IOSR Journal of Business and Management (IOSR-JBM)
e-ISSN:2278-487X, p-ISSN: 2319-7668. Volume 28, Issue 7. Ser. 1 (July. 2026), PP 01-06
www.iosrjournals.org

The Role Of Digital Leadership In Promoting Employees' Innovative Behavior Under The Impact Of Artificial Intelligence

Pham Thi Mai Lien
Vo Hong Trang

Abstract:
This study examines the role of digital leadership in promoting employees' innovative work behavior in the context of the increasing adoption of artificial intelligence (AI) within organizations. Drawing on a review of the relevant literature and theoretical analysis, the paper proposes a research model to clarify the mechanism through which digital leadership influences employees' innovative behavior. In this model, AI readiness is conceptualized as a mediating variable, reflecting employees' ability to accept, trust, and apply AI in their work. Psychological safety is further proposed as a moderating variable that strengthens the transformation of AI readiness into actual innovative behavior. The study contributes to the literature on digital leadership, technology readiness, and individual-level innovative behavior in digital work environments. In addition, the proposed model offers several managerial implications for organizations seeking to develop digital leadership capabilities, enhance employees' readiness for AI, and foster a psychologically safe work environment that encourages innovation. The study also suggests directions for empirical validation in future research.

Keywords: *digital leadership; artificial intelligence; AI readiness; employees' innovative work behavior; psychological safety.*

Date of Submission: 23-06-2026 Date of Acceptance: 03-07-2026

I. Introduction

Digital transformation has been profoundly reshaping the ways in which organizations operate, make decisions, and sustain competitive advantage. Within this process, artificial intelligence (AI) is regarded as one of the key technologies capable of generating significant changes in managerial practices and innovation activities within firms. Beyond supporting process automation, data analytics, and decision-making quality, AI also expands employees' capacity for creativity, problem identification, and the development of novel work-related solutions (Davenport & Ronanki, 2018; Raisch & Krakowski, 2021). However, the adoption of AI is not merely a technical issue; rather, it is closely associated with changes in governance models, human resource capabilities, and organizational culture (Vial, 2019). Concerns regarding job displacement, adaptation pressure, and a lack of trust in intelligent systems may become barriers to the acceptance and effective utilization of AI in practice (Brougham & Haar, 2018).

In this context, digital leadership plays a pivotal role in guiding technological transformation and facilitating employees' adaptation. Unlike traditional leadership approaches, digital leadership does not only emphasize technological competence but also encompasses the ability to formulate a digital vision, foster an innovation-oriented culture, encourage continuous learning, and support employees in technology-driven work environments (Cortellazzo et al., 2019). When leaders are able to clearly communicate the meaning and relevance of AI to employees' work, provide appropriate resources, and create conditions for employees to experiment with new technologies, AI may be perceived as a tool that supports creativity rather than as a threat to human roles.

At the individual level, employees' innovative work behavior is reflected in the generation, promotion, and implementation of new ideas aimed at improving work practices, products, services, or organizational processes (Scott & Bruce, 1994). Although digital leadership may create a favorable environment for innovation, its influence is unlikely to be translated into concrete behavior if employees are not ready to accept and use AI. AI readiness is therefore considered an important mediating mechanism, reflecting employees' positive attitudes, confidence, and capability to integrate AI into their work. At the same time, innovation in AI-enabled work environments is often accompanied by uncertainty, the risk of errors, and evaluation pressure. Accordingly, psychological safety becomes a necessary contextual condition that enables employees to ask questions, experiment with technologies, share ideas, and accept risks during the innovation process (Edmondson, 1999).

The rationale for conducting this study stems from gaps in the existing literature. Although digital transformation, digital leadership, technology acceptance, and employees' innovative work behavior have received considerable scholarly attention, studies that integrate these factors in the context of AI adoption remain

limited. In particular, few theoretical models have clarified how digital leadership promotes employees' innovative work behavior through AI readiness while simultaneously considering psychological safety as a condition that strengthens this transformation process. Based on a review of the literature and theoretical analysis, this paper proposes a research model to explain the mechanism through which digital leadership influences employees' innovative work behavior in the context of AI. In doing so, the study contributes to the theoretical foundations of digital leadership and innovative work behavior, while also suggesting directions for empirical testing in future research.

