration is very important because many institutions are still in the early stages of digital transition that require strategic leadership to utilize AI effectively (Ramadhan, 2024). Therefore, this research is here to fill this space by providing an empirical analysis of how digital leadership and AI capabilities interact in strengthening organizational resilience.

Explicitly, this study aims to analyze the influence of digital leadership and artificial intelligence capabilities on organizational resilience in the era of disruption, as well as explore how these two factors can be synergistically orchestrated in the organizational context in Jambi Province. Through a mixed methods approach, this study seeks to provide an in-depth understanding of organizational adaptation mechanisms in the midst of dynamic technological changes (Santoso & Li, 2023). In addition, this study also seeks to identify the inhibiting and supporting factors that affect the effectiveness of the implementation of leadership-based digital transformation and AI.

In terms of theoretical contribution, this study expands the literature on strategic management and organizational resilience by adding an orchestration dimension between digital leadership and artificial intelligence capabilities. The research findings are expected to enrich understanding of how the integration of the two can shape adaptive organizational resilience models in the digital age (Zhou & Wang, 2022). Practically, the results of this research can be a reference for organizational leaders, both in the public and private sectors, to design digital leadership strategies that are in line with the development of AI capabilities to strengthen the competitiveness and sustainability of organizations (Mulyono, 2023).

Thus, this research seeks to answer the empirical and conceptual needs of the importance of orchestrating digital leadership and artificial intelligence technology in building resilient organizations in the era of disruption. In the context of Jambi, the results of this research are expected not only to contribute to strengthening technology-based organizational governance, but also provide strategic direction for a more inclusive and sustainable digital transformation at the regional level.

THEORETICAL REVIEW

Organizational Resilience in the Era of Disruption

Organizational resilience is a multidimensional ability that allows organizations to effectively anticipate, respond, and transform themselves when facing environmental uncertainty (Duchek, 2020). This concept emphasizes the importance of adaptive learning, resource reconstruction, and continuous innovation as the key to maintaining organizational sustainability (Lengnick-Hall & Beck, 2021). In the context of digital disruption, organizational resilience is increasingly closely linked to technological readiness and leadership capacity that determine the extent to which organizations are able to maintain performance in the midst of rapid change (Awad & Martín-Rojas, 2024). Organizations that have high resilience also build an agile work culture and proactive risk management system, so that they are able not only to recover from crises but also to take advantage of the opportunities that arise from these disruptions (Ciampi et al., 2021). Thus, organizational resilience in the digital era is not just a condition of stability, but a dynamic capability that integrates technology, people, and strategies in a sustainable manner.

Digital Leadership as a Catalyst for Transformation

Digital leadership has developed as a strategic competency that combines technology literacy with a managerial vision to steer the digital transformation of the organization (Nasrun et al., 2022). Digital leaders act as drivers of innovation, encourage experimentation, and ensure alignment between digital initiatives and organizational strategic goals (López-Figueroa et al., 2025). In addition to mastery of technology, digital leadership also requires humanistic skills such as empathy, communication, and trust building, which are important in creating an adaptive digital culture (Aziz & Daryanto, 2025). Recent research shows that digital leadership improves organizational agility through data-driven decision-making and predictive analytics (Westerman et al., 2021). Therefore, digital leadership serves not only as a managerial skill, but also as a transformational force that strengthens an organization's ability to adapt, innovate, and build long-term resilience.

Artificial Intelligence Capabilities as a Strategic Driver

Artificial intelligence capabilities are defined as the ability of organizations to acquire, develop, and utilize AI resources, both in the form of data infrastructure and human expertise to achieve strategic goals (Rahman et al., 2024). AI technology strengthens an organization's decision-making, operational efficiency, and adaptive intelligence in the face of environmental complexity (Zhang et al., 2022). In the manufacturing and service sectors, AI capabilities have been proven to strengthen operational resilience through predictive maintenance, process optimization, and early warning of risks (Nayal et al., 2024). In addition, AI also encourages knowledge-based creativity and green innovation that contributes to sustainable performance (Al-Ayed, 2024). These findings confirm that AI capabilities are not just a technology asset, but a strategic foundation that underpins an organization's competitiveness, resilience, and long-term transformation.

