

# The Effect of Digital Transformation and Digital Leadership on Talent Management Practices and Employee Performance

*The Effect of Digital Transformation and Digital Leadership*

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## **ABSTRACT**

*The rapid advancement of digital technology has encouraged organizations to enhance digital capabilities and digital leadership to optimize employee performance. This study aims to examine the influence of digital transformation and digital leadership on talent management practices and employee performance, as well as to investigate the role of talent management practices as a mediating mechanism. A quantitative approach with an explanatory research design was employed to test the causal relationships among the variables using Partial Least Squares–Structural Equation Modeling (PLS-SEM). Data were collected from 141 employee respondents in organizations that have implemented digital systems in Semarang, Surakarta, and Yogyakarta. The findings indicate that digital transformation positively affects both talent management practices and employee performance. Similarly, digital leadership positively influences talent management practices and employee performance. Furthermore, talent management practices have a positive effect on employee performance and partially mediate the relationship between digital transformation, digital leadership, and employee performance. These results highlight the critical importance of integrating digital capabilities and leadership to enhance the effectiveness of talent management practices, enabling organizations to sustainably improve employee performance through targeted talent management strategies.*

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## **INTRODUCTION**

Digital transformation has become a key strategic agenda for organizations across various sectors in response to the dynamics of Industry 4.0. The integration of digital technologies such as artificial intelligence, big data analytics, and cloud-based systems is not only transforming operational processes but also fundamentally transforming human resource management practices (Guerra et al., 2023; Banerjee & Sharma, 2025). In this context, organizations are increasingly relying on digital systems to manage talent more effectively, from recruitment and competency development to employee performance evaluation (Martínez-Morán et al., 2021; Dang et al., 2023).

Several studies have shown that digital transformation positively contributes to strengthening talent management practices by enabling a data-driven approach to talent management (Guerra et al., 2023; Pergelova & Yordanova, 2025). Digitizing HR processes allows organizations to more objectively identify employee potential, design more adaptive training, and improve strategic talent retention (Montero & Danvila, 2024). However, several studies also confirm that digital transformation does not always automatically improve employee performance if it is not accompanied by adequate structural and leadership changes (Teng et al., 2022).

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In this context, digital leadership has emerged as a key factor determining the success of digital transformation in organizations. Digital leadership refers to a leader's ability to leverage digital technology to drive change, encourage innovation, and create an adaptive work environment (Khaw et al., 2022; Lin, 2025). Previous studies have shown that leaders with strong digital capabilities are able to drive technology adoption, build a digital culture, and strengthen strategic talent management practices (Kafetzopoulos et al., 2022; Warman et al., 2022). Furthermore, empirical research shows that digital leadership has a significant impact on employee performance by enhancing individual creativity, motivation, and digital capabilities (Öngel et al., 2023; Palmucci et al., 2025). However, the relationship between digital leadership and employee performance is often indirect and dependent on specific managerial mechanisms, such as talent management practices and HR development systems (Shin et al., 2023; Qiao et al., 2024).

Conversely, previous research on talent management consistently confirms its role as a key determinant of employee performance. Effective talent management practices, including competency-based recruitment, career development, and employee retention, have been shown to improve productivity and work quality (Mensah, 2015; Sopiah et al., 2020; Semaihi et al., 2023). In the context of digital transformation, talent management functions not only as a conventional HR practice but also as a strategic mechanism that bridges technology adoption and employee performance improvement (Chen et al., 2024; Zhou et al., 2025).

Furthermore, previous research has extensively examined the impact of digital transformation and digital leadership on organizational and employee performance. However, several research gaps remain to be addressed. First, most studies examine the influence of digital transformation and digital leadership separately, without integrating them into a comprehensive conceptual model (Banerjee & Sharma, 2025; Lin, 2025). Second, the role of talent management practices as a mediating variable in the relationship between digital transformation, digital leadership, and employee performance is still relatively limited, particularly in quantitative approaches based on structural equation modeling (Ali et al., 2017; Zahoor et al., 2024). Third, most previous studies have focused on the context of developed countries, so additional empirical evidence is needed in the context of organizations intensively adapting to digital transformation (Dang et al., 2023; Priyanto et al., 2025).

This study aims to analyze the influence of digital transformation and digital leadership on talent management practices and employee performance, and to examine the effect of talent management practices as a mediating mechanism in this relationship. This study specifically examines the direct influence of digital transformation and digital leadership on employee performance, as well as the influence of talent management practices on employee performance. The contribution of this research lies in the development of an integrative model that links organizational digital capabilities with employee performance through talent management practices. The findings of this study provide a strategic basis for organizations to optimize digital transformation and digital leadership to sustainably improve employee performance.

