

# The influence of digital leadership on employee performance at PT. Visi Cloud: The mediating role of innovative work behavior

Sahaz Abzar Ilhami\*, Dhiyan Septa Wihara, Achmad Fitro, Hafid Kholidi Hadi  
Faculty of Economics and Business, Universitas Negeri Surabaya, Indonesia

\*) Corresponding Author (e-mail: [sahazabzar.22033@mhs.unesa.ac.id](mailto:sahazabzar.22033@mhs.unesa.ac.id))

## Abstract

This study investigates the influence of digital leadership on employee performance, with innovative work behavior serving as a mediating variable, within PT. Visi Cloud. A quantitative explanatory research design utilizing a cross-sectional method was adopted. The sample comprised 35 employees selected through saturated sampling. Data were collected via structured questionnaires using a five-point Likert scale and analyzed with Structural Equation Modeling-Partial Least Squares (SEM-PLS). Results indicate that digital leadership does not exert a significant direct effect on employee performance, but has a positive and significant impact on innovative work behavior. Additionally, innovative work behavior significantly contributes to employee performance and mediates the relationship between digital leadership and employee performance. The findings suggest that digital leadership indirectly contributes to employee performance by fostering innovative behavior. Theoretically, this research reinforces the significance of innovative work behavior within the frameworks of the Resource-Based View and Social Exchange Theory. Practically, it offers insights for organizations to prioritize innovation-driven leadership strategies in digital environments.

Keywords: Digital Leadership, Employee Performance, Innovative Work Behavior, SaaS Industry

## Abstrak

Penelitian ini bertujuan untuk mengkaji pengaruh kepemimpinan digital terhadap kinerja karyawan, dengan perilaku kerja inovatif sebagai variabel mediasi, dalam konteks PT. Visi Cloud. Pendekatan kuantitatif digunakan dengan desain penelitian eksplanatori dan metode cross-sectional. Penelitian ini melibatkan 35 karyawan yang dipilih menggunakan teknik sampling jenuh. Data dikumpulkan menggunakan kuesioner terstruktur yang diukur dengan skala Likert lima poin dan dianalisis menggunakan *Structural Equation Modeling-Partial Least Squares* (SEM-PLS). Temuan menunjukkan bahwa kepemimpinan digital tidak memiliki pengaruh langsung yang signifikan terhadap kinerja karyawan, namun memiliki pengaruh positif dan signifikan terhadap perilaku kerja inovatif. Selain itu, perilaku kerja inovatif secara signifikan memengaruhi kinerja karyawan dan berperan sebagai variabel mediasi dalam hubungan antara kepemimpinan digital dan kinerja karyawan. Studi ini menyimpulkan bahwa kepemimpinan digital meningkatkan kinerja karyawan secara tidak langsung melalui pembinaan perilaku inovatif. Secara teoritis, penelitian ini memperkuat peran perilaku kerja inovatif dalam perspektif *Resource-Based View* dan *Social Exchange Theory*. Secara praktis, penelitian ini memberikan wawasan bagi organisasi untuk berfokus pada strategi kepemimpinan yang didorong oleh inovasi dalam lingkungan digital.

Kata kunci: Digital leadership, Employee performance, Innovative work behavior, SaaS industry

How to cite: Ilhami, S. A., Wihara, D. S., Fitro, A., & Hadi, H. K. (2026). The influence of digital leadership on employee performance at PT. Visi Cloud: The mediating role of innovative work behavior. *Journal of Management and Digital Business*, 6(2), 731–749. <https://doi.org/10.53088/jmdb.v6i2.3142>



## 1. Introduction

In recent years, global digital transformation has evolved from a modernization initiative to a fundamental prerequisite for organizational competitiveness. The transition to cloud-based services, adoption of artificial intelligence (AI), and increasingly distributed work patterns have redefined how organizations create value and manage human resources. This trend is evident in the sustained growth of the Software as a Service (SaaS) market, with a global market value of USD 266.23 billion in 2024 and a projected increase to USD 315.68 billion in 2025 (Fortune Business Insights, 2026). Additionally, Synergy Research Group reports that corporate spending on cloud infrastructure services reached approximately USD 94 billion in the first quarter of 2025, representing a 23% increase over the previous year (Synergy Research Group, 2025). These developments demonstrate that competition in the digital industry extends beyond technological advancement to include execution speed, organizational adaptability, and the quality of leadership in guiding technology-driven transformation.

Despite widespread adoption, not all digital transformation initiatives lead to improved organizational performance. Many organizations encounter the “digital paradox,” wherein substantial investments in technology do not necessarily yield increased productivity or effectiveness. According to McKinsey & Company, fewer than 30% of organizations achieve their digital transformation objectives, with most failures attributed to weak strategic direction, limited organizational engagement, and inadequate investment in human resource capability development (McKinsey & Company, 2021). These findings highlight the critical role of digital leadership, defined as the capacity of leaders to orchestrate digital transformation as a strategic agenda rather than simply adopting new technologies. Effective digital leaders are required to guide organizational change, foster a collaborative work culture, and develop employees’ digital competencies to enhance competitiveness.