II. Literature Review And Hypothesis Development

Digital Leadership

Digital leadership is understood as the capability of leaders to guide, coordinate, and support organizations in adapting to a digital technology-driven environment. Compared with traditional leadership approaches, digital leadership does not merely focus on managing people and resources; rather, it emphasizes the ability to develop a digital vision, leverage technology, foster an innovation-oriented culture, and facilitate collaboration in technology-enabled work environments (Avolio et al., 2000; Cortellazzo et al., 2019). In the context of digital transformation, leaders play a critical role in linking technological strategies with employees' behaviors, thereby helping organizations enhance their adaptability to changes in the business environment (Vial, 2019).

As AI is increasingly adopted within organizations, the role of digital leadership becomes particularly important. AI is not only a technical tool that supports data processing or process automation, but also a force that reshapes the way employees perform tasks, make decisions, and develop new ideas. By communicating a technological vision, providing appropriate resources, encouraging experimentation, and supporting learning processes, digital leadership can help employees perceive technology as a resource that supports innovation rather than as a threatening factor. Therefore, digital leadership is considered an important antecedent of employees' innovative work behavior under the impact of AI.

Employees' Innovative Work Behavior

Employees' innovative work behavior reflects the process through which individuals proactively generate, promote, and implement new ideas to improve organizational work practices, processes, products, or services (Scott & Bruce, 1994). According to De Jong and Den Hartog (2010), innovative work behavior does not only involve the generation of new ideas, but also includes the ability to identify opportunities, seek support, and realize ideas in actual work practices. Therefore, individual-level innovation should be understood as a continuous action-oriented process in which employees act not only as initiators of ideas, but also as agents who promote and implement change.

In response to increasing competitive pressures and digital transformation, employees' innovative work behavior has become an important resource that enables organizations to enhance adaptability, improve operational performance, and sustain competitive advantage. Digital technologies, particularly AI, can expand access to information, support data analysis, and improve the quality of decision-making, thereby creating favorable conditions for innovation. However, technological potential can only be translated into actual innovative behavior when employees receive appropriate guidance, support, and encouragement from leadership. Based on this reasoning, the study proposes the following hypothesis:

H1: Digital leadership has a positive effect on employees' innovative work behavior.

Digital Leadership and AI Readiness

AI readiness reflects the extent to which employees possess positive attitudes, confidence, knowledge, and the necessary capabilities to accept and use AI in their work. This concept can be approached from the theoretical foundation of technology readiness, according to which individuals' propensity to adopt technology is influenced by both enabling and inhibiting factors at the cognitive, emotional, and behavioral levels (Parasuraman, 2000). In the context of AI, readiness is not limited to the ability to use technological tools, but also includes perceptions of benefits, trust in technology, and the capacity to adapt to changes brought about by AI in the workplace.

Digital leadership can enhance employees' AI readiness through several mechanisms. First, leaders help employees understand the role of AI in the organization's development strategy, thereby reducing ambiguity and increasing awareness of the value of technology. Second, through training, technical support, and the appropriate allocation of resources, digital leadership contributes to strengthening employees' capability to use AI. More importantly, by emphasizing the complementary role of AI in relation to human capabilities rather than viewing AI merely as a tool for labor substitution, leaders can reduce concerns and resistance toward technology (Raisch & Krakowski, 2021). When employees are adequately guided and supported, they are more likely to feel confident

in approaching, experimenting with, and applying AI in their work. Therefore, the study proposes the following hypothesis:
H2: Digital leadership has a positive effect on employees' AI readiness.