Strategic Orchestration between Digital Leadership and AI Capabilities

The synergy between digital leadership and AI capabilities is now recognized as a strategic orchestration mechanism that strengthens organizational resilience in the era of disruption (Chen & Lin, 2023). This orchestration demands leaders' ability to read changes in the environment, capture opportunities through AI-based insights, and reconfigure organizational resources adaptively (Teece, 2012). Empirical studies show that the interaction between digital leadership and AI capabilities increases the level of adaptability, innovation, and alignment of organizational strategies (Correia et al., 2021). Furthermore, AI-powered leadership also strengthens evidence-based governance with faster, more accurate, and transparent decision-making (Al Shakarchi & Nafzaoui, 2025). Thus, the integration of digital leadership and AI capabilities forms a strategic orchestration that transforms disruption into opportunities for continuous organizational renewal and resilience.

METHODOLOGY

Types and Approaches to Research

This study uses a mixed methods approach with a sequential explanatory design, which is the combination of quantitative and qualitative methods sequentially to obtain a comprehensive understanding of the influence of digital leadership and artificial intelligence capabilities on organizational resilience. Sequential explanatory design begins with the collection and analysis of quantitative data, then continues with qualitative exploration to clarify and deepen statistical findings (Creswell & Plano Clark, 2021). This approach was chosen because it is relevant in studying complex organizational phenomena, where relationships between variables need to be analyzed in a measured way and interpreted through participants' experiences in the field (Venkatesh et al., 2022).

Population and Sampling Techniques

The research population includes leaders and managerial staff from local government institutions, universities, and private companies in Jambi Province, Indonesia, who have implemented digital-based management systems. At the quantitative stage, the study involved 40 respondents who were selected using the non-probability purposive sampling technique. This technique was chosen because it allows researchers to recruit participants who have direct competence and experience in the field of digital leadership and technology transformation (Palinkas et al., 2021). Respondents consisted of section heads, field heads, and senior staff involved in the digital management and operations of the organization. The qualitative stage involved five key informants who were purposively determined, namely the Head of the Communication and Information Service, the Chancellor of a private university, the Head of the Human Resources Section, the Information Technology Manager, and the Head of the service company. The combination of these two sampling stages allows the research to obtain statistically representative data as well as contextually deep (Silverman, 2022).

Data Collection Techniques and Research Instruments

Quantitative data is collected through a structured questionnaire that is distributed online using Google Forms. The instruments were adapted from indicators that have been validated in previous studies, namely: digital leadership from El Sawy et al. (2021), artificial intelligence capabilities from Chatterjee et al. (2023), and organizational resilience from Duchek (2020). Each question item uses a five-point Likert scale, from "strongly disagree" to "strongly agree." The validity test of the content was carried out through expert judgment by three academics who are competent in the field of organizational management and digital transformation. The construct validity and reliability test was carried out through exploratory factor analysis and Cronbach's alpha calculation, with a value above 0.70 as an acceptable reliability limit (Hair et al., 2022). Qualitative data was collected through semi-structured interviews, which provided a space for informants to explain their experiences with digital orchestration and artificial intelligence-based decision-making.

Research Procedure

The research process is carried out in four main stages. The first stage is a preliminary study to identify the appropriate organization and obtain data collection permissions. The second stage is in the form of a quantitative survey to analyze the relationship between research variables. The third stage was conducted an in-depth qualitative interview with key informants to explain the mechanisms underlying the relationships of variables that had been found in the previous stage. The fourth stage is data triangulation and validation of results through member checking techniques to ensure the validity of findings (Noble & Heale, 2019). All stages of the research adhere to the principles of research ethics, where each participant is given the right of confidentiality and freedom to participate voluntarily after receiving an adequate explanation.

Data Analysis Techniques

Quantitative data analysis was performed using multiple linear regression analysis with the help of IBM SPSS Statistics software version 28 to test the direct and indirect influences between variables. Normality, multicollinearity, and heteroscedasticity tests were carried out to ensure the fulfillment of statistical assumptions (Field, 2020). Qualitative data analysis is carried out through thematic analysis by following six steps according to Braun and Clarke (2021): understanding the data, performing initial coding, forming a theme, reviewing the theme, defining the theme, and compiling the final report. The coding process is assisted by NVivo 12 software, which allows the grouping of data based on emerging conceptual themes. The integration of quantitative and qualitative analysis results is carried out through data merging and joint display techniques, so that statistical patterns can be explained narratively through the real experiences of participants (Fetters & Molina-Azorin, 2020).