In the Indonesian context, the urgency of digital leadership is becoming increasingly prominent in line with the growth of the national digital economy. The e-Conomy SEA 2024 report by Google, Temasek, and Bain & Company projects that Indonesia's digital economy will reach USD 90 billion (Gross Merchandise Value) in 2024, an increase of 13% compared to 2023, making it the largest in Southeast Asia (Google, 2024). This growth also has an impact on the increased demand for cloud infrastructure and services. According to Mordor Intelligence (2025), the Indonesian cloud market is projected to be worth USD 2.46 billion in 2025 and increase to USD 4.87 billion in 2030 (Mordor Intelligence, 2025). This shows that the national business environment is rapidly moving towards a platform-based digital ecosystem, demanding continuous innovation and high effectiveness in employee performance management.

PT. Visi Cloud, a SaaS provider specializing in the digitization and integration of the Islamic finance ecosystem, exemplifies these dynamics. As a technology enabler, Visi Cloud develops digital platforms and solutions that facilitate the transformation of Indonesia’s Islamic economy. The company adopts a flexible work culture, including

remote work and continuous learning, which aligns with the dynamic and collaborative nature of the SaaS industry. In this context, digital leadership is critical for sustaining team performance, promoting product innovation, and enhancing organizational agility. PT. Visi Cloud faces challenges such as rapid technological advancements that necessitate continuous employee adaptation and skill development, the implementation of flexible work systems that may hinder team communication and coordination, and the demands of the SaaS industry, which require rapid innovation and agile decision-making. Maintaining employee productivity and engagement in a dynamic digital work environment remains a primary concern. Consequently, this study examines the relationship between digital leadership and employee performance at PT. Visi Cloud, with particular attention to the challenges of digital transformation and the evolving dynamics of technology-driven work.

Employee performance is a key indicator of an organization's success in achieving its strategic goals. In the context of digital transformation, employee performance is greatly influenced by the readiness of digital systems and adaptive leadership support. Research shows that digital transformation and digital leadership have a significant effect on improving employee performance (Indriani, 2024). These findings are in line with research by Mandayanti et al. (2024), which proves that digital leadership contributes positively to performance through increased creativity and job satisfaction. In addition, digital leadership has also been proven to increase employee motivation and work engagement, which ultimately has an impact on performance improvement (Natasha et al., 2025). In the public sector, digital leadership and digital competence are key factors in driving human resource performance, both directly and through mediating variables such as resilience and job satisfaction.

Digital Leadership describes a leader's ability to utilize digital technology to lead, direct, and strategically transform an organization. A digital leader not only understands technology but also has a vision for integrating innovation into the work culture and organizational strategy. In the context of modern organizations, digital leadership is an important foundation for creating a collaborative, adaptive, and innovation-oriented work culture. Research by Erhan et al. (2022) confirms that digital leadership has a positive influence on innovative work behavior and employee performance because digital leaders are able to foster trust, creativity, and empowerment within work teams.

The influence of digital leadership on employee performance has been proven in various empirical studies. Leaders who implement effective digital leadership are able to increase efficiency, productivity, and employee job satisfaction through the application of technology that accelerates workflow and communication. According to Natasha et al. (2025), digital leadership has a significant effect on employee performance because it encourages adaptation to technological changes, increases resilience, and creates an innovation-based work culture. Meanwhile, Hernitasari & Andrias (2022) add that digital leadership increases employee motivation and engagement, thereby directly impacting work performance through the strengthening of digital collaboration and a culture of continuous learning.

Furthermore, the influence of digital leadership on innovative work behavior shows that digital leaders act as catalysts for innovation. They create an environment that supports the exploration of new ideas, risk-taking, and continuous learning. Research by Siregar et al. (2025) shows that digital leadership has a direct and significant influence on innovative work behavior because it is able to build employee engagement and creativity in developing new ideas. Similarly, a study by Hadi et al. (2024) confirms that the combination of digital leadership and organizational support strengthens innovative work behavior through increased emotional intelligence, which enables employees to think creatively, adapt quickly, and make innovative contributions to the organization. Thus, digital leadership not only influences employee performance but also encourages innovative behavior, which is key to organizational competitive advantage in the digital age.

Innovative Work Behavior is an individual's behavior in recognizing problems, generating new ideas, and implementing innovative solutions to improve work effectiveness and achieve organizational goals. According to research by Erhan et al. (2022), innovative work behavior includes three main stages, namely idea creation, idea promotion, and idea implementation. In the context of modern organizations, this behavior is the foundation for creating an adaptive and creative work culture in the face of changes in the business environment. Employees who exhibit innovative work behavior are able to adapt to technological developments, take initiative, and contribute to improving the overall performance of the organization.