AI Readiness and Employees' Innovative Work Behavior

AI readiness plays an important role in promoting employees' innovative work behavior, as AI provides various tools that support problem identification, information processing, and the development of new solutions. Through its capabilities in data analysis, pattern recognition, task automation, and decision-making support, AI can help employees expand their cognitive capabilities, improve work processes, and enhance the quality of innovative ideas (Davenport & Ronanki, 2018). However, these benefits can only be effectively realized when employees possess sufficient knowledge, confidence, and positive attitudes toward the use of AI.

When employees are ready to accept AI, they are more likely to proactively experiment with technology, seek new ways of working, and apply intelligent tools to solve problems. Such readiness enables employees not only to use AI as a technical support tool, but also to perceive AI as a complementary resource for creativity and innovation. According to Raisch and Krakowski (2021), AI can complement human capabilities by extending analytical, predictive, and decision-making capacities. Therefore, a high level of AI readiness may increase employees' engagement in innovative work behavior. Based on this reasoning, the study proposes the following hypothesis:
H3: AI readiness has a positive effect on employees' innovative work behavior.

The Mediating Role of AI Readiness

Digital leadership may influence employees' innovative work behavior not only directly, but also indirectly through the formation of AI readiness. From a theoretical perspective, digital leadership facilitates employees' acceptance of technology by communicating a digital vision, providing resources, encouraging learning, and reducing resistance to change. These factors contribute to the development of employees' positive perceptions of AI, while also enhancing their confidence and capability to use technology in their work.

When AI readiness is strengthened, employees are more likely to leverage AI to improve work processes, develop new ideas, and implement creative solutions. From this perspective, AI readiness serves as a mechanism that translates the influence of digital leadership into employees' innovative work behavior. This argument is consistent with the view that the value of digital technology does not lie solely in the technology itself, but also depends on human capability to accept, use, and integrate technology into organizational activities (Nambisan et al., 2017; Vial, 2019). Therefore, the study proposes the following hypothesis:
H4: AI readiness mediates the relationship between digital leadership and employees' innovative work behavior.

The Moderating Role of Psychological Safety

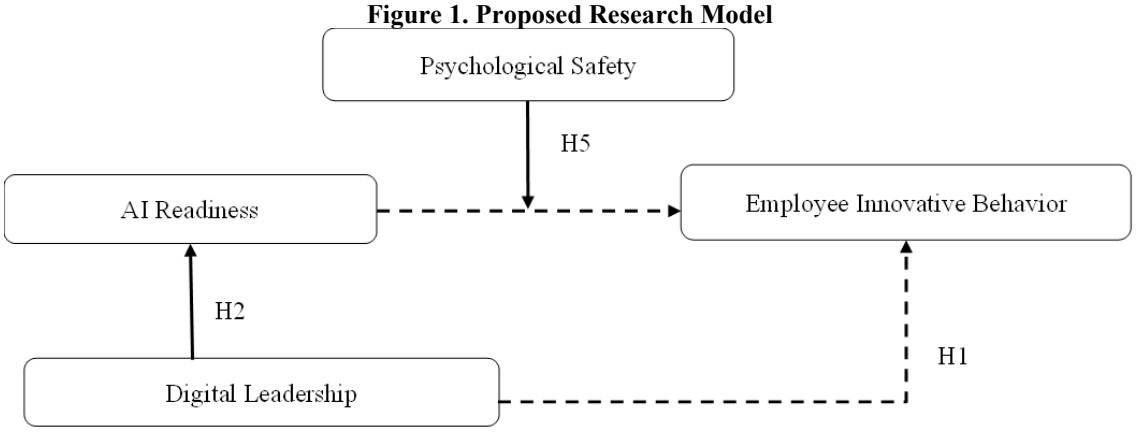
Psychological safety is understood as the belief that individuals can express opinions, ask questions, acknowledge mistakes, or experiment with new ways of working without fear of punishment or negative evaluation (Edmondson, 1999). In AI-enabled work environments, this factor is particularly necessary because the use of new technologies is often associated with uncertainty, the risk of errors, and learning pressure. When employees perceive a high level of psychological safety, they are likely to be more open to experimenting with AI, sharing their experiences in using technology, and proposing improvement-oriented solutions.