Validity, Reliability, and Integration of Findings

To ensure the validity and reliability of the research results, triangulation of methods and data sources was carried out. Quantitative validity is maintained

through rigorous instrument testing, while qualitative reliability is strengthened through peer debriefing and respondent validation (Lincoln & Guba, 2021). The integration of the two types of data results in a complete understanding of how digital leadership and artificial intelligence capabilities play a role in orchestrating organizational resilience in various institutional contexts in Jambi Province. This methodological combination ensures that research not only produces strong empirical evidence, but also makes a practical contribution to leadership and management strategies in an era of digital disruption.

RESULTS AND DISCUSSION

The Influence of Digital Leadership on Organizational Resilience

Quantitative analysis shows that digital leadership has a positive and significant influence on organizational resilience. The value of the regression coefficient is **b = 0.482**, t = **4.216**and p < **0.001**, indicating that the higher the adoption of digital leadership, the greater the organization's ability to adapt and survive in the midst of disruptive environmental changes. The construct reliability test showed that Cronbach's alpha value was **0.872**, which signifies a high level of internal consistency on the variable indicators of digital leadership. The results of the classical assumption test also showed that the data met the criteria of normality and there was no multicollinearity. Thus, the regression model constructed is considered valid to explain the relationship between digital leadership and organizational resilience.

Table 1. Regression Test Results of the Influence of Digital Leadership on Organizational Resilience

Variabel	Coephyses (β)	t-count	Sig.	Information
Digital Leadership	0.482	4.216	0.000	Signifikan

These findings are in line with the results of interviews that reveal that digital leadership is a major factor in creating organizational adaptability. This was confirmed by the Head of the Communication and Information Service who stated that "*Leaders who understand the direction of digital transformation are able to move all work units to be more responsive and efficient in dealing with technological changes*" (K, interview on August 14, 2025). The same view was also conveyed by the Rector of a private university who added that "*Digital leadership is not only about technical skills, but the ability to inspire teams to dare to innovate in the midst of uncertainty*" (R, interview on August 15, 2025). These findings show that visionary and participatory leadership aspects are an important foundation in building resilient organizations.

Artificial Intelligence Capabilities in Increasing Operational Efficiency and Innovation

The results of regression analysis show that artificial intelligence capabilities have a significant effect on organizational operational efficiency and innovation, with a coefficient value **b = 0.539**, t = **5.014**and p < **0.001**. These findings show that organizations with high ability to leverage AI technology have better levels of efficiency and innovation. The reliability value of constructs AI capabilities achieves **0.861**, indicating that the measurement indicator has a strong consistency. These results indicate that the implementation of AI-based systems helps organizations in speeding up decision-making processes, improving accuracy, and reducing human operational errors.

Table 2. Regression Test Results of the Influence of AI Capabilities on Efficiency and Innovation

Variabel	Coephyses (β)	t-count	Sig.	Information
AI Capabilities	0.539	5.014	0.000	Signifikan

In-depth interviews confirmed the findings. The Information Technology Manager explained that "*AI implementation has accelerated customer data analysis and minimized administrative errors that were previously common*" (T, interview on August 17, 2025). Meanwhile, the Head of the Human Resources Section added that "*with the support of AI systems, the recruitment and training process becomes more efficient because performance data can be analyzed automatically*" (S, interview on August 18, 2025). These two quotes reinforce that AI capabilities not only improve operational efficiency, but also encourage the creation of continuous innovation across various lines of the organization.

Synergy between Digital Leadership and Artificial Intelligence Capabilities on Organizational Resilience

The results of the regression model integration show that the synergy between digital leadership and artificial intelligence capabilities has a significant influence on organizational resilience with the value of determination **R^2 = 0.693**, meaning that about 69.3% of organizational resilience variations can be explained by a combination of these two variables. The coefficient of interaction between digital leadership and AI capabilities is **b = 0.427**, p < **0.01**, which indicates a strengthening effect when both variables work simultaneously. As such, organizations that have digitally-oriented leaders and mature AI systems tend to be better able to deal with disruption.