The relationship between innovative work behavior and employee performance is positive and significant. Employees who are active in developing ideas and innovating tend to have higher performance in terms of efficiency, creativity, and work results. Based on research by Andriyani et al. (2024), innovative work behavior has a significant positive influence on employee performance because innovation encourages an increase in thinking capacity, problem-solving abilities, and work quality. A similar finding was reported by Lathifah & Kurniawati (2021), who explained that innovative behavior helps employees adapt their work methods to the needs of the organization, thereby optimizing work results. Thus, the higher an individual's innovative work behavior, the greater their contribution to improving individual and organizational performance.

Additionally, innovative work behavior acts as a mediating variable between digital leadership (X) and employee performance (Y). The results of research by Emma Yulianti & Nova Maharani (2024) prove that digital leadership does not always have a direct effect on employee performance, but has a significant indirect effect through innovative work behavior. This means that digital leaders are able to create a work environment that supports creativity and idea exploration, which in turn improves employee performance. Similar findings were confirmed by Arifin et al. (2025), who showed that innovative work behavior acts as a link between digital leadership and employee performance in public institutions. Thus, innovative work behavior functions as a strategic bridge that transforms the influence of digital leadership into improved performance through the creation of sustainable work value and innovation.

While prior research has highlighted the significance of digital leadership in enhancing organizational performance and innovation, its implementation within Indonesia's digital technology-based industries remains underexplored. This study addresses the empirical gap by examining the relationship between digital leadership, innovative work behavior, and employee performance in the Software as a Service (SaaS) sector, particularly in organizations with a Sharia digital ecosystem such as PT. Visi Cloud. Previous studies have predominantly focused on the public or manufacturing sectors and have not sufficiently explored how digital leadership influences performance through innovative work behavior in flexible, collaborative, and technologically advanced environments. The novelty of this research lies in integrating the concept of digital leadership with the distinctive dynamics of the SaaS industry, which prioritizes cross-functional collaboration, adaptive learning, and rapid product innovation. This study analyzes the impact of digital leadership on employee performance at PT. Visi Cloud, with innovative work behavior as a mediating variable, thereby contributing theoretically to digital leadership literature and practically to the development of technology-based managerial strategies in the digital transformation era.

## **2. Literature Review**

### **Resource-Based View (RBV) and Social Exchange Theory (SET)**

This study is based on two main theories, namely the Resource-Based View (RBV) and Social Exchange Theory (SET), which together explain the relationship between digital leadership, innovative work behavior, and employee performance. According to the Resource-Based View (RBV), Barney (1991), a company's competitive advantage stems from internal resources that are valuable, rare, difficult to imitate, and irreplaceable. In this study, innovative work behavior serves as a strategic capability that strengthens the relationship between digital leadership and employee performance. A study by Cui (2024) confirms that digital leadership strengthens competitive advantage through innovation and technology-driven human resource development. Finally, Social Exchange Theory (SET), introduced by Blau (1964), highlights the importance of reciprocal relationships within organizations: when leaders provide trust, support, and empowerment, employees reciprocate with commitment, innovation, and higher performance. This is reinforced by the findings of Chiocchio & Frigon (2005), who explain that social exchange relationships based on trust and emotional support form the foundation of innovative behavior and improved work performance in modern organizations. Thus, these two theories collectively demonstrate that digital leadership can enhance employee performance by fostering an innovative culture and mutually beneficial social relationships in a technology-driven work environment.

### **Employee Performance**

Employee performance in the context of modern organizations is understood as the level of achievement of individual work results that reflect the ability to carry out tasks and responsibilities effectively, efficiently, and sustainably in accordance with

organizational standards and objectives. Performance is not solely assessed based on the final output, but also includes the quality of the work process as demonstrated through accuracy, precision, and consistency in completing tasks. High-performing employees are able to produce work that meets standards, achieve the specified quantity of work, and complete work on time as a form of discipline and professional responsibility. In addition, employee performance is also reflected in work effectiveness, which is the extent to which work objectives can be achieved according to plan, as well as work efficiency, which demonstrates an individual's ability to optimally utilize resources to produce maximum output. This multidimensional approach to performance emphasizes that employee performance measurement needs to be carried out comprehensively and objectively through standardized indicators such as Key Performance Indicators (KPIs), as they provide a realistic picture of employee contributions to organizational performance and serve as an important basis for managerial decision-making, performance evaluation, and human resource development, as confirmed in various empirical studies (Groen et al., 2017; Koopmans et al., 2014).

### **Digital Leadership**

Digital leadership in this study is understood as the ability of leaders to strategically direct organizations through the use of digital technology, which is reflected in several key dimensions. First, digital vision describes the ability of leaders to formulate and communicate an organizational vision that is in line with developments in digital technology, thereby providing clear direction for employees in facing digital change and transformation. Second, digital capability reflects the level of understanding, knowledge, and skills of leaders in utilizing digital technology to support decision-making, work process management, and the creation of organizational value. Third, digital experience shows leaders' experience in managing digital-based initiatives and projects, enabling them to act more adaptively and responsively to technology implementation challenges. Fourth, digital predictability describes leaders' ability to anticipate changes in the digital environment, technological risks, and future innovation opportunities, enabling organizations to be proactive and sustainable. These four dimensions collectively represent the strategic role of digital leadership in driving organizational readiness, enhancing employee capabilities, and ensuring the success of digital transformation that impacts the improvement of individual and overall organizational performance (Senadjki et al., 2024).