Psychological safety may strengthen the relationship between AI readiness and employees' innovative work behavior. Even when employees possess knowledge, skills, and positive attitudes toward AI, they may still hesitate to implement new ideas if they fear failure or negative evaluation. Conversely, when the work environment encourages experimentation, accepts controlled errors, and respects new ideas, AI readiness is more likely to be translated into actual innovative actions. Based on this reasoning, the study proposes the following hypothesis:
H5: Psychological safety positively moderates the relationship between AI readiness and employees' innovative work behavior; specifically, this relationship is stronger when the level of psychological safety is high.

III. Research Approach And Proposed Research Model

This paper adopts a literature review and theoretical analysis approach to develop the proposed research model. Studies related to digital leadership, artificial intelligence, technology readiness, employees' innovative work behavior, and psychological safety are synthesized, compared, and systematized to clarify the theoretical foundation for the relationships among the variables in the model. This approach is consistent with the objective of the paper, which is to develop a theoretical analytical framework to explain the mechanism through which digital leadership influences employees' innovative work behavior in AI-enabled work environments. Based on the theoretical review and the hypotheses developed, this paper proposes a research model in which digital leadership is identified as the independent variable, employees' innovative work behavior as the dependent variable, AI readiness as the mediating variable, and psychological safety as the moderating variable.

Figure 1. Proposed Research Model



Source: Author's compilation

The proposed research model suggests that digital leadership has a direct effect on employees' innovative work behavior, while also exerting an indirect effect through the enhancement of AI readiness. When employees possess positive attitudes, confidence, and the necessary capabilities to accept and use AI in their work, they are more likely to proactively propose new ideas, improve work processes, and implement innovative solutions. In addition, psychological safety is expected to strengthen the relationship between AI readiness and employees' innovative work behavior. When employees feel safe to experiment, share ideas, and accept risks, AI readiness is more likely to be translated into actual innovative behavior.

In future studies, this model can be empirically tested using quantitative methods through surveys of employees working in organizations that are currently adopting, or planning to adopt, AI. The research variables can be measured using Likert scales and analyzed through SEM or PLS-SEM to assess the direct, mediating, and moderating effects among the variables.

IV. Discussion And Implications

Practical Basis of the Proposed Research Model

The rapid development of artificial intelligence in the workplace indicates the necessity of examining the relationships among digital leadership, AI readiness, and employees' innovative work behavior. According to McKinsey (2025), 78% of surveyed organizations reported using AI in at least one business function, an increase from 72% in the previous year. This suggests that AI is no longer merely an isolated experimental technology but is gradually becoming an important component of corporate management, operations, and innovation. Similarly, Microsoft and LinkedIn (2024) reported that 75% of global knowledge workers had used generative AI at work. In Vietnam, this figure reached 88%, exceeding the global average. These statistics indicate that employees are rapidly adopting AI, while also creating new requirements for leadership capabilities, training, and change management within organizations.

However, the level of AI use does not necessarily imply that organizations have effectively captured the innovative value of this technology. The IBM (2024) report shows that 42% of large enterprises have deployed AI in their business operations, while 40% remain at the exploration or experimentation stage. This indicates a considerable gap between awareness of AI's potential and the capability to integrate AI systematically into organizational activities. In the case of Vietnam, recent reports also suggest that AI adoption is increasing rapidly, yet the readiness of both enterprises and employees remains a significant challenge. A report on AI opportunities in Vietnam indicates that more than 60% of enterprises face difficulties in finding workers with appropriate skills, while nearly 60% of enterprises perceive themselves as only "moderately ready or less" for AI adoption. These data further support the argument that employees' AI readiness constitutes a critical link in the process of transforming technology into innovative work behavior.

From a theoretical perspective, the proposed research model emphasizes that digital leadership not only provides strategic direction for digital transformation at the organizational level, but also influences how employees perceive, accept, and use AI in their work. As AI becomes increasingly embedded in organizational practices, employees require more than technical tools; they also need guidance on the meaning and relevance of AI, support in developing technological capabilities, and encouragement to experiment with new ways of working. Accordingly, digital leadership serves as an antecedent condition that fosters AI readiness, thereby promoting employees' innovative work behavior.