## **LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT**

### **Digital Transformation, Digital Leadership, and Talent Management Practices**

Digital transformation reflects the adoption and integration of digital technologies into organizational processes, including human resource management, enabling systematic, objective, and data-driven talent management through tools such as e-recruitment systems, HR analytics, Learning Management Systems (LMS), and performance management platforms, which enhance talent identification, development, and retention (Martínez-Morán et al., 2021; Dang et al., 2023). Empirical studies indicate that digitizing HR processes strengthens talent management by fostering a more integrated, adaptive, and performance-oriented approach in both large organizations and SMEs (Pergelova & Yordanova, 2025). The Resource-Based View (RBV) explains that digital transformation functions as a strategic resource that enables data-driven HR practices, leading to more

accurate, transparent, and consistent talent management, while the Dynamic Capabilities Theory suggests it enhances organizational adaptability through competency development, potential mapping, and flexible succession planning (Valle et al., 2023; Banerjee & Sharma, 2025).

Digital leadership, defined as a leader's capacity to leverage technology to drive organizational change and innovation, similarly plays a strategic role in shaping talent management policies and promoting the adoption of digital HR systems (Lin, 2025; Mulyono et al., 2025). Transformational Leadership Theory suggests that visionary, future-oriented leaders foster employee competence, innovation, and continuous learning, accelerating the use of technology in recruitment, training, performance management, and career development (Widodo & Mawarto, 2020; Muftiyanto & Jatmika, 2025). Empirical evidence shows that digital leadership enhances strategic flexibility, talent mobility, and a supportive digital culture, which strengthens talent management practices (Warman et al., 2022; Khaira et al., 2023). From a Technology Acceptance Model perspective, leadership support and role modeling increase employee acceptance of digital HR tools, ensuring that technology adoption is strategically integrated rather than symbolic (Guerra et al., 2023; Priyanto et al., 2025).

H1: Digital transformation has a positive effect on talent management practices.

H2: Digital leadership has a positive effect on talent management practices.

### **Digital Transformation, Digital Leadership, and Employee Performance**

Digital transformation refers to the integration of digital technology into work processes, organizational structures, and decision-making, fundamentally changing how employees create value. Digital transformation enhances efficiency, accuracy, and speed through automation, real-time data, and integrated information systems (Purwanto et al., 2023). Qiao et al. (2024) indicate that organizations implementing digital transformation successfully tend to have employees with higher productivity and work commitment. From the Ability–Motivation–Opportunity (AMO) framework, digital transformation improves employee capabilities through access to technology and training, strengthens motivation via transparent and flexible work systems, and provides performance opportunities through cross-functional collaboration and innovation (Zhou et al., 2025). Additionally, it fosters innovative work behaviors, dynamic capabilities, and employee empowerment via autonomy and data-driven decision-making, directly enhancing performance (Thuy et al., 2023; Subramaniam et al., 2025; Yildiz et al., 2025). Chen et al. (2024) shows its contribution to sustainable organizational performance through adaptive talent management and workforce structures.

Digital leadership, conceptualized as a leader's capacity to utilize digital technologies in guiding vision and managing organizational change, plays a crucial role in enhancing employee performance by ensuring that technological tools are effectively deployed to support productivity and the quality of work outcomes (Khaw et al., 2022; Chatterjee et al., 2023). Transformational Leadership Theory explains that visionary and technologically adaptive leaders increase motivation, creativity, and commitment. Empirical studies confirm that digital leadership enhances performance by fostering a digital culture, developing individual digital capabilities, and providing an inclusive environment for innovation (Muhdar et al., 2022; Shin et al., 2023; Öngel et al., 2023; Palmucci et al., 2025). Thus, digital transformation and digital leadership both positively influence employee performance, with leadership acting as a key mechanism translating technology adoption into tangible performance outcomes.

H3: Digital transformation has a positive effect on employee performance.

H4: Digital leadership has a positive effect on employee performance.

### **Talent Management Practices and Employee Performance**

A variety of strategic organizational initiatives focused at luring, nurturing, inspiring, and keeping high-potential workers in order to accomplish corporate objectives are included in talent management practices. Talent management is essential to ensuring that job expectations and individual competencies align in the context of employee performance. Mensah (2015) claims that integrated people management methods directly increase worker productivity and performance quality, utilizing the Coalesced Framework. Empirically, various studies demonstrate that talent management practices have a positive and significant impact on employee performance across various sectors. Sopiiah et al. (2020) found that talent management implementation improves employee performance, particularly when supported by high levels of work engagement. Similar findings were also demonstrated by Masri and Abubakr (2019), who emphasized the importance of talent recognition and development in enhancing individual performance in research institutions.