### **Innovative Work Behavior**

Innovative work behavior is a form of employee behavior that is deliberately oriented towards the creation, introduction, and application of new ideas that are beneficial for improving individual and organizational performance. In the context of modern organizations characterized by rapid change and intense competition, innovative work behavior has become a strategic element because it enables employees to not only perform routine tasks but also actively contribute to process improvement, the development of new work methods, and the creation of solutions to work problems. This behavior reflects an employee's proactive attitude in identifying opportunities,

exploring new ideas, and taking the initiative to implement these ideas into daily work practices. A number of studies confirm that innovative work behavior is multidimensional and occurs in stages, starting from the ability of employees to generate creative ideas, promoting these ideas to relevant parties, and realizing them in the form of innovations that can be applied and provide added value to the organization. Furthermore, innovative work behavior has been proven to play an important role as a link between leadership and employee performance, because a work environment that supports innovation and adaptive leadership can encourage employees to dare to experiment, learn from failure, and continue to improve their work quality. Thus, innovative work behavior not only reflects individual creativity but also serves as an indicator of the readiness of employees and organizations to face the demands of change and long-term performance sustainability (Adu et al., 2024).

### **The Influence of Digital Leadership on Employee Performance**

Empirical studies show that digital leadership plays a significant role in improving employee performance, especially in organizations facing the demands of digital transformation. Various studies in the analyzed documents reveal that leaders who are able to utilize digital technology, provide support for digital competency development, and create an adaptive and innovative work culture can improve the effectiveness, productivity, and quality of employee performance. Hernitasari & Andrias (2022) and Mandayanti et al. (2024) found that digital leadership has a positive effect on employee performance through increased motivation, engagement, and job satisfaction, while Natasha et al. (2025) emphasized that digital leadership also plays an important role in building employee resilience and competencies as key assets for performance improvement in the public sector. From the perspective of the Resource-Based View (RBV), employees' digital competencies developed through digital leadership are viewed as valuable and difficult-to-imitate strategic resources, thereby contributing to the organization's performance advantage. Meanwhile, *Social Exchange Theory* (SET) explains that leaders' support and investment in the form of digital facilities, training, and clear direction will be reciprocated by employees through increased commitment and work performance. Overall, these empirical findings indicate that digital leadership positively contributes to employee performance by fostering motivation, competency development, and productive reciprocal relationships within a digital-based work environment.

H1: Digital Leadership has a positive effect on Employee Performance

### **The Influence of Digital Leadership on Innovative Work Behavior**

Empirical studies show that digital leadership has a significant influence on employees' innovative work behavior, especially in the context of organizations undergoing digital transformation. Research by Çetinkaya & Sürücü (2025) shows that digital leaders who are able to utilize technology, build a digital culture, and encourage continuous learning directly improve employees' ability to explore ideas, generate new ideas, and implement innovations in their daily work. From the perspective of the Resource-Based View (RBV), digital leadership can be viewed as a strategic capability that is valuable, rare, and difficult to imitate, as it is capable of orchestrating digital resources and

employee competencies into an organization's innovative advantage (Erhan et al., 2022). Meanwhile, based on Social Exchange Theory (SET), supportive and participatory digital leadership creates a positive reciprocal relationship between leaders and employees, so that employees reciprocate this support through higher engagement and innovative work behavior (Sebetci et al., 2025). Thus, digital leadership plays a crucial role in shaping a work environment conducive to innovation through mechanisms of transformational inspiration, strategic resource management, and mutually beneficial social exchange.

H2: Digital Leadership has a positive effect on Innovative Work Behavior

### **The Influence of Innovative Work Behavior on Employee Performance**

Empirical studies show that innovative work behavior has a significant influence on employee performance, as this behavior encourages employees to generate, develop, and implement new ideas that are beneficial for improving work effectiveness and quality. Research by Berliana & Arsanti (2018) and Sanjaya et al. (2024) explains that employees who exhibit innovative work behavior tend to have higher levels of creativity, productivity, and work quality compared to less innovative employees. This finding is reinforced by research by Sitanaya & Rahardjo (2024), which shows that innovative work behavior has a positive and significant effect on employee performance, both individually and as a team, because innovative employees are able to solve work problems more effectively and make real contributions to the achievement of organizational goals. Furthermore, Andriyani et al. (2024) also prove that innovative work behavior has a positive effect on employee performance in the government sector, where employees who actively explore ideas, develop new solutions, and implement more efficient work methods show improvements in the quality, quantity, and timeliness of their work. Thus, innovative work behavior can be seen as a key factor that drives employee performance improvement, as it enables employees to adapt to change, increase work process efficiency, and create sustainable added value for the organization.