Theoretical Implications

This paper offers several theoretical implications for the fields of digital leadership, artificial intelligence, and employees' innovative work behavior. First, the proposed model contributes to extending the understanding of digital leadership by situating this concept within a work environment increasingly shaped by AI. Rather than viewing digital leadership merely as a capability that supports digital transformation at the organizational level, this paper emphasizes its role in shaping employees' perceptions, attitudes, and innovative behavior at the individual level. This approach is consistent with the view that leadership in digital environments is not only associated with the ability to use technology, but also involves the capability to develop a digital culture, foster collaboration, and manage change (Cortellazzo et al., 2019).

Second, this paper contributes to the theoretical foundation of employees' innovative work behavior by clarifying the role of AI readiness as a mediating mechanism. Innovative work behavior is understood as a process through which individuals proactively generate, promote, and implement new ideas to improve organizational work practices, processes, or products (Scott & Bruce, 1994; De Jong & Den Hartog, 2010). In the proposed model, digital leadership may provide vision, resources, and a supportive environment; however, these factors are likely to be translated into innovative behavior only when employees possess positive attitudes, confidence, and the necessary capabilities to accept and use AI in their work. This argument is consistent with the theory of technology readiness, which suggests that individuals' propensity to adopt new technologies is influenced by their cognitive and emotional states as well as their level of self-confidence (Parasuraman, 2000).

Third, this paper clarifies the role of psychological safety as a contextual condition in the process through which AI readiness is translated into innovative work behavior. According to Edmondson (1999), psychological safety reflects the belief that individuals can express opinions, ask questions, experiment, or acknowledge mistakes without fear of negative evaluation. In AI-enabled work environments, this factor is particularly important because the use of new technologies is often accompanied by risks, uncertainty, and learning pressures. Even when employees demonstrate a high level of AI readiness, they still require a psychologically safe work environment that enables them to experiment confidently, propose new ideas, and transform technological capabilities into actual innovative behavior.

Overall, the proposed research model contributes to connecting three streams of research: digital leadership, AI readiness, and employees' innovative work behavior. The model not only clarifies the direct effect of digital leadership on individual innovation, but also explains the mediating mechanism and moderating condition underlying this relationship in contemporary digital work environments. In doing so, this paper provides a relevant theoretical framework for analyzing employees' innovative work behavior under the impact of AI, while also establishing a foundation for future empirical research.

Managerial Implications

From a managerial perspective, the proposed research model suggests that organizations should regard digital leadership as a strategic capability in the process of AI adoption, rather than merely as a technical requirement of digital transformation. As the use of AI in the workplace continues to increase, the role of managers is not limited to selecting appropriate technologies, but also involves guiding how employees understand, trust, and leverage AI to generate innovative value. Managers need to be able to communicate a clear digital vision, align technological objectives with innovation goals, and motivate employees to proactively adapt to changes in their work.

In addition, organizations should place greater emphasis on enhancing employees' AI readiness. Evidence on the level of AI adoption indicates that employees are engaging with AI at a rapid pace; however, not all organizations have corresponding training and support strategies. Therefore, enterprises should implement practice-oriented AI training programs that help employees understand how to use AI in their daily work, recognize the limitations of the technology, and develop the capability to collaborate effectively with intelligent systems. Rather than communicating AI as a tool for control or labor substitution, managers should emphasize AI as a resource that supports employees in improving performance, developing new ideas, and enhancing work processes.

Directions for Future Empirical Testing

As this paper focuses on proposing a theoretical model, the research hypotheses need to be tested in future empirical studies. The model can be examined through surveys of employees working in organizations that are currently adopting, or planning to adopt, AI in sectors such as banking, retail, technology, education, logistics, services, and manufacturing. The research variables, including digital leadership, AI readiness, employees' innovative work behavior, and psychological safety, can be measured using five-point Likert scales.