Furthermore, research in the higher education sector indicates that talent management practices contribute to improved employee performance through psychological and organizational mechanisms, such as employee engagement and managerial support (Abdullahi et al., 2022a; Abdullahi et al., 2022b; Semaihi et al., 2023). From a sustainability perspective, the implementation of talent management practices has also been shown to improve organizational performance sustainably by creating an adaptive and highly competitive workforce (Al Aina & Atan, 2020; Ferreiro-Seoane et al., 2021; Attar et al., 2025). Thus, talent management practices serve not only as a human resource management tool but also as a strategic mechanism that directly drives improved employee performance. Organizations that implement talent management practices systematically and sustainably tend to produce employees with superior performance.

H5: Talent management practices have a positive effect on employee performance.

### **Talent Management Practices as a Mediating Variable**

Digital transformation does not automatically improve employee performance without effective human resource management mechanisms. In this context, talent management practices act as a mediating mechanism that translates digital technology adoption into improved employee performance by ensuring employees possess the competencies, motivation, and support needed to utilize digital systems effectively. According to the Resource-Based View and Dynamic Capabilities Theory, better performance results from combining human and technological resources. Empirical studies confirm that talent management mediates the relationship between organizational capabilities and performance outcomes, particularly through strengthening organizational learning and employee retention (Shaikh, 2021; Afshari & Hadian, 2021). In the context of digital transformation, talent management contributes to developing digital talent, managing resistance to change, and fostering competency development that supports technology adoption (Samir, 2024; Mahroof et al., 2025). Evidence across sectors such as tourism, supply chains, and construction also shows that integrating digital technology with talent management practices enhances operational effectiveness and employee engagement (Datta et al., 2023; Alkhozaim et al., 2024; Al-Romeedy & Alharethi, 2024; Sánchez-Rodríguez et al., 2025).

Similarly, the influence of digital leadership on employee performance often operates through talent management practices rather than directly. Leaders with strong digital capabilities tend to implement talent management systems aligned with digital work demands, including digital talent development, technology-based performance management, and continuous learning. Based on the resource-based view and transformational leadership Theory, effective leadership enhances organizational value through the development of human capabilities. Jia et al. (2022) show that talent management mediates the relationship between leadership and performance outcomes. Digital leadership strengthens employee performance through engagement-oriented

HRM practices and dynamic capabilities, while also supporting digital talent development and reducing resistance to change (Wang et al., 2024; Al-Romeedy, 2024). Evidence from SMEs and the public sector further confirms that digital leadership improves employee competencies and performance through talent management practices (Borah et al., 2022; Alakaş, 2024; Chacón, 2025).

H6: Talent management practices mediate the effect of digital transformation on employee performance.

H7: Talent management practices mediate the effect of digital leadership on employee performance.

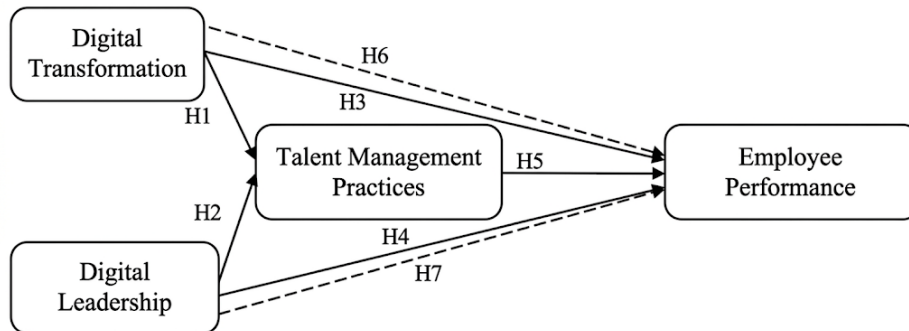


Figure 1. Research Framework

A model of the connection between digital transformation, digital leadership, talent management practices, and employee performance is presented in Figure 1. Employee performance is directly and indirectly impacted by digital transformation and digital leadership through talent management practices. The dotted lines in routes H6 and H7 show mediation, namely the impact of digital leadership and change on employee performance through talent management practices. Employee performance is directly impacted by the independent factors, as shown by the solid line. The impact of digitalization and digital leadership on employee performance is thus strengthened or explained by talent management practices, which are examined in this model.