H3: Innovative Work Behavior has a positive effect on Employee Performance

### **The Mediating Role of Innovative Work Behavior**

Innovative work behavior plays an important mediating role in explaining how digital leadership impacts employee performance, particularly in the context of organizations undergoing digital transformation. Various empirical studies show that digital leadership does not always have a direct effect on performance, but it can encourage innovative work behavior, which then becomes the main driver of improved employee performance. Research by Erhan et al. (2022) proves that digital leaders who have transformational vision, digital competence, and the ability to encourage technology adoption are able to stimulate employees to create, promote, and implement new ideas at work, which in turn has a positive impact on performance. Similar findings were also presented by Yulianti & Maharani (2024), which showed that innovative work behavior significantly mediates the influence of digital leadership on employee performance, while its direct influence is not significant. This aligns with the Resource-Based View (RBV), which views innovative behavior as a high-value, hard-to-imitate strategic

resource, and with Social Exchange Theory (SET), which explains that the support and trust provided by digital leaders will be reciprocated by employees through innovative behavior that contributes to performance. Thus, innovative work behavior serves as a key mechanism that bridges the influence of digital leadership on improved employee performance in modern organizations.

H4: Innovative Work Behavior Mediates the Influence of Digital Leadership on Employee Performance

### 3. Research Method

This study uses a quantitative approach with an explanatory research method, which is research that aims to explain the causal relationship between research variables through hypothesis testing. A quantitative approach was chosen because this study focuses on measuring the influence of digital leadership on employee performance, both directly and indirectly through innovative work behavior as a mediating variable.

The research design used is cross-sectional, where data collection is carried out at a specific time. The survey method is used as the main data collection technique, with instruments in the form of structured questionnaires compiled based on indicators that have been tested in previous studies. This study aims to obtain an empirical description of the relationship patterns between variables in the context of a Software as a Service (SaaS) technology-based company, specifically at PT. Visi Cloud.

The population in this study consists of all PT. Visi Cloud employees who are actively involved in the company's operational activities, both in technical and non-technical functions. This population was selected because all employees interact directly with the digital work system and are under leadership that applies the principles of digital leadership. The sampling technique used was saturated sampling (census), in which all members of the population, totaling 35 employees, were made respondents in the study. This technique was chosen because the population size was relatively limited and allowed researchers to obtain a comprehensive picture of the actual conditions of the organization. According to Hair et al. (2017), for PLS-SEM analysis, the minimum recommended sample size is determined by the "10 times rule," which requires at least 10 times the number of the largest structural paths pointing to a particular construct in the model. With a maximum of two paths pointing to any single construct in this study, the minimum required sample size is 20 respondents. The total sample of 35 employees therefore meets and exceeds this threshold, providing sufficient statistical power for the PLS-SEM analysis employed in this study.

Data collection was carried out using an online questionnaire distributed to respondents through the company's internal media. The questionnaire was compiled using a five-point Likert scale, with a range of values from 1 (strongly disagree) to 5 (strongly agree). The digital leadership variable was measured through the dimensions of digital vision, digital capability, digital experience, and digital predictability. The innovative work behavior variable was measured through the indicators of idea creation, idea promotion, and idea implementation, while employee performance was measured through the indicators of work quality, work quantity, timeliness,

effectiveness, and work efficiency. The data obtained was then used as the basis for statistical analysis to answer the research objectives.

Table 1. Operational Definitions of Research Variables

Variable	Definition	Indicators	Source
Digital Leadership (X)	The ability of leaders to strategically direct organizations through the use of digital technology, reflected in vision formulation, digital skill, experience in digital initiatives, and anticipation of future digital change.	Digital vision, Digital capability, Digital experience, Digital predictability	Senadjki et al. (2024)
Innovative Work Behavior (Z)	An individual’s intentional behavior oriented toward creating, introducing, and applying new ideas to improve individual and organizational performance, encompassing the stages of idea generation, promotion, and implementation.	Idea creation, Idea promotion, Idea implementation	Erhan et al. (2022)
Employee Performance (Y)	The level of achievement of individual work results reflecting the ability to carry out tasks effectively, efficiently, and sustainably, assessed across multiple dimensions including quality, quantity, timeliness, effectiveness, and efficiency.	Work quality, Work quantity, Timeliness, Effectiveness, Work efficiency	Koopmans et al. (2014)

Data analysis in this study was conducted in stages and systematically to ensure that the research results had a high level of accuracy and validity. The data collected from the respondent questionnaires was first processed and selected to ensure the completeness and consistency of the answers. Next, the data was analyzed using the Structural Equation Modeling–Partial Least Squares (SEM-PLS) approach with the help of statistical software, given that this method is capable of analyzing causal relationships between latent variables simultaneously and is suitable for use with a relatively limited sample size and data that does not require a normal distribution.