Regarding analytical methods, future studies may employ structural equation modeling (SEM) or partial least squares structural equation modeling (PLS-SEM) to simultaneously test the direct, mediating, and moderating effects in the proposed model. In addition, control variables such as age, gender, educational level,

job tenure, experience with AI, and the organization's level of digital maturity should be incorporated to enhance the reliability of the empirical findings. Testing the model across different industries may also help clarify whether the roles of digital leadership and psychological safety vary according to the level of AI adoption in each sector.

V. Conclusion

This paper proposes a theoretical model to clarify the role of digital leadership in promoting employees' innovative work behavior under the impact of AI. The model suggests that digital leadership may directly influence innovative work behavior while also exerting an indirect effect through AI readiness. Psychological safety is considered a moderating factor that enhances the extent to which AI readiness is translated into actual innovative behavior. Theoretically, this paper contributes to connecting the literature on digital leadership, technology readiness, psychological safety, and individual innovation. From a managerial perspective, the study suggests that organizations should develop digital leadership capabilities, enhance employees' AI-related skills, and build an open and psychologically safe work environment that encourages experimentation and creativity. Future studies may empirically validate the proposed model using quantitative data.

References

[1]. Brougham, D., & Haar, J. (2018). Smart Technology, Artificial Intelligence, Robotics, And Algorithms: Employees' Perceptions Of Our Future Workplace. Journal Of Management & Organization, 24(2), 239–257.
[2]. Cortellazzo, L., Bruni, E., & Zampieri, R. (2019). The Role Of Leadership In A Digitalized World: A Review. Frontiers In Psychology, 10, Article 1938.
[3]. Davenport, T. H., & Ronanki, R. (2018). Artificial Intelligence For The Real World. Harvard Business Review, 96(1), 108–116.
[4]. De Jong, J., & Den Hartog, D. (2010). Measuring Innovative Work Behaviour. Creativity And Innovation Management, 19(1), 23–36.
[5]. Edmondson, A. (1999). Psychological Safety And Learning Behavior In Work Teams. Administrative Science Quarterly, 44(2), 350–383.
[6]. IBM. (2024). Data Suggests Growth In Enterprise Adoption Of AI Is Due To Widespread Deployment By Early Adopters, But Barriers Keep 40% In The Exploration And Experimentation Phases. IBM Newsroom.
[7]. Mckinsey & Company. (2025). The State Of AI: How Organizations Are Rewiring To Capture Value. Mckinsey & Company.
[8]. Microsoft & Linkedin. (2024). 2024 Work Trend Index Annual Report: AI At Work Is Here. Now Comes The Hard Part. Microsoft.
[9]. Microsoft Vietnam Communications. (2024). Microsoft Và Linkedin Công Bố Báo Cáo Chỉ Số Xu Hướng Công Việc Năm 2024 Về Xu Hướng Sử Dụng AI Tại Nơi Làm Việc Tại Việt Nam. Microsoft News.
[10]. Nambisan, S., Lyytinen, K., Majchrzak, A., & Song, M. (2017). Digital Innovation Management: Reinventing Innovation Management Research In A Digital World. MIS Quarterly, 41(1), 223–238.
[11]. Parasuraman, A. (2000). Technology Readiness Index: A Multiple-Item Scale To Measure Readiness To Embrace New Technologies. Journal Of Service Research, 2(4), 307–320.
[12]. Public First. (2024). Vietnam's AI Roadmap: Maximising The AI Opportunity. Public First.
[13]. Raisch, S., & Krakowski, S. (2021). Artificial Intelligence And Management: The Automation–Augmentation Paradox. Academy Of Management Review, 46(1), 192–210.
[14]. Scott, S. G., & Bruce, R. A. (1994). Determinants Of Innovative Behavior: A Path Model Of Individual Innovation In The Workplace. Academy Of Management Journal, 37(3), 580–607.
[15]. Vial, G. (2019). Understanding Digital Transformation: A Review And A Research Agenda. The Journal Of Strategic Information Systems, 28(2), 118–144.