Table 3. Integrative Regression Model

Independent Variables	Coephyses (β)	Sig.	R^2	Information
Digital Leadership	0.312	0.002	0.693	Signifikan
AI Capabilities	0.354	0.001		Signifikan

Independent Variables	Coephyses (β)	Sig.	R^2	Information
Interaction (DL×AI)	0.427	0.009		Signifikan

Qualitative interviews reinforce these findings. The leader of the service company said that "*The use of AI will not be effective without leadership that is able to integrate it into the strategic vision of the organization*" (J, interview on August 20, 2025). The university chancellor also added that "*Digital-savvy leaders are able to orchestrate technology and human resources to move harmoniously to achieve organizational goals*" (R, interview on August 21, 2025). This shows that the relationship between leadership and technology is synergistic, not separate, in strengthening organizational resilience.

Digital AI Strategic Orchestration in Realizing Sustainable Organizational Resilience

The integration of quantitative and qualitative results reveals a pattern of strategic orchestration between digital leadership and AI capabilities that shape the resilience of a sustainable organization. The path analysis shows that the indirect effect of digital leadership on organizational resilience through AI capabilities is as much as **b = 0.212**, which means that AI capabilities mediate part of the relationship between the two. These findings reinforce the role of digital leadership as a catalyst for AI adoption and continuous innovation in organizations.

Table 4. Mediating Effect Analysis

Influence Path	Coephyses (β)	Information
Digital Leadership → AI Capabilities → Organizational Resilience	0.212	Significant Partial Mediation

Qualitative interviews show how the orchestration is realized in the field. The Head of the Communication and Information Service revealed that "*Digital orchestration requires a balance between technology, people, and strategic vision so that transformation does not just stop at the system, but becomes an organizational culture*" (K, interview on August 22, 2025). Meanwhile, the Information Technology Manager emphasized that "*AI is a key driver of innovation, but the strategic direction is still determined by leadership who understands how to use the technology sustainably*" (T, interview on August 23, 2025). This illustrates that the integration between digital leadership and artificial intelligence creates an adaptive, visionary, and sustainability-oriented orchestration of organizations in the era of disruption.

DISCUSSION

The results of this study show that digital leadership has a significant contribution to increasing organizational resilience in the midst of a dynamic era of disruption. Digital leadership plays a key driving factor in building an

organization's adaptive and responsive capabilities to changes in the strategic environment. Leaders who have a digital vision are able to direct organizations towards data-driven decision-making, service innovation, and cross-system work efficiency. This condition is in line with the view that digital leadership is a crucial element in strengthening organizational resilience because it allows for a faster and more targeted transformation process (Garcia-Molina et al., 2023). When leaders understand the potential of technology and are able to integrate it with organizational strategy, organizations can be more resilient in the face of uncertainty and increasingly complex market disruptions.

These findings also reinforce the argument that digital leadership not only impacts structural efficiency, but also shapes innovative cultures oriented towards continuous learning. Through a collaborative and technology-based leadership style, leaders are able to create space for employees to experiment and come up with creative solutions. Previous studies have shown that digitally oriented leaders are able to strengthen an organization's responsiveness to change and expand its innovation capacity through the use of smart technology (Nasrun et al., 2024). Therefore, digital leadership serves not only as a managerial tool, but also as a strategic foundation in building a competitive organization in the high-tech era.

Furthermore, the results of the study confirm that artificial intelligence capabilities have a strong effect on increasing organizational resilience through operational efficiency and acceleration of innovation. The implementation of AI encourages process automation, big data processing, and increased prediction accuracy in managerial decision-making. This is in line with the view that the application of AI can strengthen an organization's capacity to respond to external disruptions through strengthening learning structures and continuous innovation (Zhang et al., 2024). In the context of Jambi, organizations that leverage AI-based systems can reduce reliance on manual decision-making and increase the speed of adaptation to changing regulations and market needs.

In addition, the study found that the synergy between digital leadership and AI capabilities forms a strategic orchestration that determines organizational resilience. The integration of the two creates harmony between the direction of the leader's digital vision and the technological capabilities applied in the operational process. This combination results in organizations that are more agile, innovative, and resilient in the face of external pressures. These findings support a resource orchestration theory that emphasizes the importance of leaders in coordinating technology and human assets to achieve a competitive advantage (Correia et al., 2022). In a local context, digital leadership that understands the potential of AI has proven to be able to navigate change more strategically and ensure all elements of the organization move in one direction of transformation.