## RESEARCH METHODS

This study employs a quantitative approach with an explanatory research design aimed at testing the causal relationships among variables based on a formulated conceptual framework. The explanatory design was selected because it allows the examination of both direct and indirect (mediation) effects between digital transformation, digital leadership, talent management practices, and employee performance. This design is appropriate for identifying complex causal relationships and explaining the underlying mechanisms connecting the variables.

Google Forms was used to deliver online surveys used to gather data. Using reflective indicators on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree), the questionnaire was created to measure four key variables: employee performance, talent management techniques, digital transformation, and digital leadership. Digital transformation was assessed through indicators related to the digitalization of work processes and technology integration, while digital leadership was measured in terms of digital vision, support for innovation, and the ability to lead change. Talent management practices included recruitment, development, career planning, and retention, whereas employee performance was evaluated through quality, productivity, punctuality, and work initiative.

The study population consisted of employees in organizations or companies that have implemented digital systems in operational activities and human resource management. Due to the uncertain population size, purposive sampling was applied with the following respondent criteria: permanent employees, working in organizations that utilize digital

technology in work processes, and having an understanding of leadership and talent management practices in the workplace. Respondents included staff to managerial levels, as this group is directly involved in the implementation of digital policies and HR practices. A total of 200 questionnaires were distributed, achieving a 76% response rate, yielding 152 responses. After data screening, 11 incomplete questionnaires were excluded, resulting in 141 valid responses, meeting the minimum sample size requirement for PLS-SEM.

Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS software was used to analyze the data. The analytical process involved testing path significance using bootstrapping, evaluating the inner model to look at the strength of structural relationships among variables, evaluating the outer model to assess construct validity and reliability, and evaluating the mediating effect of talent management practices on the relationship between independent variables (digital transformation and digital leadership) and employee performance. This methodology verifies the conceptual model that links organizational digital capabilities to employee performance through talent management strategies and permits empirical examination of both direct and intermediary impacts.

**RESULTS**

The results of the data analysis used to evaluate the hypotheses about the connections between employee performance, talent management techniques, digital transformation, and digital leadership are shown in the results section. In order to investigate both direct and mediating effects between the variables, the measurement model and structural model are evaluated as part of the analysis.

**Table 1.** Convergent Validity & Reliability Test

Construct	Indicator	Outer Loading	Cronbach’s Alpha	Composite Reliability	AVE
Digital Transformation (X1)	DT1	0.82	0.82	0.88	0.62
	DT2	0.85			
	DT3	0.79			
	DT4	0.74			
Digital Leadership (X2)	DL1	0.83	0.84	0.89	0.65
	DL2	0.87			
	DL3	0.81			
	DL4	0.76			
Talent Management Practices (M)	TMP1	0.86	0.86	0.90	0.67
	TMP2	0.84			
	TMP3	0.80			
	TMP4	0.78			
Employee Performance (Y)	EP1	0.85	0.81	0.88	0.64
	EP2	0.82			
	EP3	0.79			
	EP4	0.76			

Table 1 shows that every indicator satisfies the requirements for reliability and convergent validity. Each indicator appears to accurately reflect the relevant latent construct, as seen by the outer loading values for each construct, which vary from 0.74 to 0.87 above the minimal requirement of 0.70. Furthermore, Cronbach’s Alpha and Composite Reliability scores greater than 0.70 indicate good internal consistency for the constructs of employee performance, talent management, digital transformation, and digital leadership, according to the reliability test results. Every construct accounted for more than half of the variation of its indicators, with Average Variation Extracted (AVE) values more than 0.50. These results show that the measurement model has strong validity and reliability and is suitable for further examination in the PLS-SEM structural model.

**Table 2.** Discriminant Validity – Fornell–Larcker Criterion

Construct	DT	DL	TMP	EP
Digital Transformation (DT)	0.79			
Digital Leadership (DL)	0.58	0.81		
Talent Management Practices (TMP)	0.61	0.64	0.82	
Employee Performance (EP)	0.55	0.59	0.66	0.80

The Fornell-Larcker criteria were used to verify discriminant validity, with the minimum requirement that the square root of the AVE for each construct must be greater than the correlations between constructs and that the AVE value must be at least 0.50. The results in Table 2 show that the square root of the AVE for digital transformation is 0.79, digital leadership is 0.81, talent management practices is 0.82, and employee performance is 0.80. All of these values are higher than the highest correlation between constructs, which is 0.66. Therefore, it can be concluded that all constructs meet the discriminant validity criteria and are suitable for further structural model analysis.