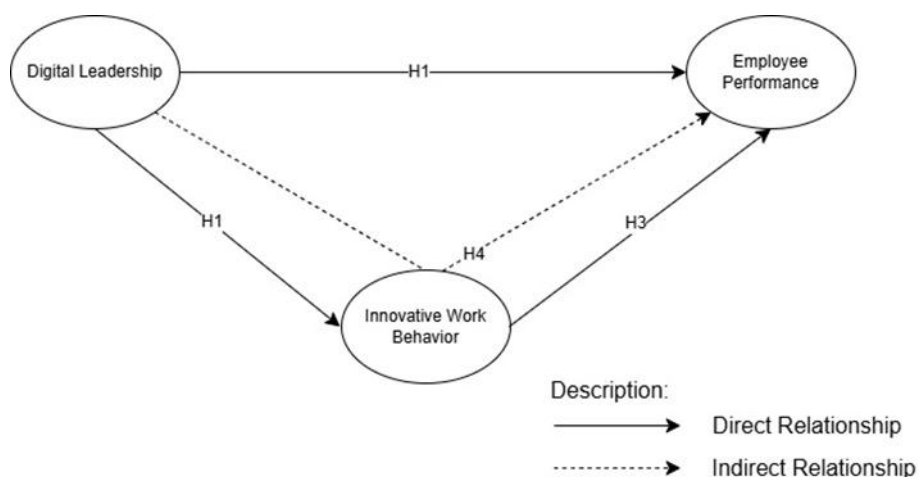


Figure 1. Research Model

SEM-PLS was chosen over simple mediation regression for several key reasons. First, SEM-PLS allows simultaneous estimation of both the measurement model (outer model) and structural model (inner model), enabling evaluation of construct validity and

reliability alongside path coefficient estimation. Simple mediation regression, by contrast, treats all variables as observed and does not account for measurement error. Second, SEM-PLS is more appropriate when constructs are measured through multiple reflective indicators, as in this study, where latent variables (digital leadership, innovative work behavior, and employee performance) are each represented by multiple items. Third, SEM-PLS performs well with small sample sizes and makes no assumption of multivariate normality, making it particularly suitable for the present study context (Hair et al., 2017; Ringle et al., 2015).

The initial stage of analysis focused on testing the measurement model (outer model) to assess the quality of the research instruments. At this stage, construct validity and reliability were tested. Convergent validity was evaluated through factor loading values and Average Variance Extracted (AVE) to ensure that each indicator was able to represent the construct being measured. Discriminant validity is tested by comparing the square root of AVE with the correlation between constructs to ensure that each variable has a clear conceptual uniqueness. Meanwhile, the reliability of the instrument is measured through Cronbach's Alpha and Composite Reliability values to ensure the internal consistency of the indicators in each research construct.

After the measurement model was declared to meet the criteria, the analysis continued with testing the structural model (inner model) to determine the strength and direction of the relationship between the research variables. The structural model was evaluated by looking at the R-square value to determine the ability of the independent variables to explain the dependent variables, as well as the path coefficient value to determine the direction and magnitude of the influence between variables. The significance of the relationship was tested using the bootstrapping method by looking at the t-statistics and p-values as the basis for decision-making on the research hypothesis.

Furthermore, the analysis focused on testing the mediating effect of innovative work behavior in the relationship between digital leadership and employee performance. This test was conducted by analyzing the direct and indirect effects between variables to determine whether innovative work behavior acts as a partial mediation or a full mediation. The mediation test results are used to explain the mechanism of how digital leadership can improve employee performance by encouraging innovative behavior in a technology-based work context. Through this entire data analysis process, this study is expected to provide strong and comprehensive empirical evidence in accordance with the research objectives.

## **4. Results and Discussion**

### **4.1. Results**

#### **Evaluation of Measurement Model**

Based on the results of the analysis in Table 2, the measurement model (outer model) indicates that all indicators within each construct meet the criteria for validity and reliability. This is evidenced by the factor loadings for the variables Digital Leadership, Innovative Work Behavior, and Employee Performance, which generally exceed the

minimum threshold of 0.70, although some indicators remain within the exploratory range.

Table 2. Result of Model Construct

Construct	Indicator	Item reliability	Convergent validity		
		Loadings	CR	Alpha	AVE
Digital Leadership (X)	X1.1	0.891	0.884	0.832	0.658
	X1.2	0.845			
	X1.3	0.713			
	X1.4	0.784			
Innovative Work Behavior (Z)	Z1.1	0.805	0.852	0.744	0.659
	Z1.2	0.742			
	Z1.3	0.882			
Employee Performance (Y)	Y1.1	0.854	0.911	0.877	0.672
	Y1.2	0.814			
	Y1.3	0.868			
	Y1.4	0.787			
	Y1.5	0.769			

The Average Variance Extracted (AVE) values for all constructs were above 0.50, specifically 0.658 for Digital Leadership, 0.659 for Innovative Work Behavior, and 0.672 for Employee Performance. This indicates that each construct explains more than 50% of the variance in its respective indicators, thereby meeting the criteria for convergent validity. Furthermore, the Composite Reliability (CR) and Cronbach's Alpha values for all variables also exceeded the 0.70 threshold. The CR values of 0.884, 0.852, and 0.911, respectively, indicate a high level of internal consistency. Thus, it can be concluded that this research instrument is reliable and valid for measuring the constructs under study.