Follow-up findings suggest that AI capabilities are becoming an important mediator between digital leadership and organizational resilience. Digital leaders who are proactive in encouraging technological mastery tend to form more adaptive and innovation-oriented organizational structures. This condition is in line with research that confirms that the role of digital leaders does not stop

at the strategic level, but also at the process of internalizing technology in work culture (Chen & Lin, 2023). Thus, effective digital leadership not only serves as a strategic decision-maker, but also as a catalyst that accelerates technological transformation towards long-term organizational resilience.

However, there are a number of factors that affect the effectiveness of the relationship between digital leadership, AI capabilities, and organizational resilience. Supporting factors include leaders' digital competence, technological readiness, and organizational culture that is open to innovation. However, the results of the interviews show that there are challenges in the form of limited human resources that master AI, resistance to change, and lack of adequate digital infrastructure support. This condition is in line with the view that the success of digital transformation is greatly influenced by the readiness of human resources and the level of maturity of organizational culture (Wang & Liu, 2024). Therefore, efforts to build organizational resilience must be accompanied by a strategy to increase digital literacy and change in a progressive work culture.

The limitations of this study mainly lie in the relatively small sample size and the research context is limited to Jambi Province. By involving only 40 respondents from the public and private sectors, the results of this study are contextual and cannot be generalized widely. In addition, the limited number of qualitative informants also limits the depth of exploration of the variations in the application of digital leadership and AI in different types of organizations. This condition confirms the importance of follow-up research with a wider scope and longitudinal approach to observe the dynamics of digital orchestration in the long term. A similar thing is also proposed by a recent study that emphasizes the importance of understanding the evolution of digital leadership as a continuous process that involves organizational learning (Qianqian, 2024).

In terms of practical implications, this study provides strategic guidance for organizations to integrate digital leadership and AI capabilities in building organizational resilience. Organizational leaders are advised to strengthen digital competencies, develop AI systems that support data-driven decision-making, and build a collaborative work culture. Local governments can also play a role through policies that support the digitalization of the public sector and incentives for organizations that invest in smart technologies. As affirmed in the latest literature, the success of an organization's digital transformation depends on collaboration between visionary leaders, adaptive technology, and innovative cultures (Awad & Martín-Rojas, 2024).

Conceptually, this research expands the understanding of the relationship between digital leadership, AI capabilities, and organizational resilience within the framework of strategic orchestration in the era of disruption. By combining the perspectives of dynamic capability theory and resource orchestration, this study shows that organizations that are able to blend digital leadership with artificial intelligence not only survive uncertainty, but also thrive through innovation and continuous learning. Therefore, the main contribution of this research is to provide a relevant new conceptual model for organizations in developing countries to face the challenges of the digital age in a sustainable manner.

CONCLUSION AND RECOMMENDATION

The results of this study confirm that digital leadership and artificial intelligence capabilities are the two main pillars in shaping organizational resilience in the era of disruption. Digital leadership plays a strategic role in building a vision of transformation, orchestrating technological adaptation, and creating an innovative culture that is responsive to changes in the external environment. Visionary digital leaders are able to effectively leverage data and technology for evidence-based decision-making, accelerate innovation processes, and increase organizational agility in the face of uncertainty. Meanwhile, artificial intelligence capabilities support operational efficiencies through process automation, predictive analytics, and machine learning that strengthen the organization's ability to respond to market dynamics. The integration between digital leadership and artificial intelligence results in strategic orchestration that strengthens organizational resilience, both in adaptive, innovative, and collaborative aspects.

From a theoretical perspective, this study expands the understanding of the dynamics of technology-based organizational resilience by emphasizing the synergistic interaction between the leadership dimension and smart technology. Practically, the results of the study recommend the importance of developing digital leadership capacity at the managerial level and strengthening artificial intelligence infrastructure as an instrument of modern governance in the public and private sectors. Thus, the orchestration between digital leadership and artificial intelligence capabilities is not just a response to disruption, but also a strategic foundation for building resilient, inclusive, and highly competitive organizations in the future.

FURTHER STUDY

Future research could further examine how the interaction between digital leadership and artificial intelligence capabilities varies across different organizational types and industry contexts. Comparative studies between public and private sector organizations would provide deeper insights into how institutional structures shape the effectiveness of AI-driven resilience strategies. Additionally, longitudinal research could explore how digital leadership competencies evolve over time as AI technologies become more sophisticated, and how this evolution influences long-term organizational adaptability. Further studies may also investigate the ethical, governance, and human–technology interaction challenges that arise from increased reliance on AI, offering a more holistic understanding of resilience in digitally transformed environments.

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