Based on the results of the analysis in Table 3, Discriminant validity was further assessed using the Heterotrait-Monotrait (HTMT) ratio criterion. The HTMT values for all construct pairs were below the threshold of 0.85, as follows: Digital Leadership–Employee Performance = 0.501, Digital Leadership–Innovative Work Behavior = 0.489, and Innovative Work Behavior–Employee Performance = 0.840. These results confirm that each construct is empirically distinct from the others, thereby satisfying the requirements for discriminant validity.

Table 3. Heterotrait-Monotrait Ratio (HTMT)

	Digital Leadership (X)	Employee Performance (Y)	Innovative Work Behavior (Z)
Digital Leadership (X)			
Employee Performance (Y)	0.501		
Innovative Work Behavior (Z)	0.489	0.840	

Table 4. Fornell-Larcker Criterion

	Digital Leadership (X)	Employee Performance (Y)	Innovative Work Behavior (Z)
Digital Leadership (X)	0.811		
Employee Performance (Y)	0.462	0.820	
Innovative Work Behavior (Z)	0.445	0.695	0.811

Additionally, the Fornell-Larcker Criterion in Table 4 was checked by comparing the square root of each construct's AVE against the inter-construct correlations. The square roots of AVE were 0.811 (Digital Leadership), 0.820 (Employee Performance), and 0.811 (Innovative Work Behavior), each exceeding their corresponding inter-construct correlations of 0.462 (Digital Leadership–Employee Performance), 0.445 (Digital Leadership–Innovative Work Behavior), and 0.695 (Employee Performance–Innovative Work Behavior), which further supports discriminant validity.

### Evaluation of Structural Model

Table 5. R Square

	R <sup>2</sup>
Y	0.482
Z	0.175

The results of the structural model evaluation in Table 5 show that the R-Square value for the Employee Performance (Y) variable is 0.482. This means that 48.2% of the variation in employee performance can be explained by the Digital Leadership and Innovative Work Behavior variables, while the remaining 51.8% is influenced by other variables outside the research model.

Meanwhile, the R-Square value for the Innovative Work Behavior (Z) variable is 0.175, indicating that Digital Leadership accounts for 17.5% of the variation in innovative work behavior. This value falls into the moderate to weak category, suggesting that other factors also play a role in shaping employees' innovative work behavior, such as organizational culture or individual competencies.

### Hypothesis Testing

Table 6. Path Coefficients Effects

Construct	Original sample	T statistic	P values	Report
Digital Leadership → Employee Performance	0.190	1.059	0.290	Not supported
Digital Leadership → Innovative Work Behavior	0.445	3.372	0.001	Supported
Innovative Work Behavior → Employee Performance	0.610	4.443	0.000	Supported
Digital Leadership → Employee Performance by Innovative Work Behavior	0.272	2.269	0.023	Supported

Based on the results of the hypothesis testing in Table 6, several important findings were obtained as follows:

1. First, the effect of Digital Leadership on Employee Performance yielded a coefficient value of 0.190 with a t-statistic of 1.059 and a p-value of 0.290 (> 0.05). These results indicate that Digital Leadership does not have a significant effect on employee performance; therefore, the first hypothesis (H1) is not supported. This finding suggests that, within the context of PT. Visi Cloud, digital leadership has not yet been able to directly improve employee performance. This aligns with several

studies stating that the influence of digital leadership is often indirect and requires mediating variables.

2. Second, the effect of Digital Leadership on Innovative Work Behavior yielded a coefficient of 0.445 with a t-statistic of 3.372 and a p-value of 0.001 ( $< 0.05$ ). These results indicate that Digital Leadership has a positive and significant effect on innovative work behavior, thus supporting the second hypothesis (H2). This finding confirms that digital leaders are capable of creating a work environment that fosters creativity, idea exploration, and employee innovation.
3. Third, the effect of Innovative Work Behavior on Employee Performance yielded a coefficient of 0.610, with a t-statistic of 4.443 and a p-value of 0.000 ( $< 0.05$ ). These results indicate that innovative work behavior has a positive and significant effect on employee performance, thus supporting the third hypothesis (H3). This indicates that employees who actively innovate tend to have higher performance.
4. Fourth, the results of the mediation effect test show that Digital Leadership influences Employee Performance through Innovative Work Behavior with a coefficient of 0.272, a t-statistic of 2.269, and a p-value of 0.023 ( $< 0.05$ ). Thus, the fourth hypothesis (H4) is supported. These results indicate that Innovative Work Behavior acts as a mediating variable in the relationship between Digital Leadership and Employee Performance.

Overall, the results of this study indicate that the relationship between Digital Leadership and Employee Performance is one of full mediation, in which the direct effect is not significant, but the indirect effect through innovative work behavior is significant. This reinforces the Resource-Based View (RBV) perspective that innovation is a strategic resource that drives performance, as well as Social Exchange Theory (SET), which explains that leaders' support is reciprocated by employees through innovative behavior that leads to improved performance.

#### **4.2. Discussion**

The findings of this study are consistent with the theoretical frameworks used, namely the Resource-Based View (RBV) and Social Exchange Theory (SET). From the RBV perspective, innovative work behavior is a valuable and difficult-to-imitate strategic capability, making it a crucial mechanism for transforming digital leadership into organizational performance excellence (Barney, 1991). Meanwhile, SET explains that the support, empowerment, and trust provided by digital leaders will encourage positive reciprocity from employees in the form of innovative contributions and improved work performance (Blau, 1964). Empirically, the results of this study align with the findings of Çetinkaya & Sürücü (2025), Erhan et al. (2022), and Sebetci et al. (2025), which demonstrate that digital leadership has a positive influence on innovative work behavior. These results also support the research by Andriyani et al. (2024), Sitanaya & Rahardjo (2024), and Sanjaya et al. (2024), which indicates that innovative work behavior significantly influences improvements in employee performance. Furthermore, the mediation findings in this study reinforce the studies by Yulianti & Maharani (2024) and Erhan et al. (2022), which state that the influence of digital

leadership on employee performance operates indirectly through innovative work behavior as the primary mediating mechanism.

Based on empirical observations at PT. Visi Cloud, these findings reflect the company's operational reality as a SaaS-based organization that relies on digital collaboration, rapid product innovation, and high adaptability to technological changes. In practice, PT. Visi Cloud's leadership has implemented various characteristics of digital leadership through the use of cloud-based collaboration platforms, digital workplace communication, the adoption of flexible work systems, and a commitment to continuous learning. However, improvements in employee performance do not occur solely due to the use of technology or digital directives from leadership alone. Optimal performance is found among employees who are able to translate that leadership support into innovative initiatives, such as developing new ideas, improving work processes, and creating more efficient solutions for task execution. These findings indicate that at PT. Visi Cloud, the success of digital leadership heavily depends on its ability to foster an innovative work culture and empower employees to contribute creatively within a dynamic digital work environment.

## 5. Conclusion

This study aims to analyze the effect of digital leadership on employee performance, with innovative work behavior serving as a mediating variable at PT. Visi Cloud. Based on the results of the analysis using SEM-PLS, it was found that digital leadership does not have a significant direct effect on employee performance. Conversely, digital leadership was found to have a positive and significant effect on innovative work behavior, and innovative work behavior significantly contributes to employee performance. Furthermore, innovative work behavior was found to significantly mediate the relationship between digital leadership and employee performance. These findings indicate that the influence of digital leadership on performance does not occur directly but rather through the mechanism of fostering innovative employee behavior. Thus, the success of digital leadership in enhancing performance is highly dependent on its ability to create a work environment that encourages innovation.

Theoretically, the findings of this study reinforce the Resource-Based View (RBV), which positions innovative work behavior as a strategic resource capable of enhancing organizational performance, as well as Social Exchange Theory (SET), which explains that digital leaders' support will be reciprocated by employees through innovative contributions. Practically, these findings indicate that technology-based organizations such as PT. Visi Cloud needs to prioritize innovation as the primary focus in implementing digital leadership, rather than merely focusing on technology adoption.

However, this study has several limitations that require careful consideration. First, the relatively small sample size, limited to a single company, restricts the generalizability of the research findings. Second, the cross-sectional research design cannot capture the dynamics of changes in employee behavior and performance over time. Third, the low R-Square value for the innovative work behavior variable suggests

that other variables have not been included in the research model, such as organizational culture, digital competencies, or individual psychological factors.

Given these limitations, future research is advised to expand the sample scope to include various companies in the digital industry in order to obtain more generalizable results. Additionally, the use of a longitudinal or mixed-methods design is recommended to capture the dynamics of the relationships between variables in greater depth. Future research could also incorporate additional variables such as digital competence, organizational culture, or employee engagement to enhance the model's explanatory power.

From a policy implication perspective, organizations need to direct their digital leadership strategies toward strengthening an innovation culture through employee empowerment, support for experimentation with ideas, and the provision of a collaborative and adaptive work environment. Thus, digital transformation should not only focus on technology but also on the development of employee behaviors and capabilities as key factors for sustainable performance improvement.

### Acknowledgements

The author expresses sincere gratitude to the academic supervisor for valuable guidance, constructive feedback, and continuous support throughout the research process and manuscript preparation. Appreciation is also extended to PT. Visi Cloud for providing access to research data and facilitating the data collection process. Additionally, the author thanks all respondents who participated in this study and contributed to its successful completion.

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