**Table 3.** Inner Model Evaluation Results

Endogenous Variables	R <sup>2</sup>	Q <sup>2</sup>	Criteria
Talent Management Practices	0.623	0.412	Moderate–Strong
Employee Performance	0.687	0.458	Strong

Table 3’s inner model evaluation findings show how well the model explains endogenous variables. Digital transformation and digital leadership account for 62.3% of the variation in talent management practices, according to the talent management R<sup>2</sup> value of 0.623, which is in the moderate to strong range. In the meantime, the R<sup>2</sup> value for employee performance, which is 0.687, shows that talent management practices, digital transformation, and digital leadership all account for 68.7% of the variation in employee performance, placing it in the strong category. The significant predictive power of the structural model is confirmed by these values.

The model provides sufficient predictive power for endogenous variables, according to Table 3’s predictive relevance (Q<sup>2</sup>) test results. The Q<sup>2</sup> values for employee performance and talent management practices (M) are both over the 0.0 threshold, indicating pertinent forecasts, at 0.458 and 0.412, respectively. This demonstrates that the model can accurately forecast changes in employee performance and talent management strategies depending on the exogenous variables examined.

**Table 4.** Effect Size Value (f<sup>2</sup>)

Variable Relationship	f <sup>2</sup>	Category
Digital Transformation → Talent Management Practices	0.214	Medium
Digital Leadership → Talent Management Practices	0.287	Medium
Digital Transformation → Employee Performance	0.132	Small-Medium
Digital Leadership → Employee Performance	0.156	Medium
Talent Management Practices → Employee Performance	0.319	Large

According to Table 4, each exogenous variable’s relative contribution to the endogenous variable is displayed by the effect size (f<sup>2</sup>) test results. Digital leadership on talent management practices exhibits a moderate influence with a f<sup>2</sup> value of 0.287, whereas digital transformation on talent management has a f<sup>2</sup> score of 0.214, falling into the medium category. Digital leadership’s direct impact on employee performance is categorized as medium (f<sup>2</sup> = 0.156), whilst digital transformation’s is in the small-medium range (f<sup>2</sup> = 0.132). With an f<sup>2</sup> value of 0.319, the association between talent management and employee performance has the biggest effect size, suggesting a highly important role.

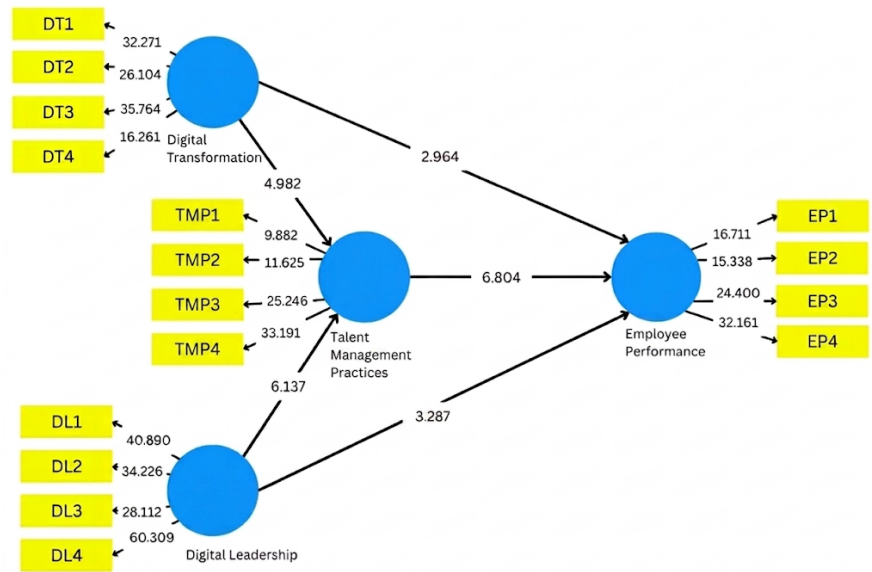


Figure 2. Hypothesis Framework

The associations between the research variables digital transformation, digital leadership, talent management, and employee performance are shown by the PLS-SEM model in Figure 2. The findings show that talent management, which in turn helps to improve employee performance, benefits from both digital transformation and digital leadership. Additionally, digital transformation and digital leadership also exert direct effects on employee performance, making talent management a partial mediator in these relationships. Each variable is measured through several specific indicators, such as DT1–DT4 for digital transformation, DL1–DL4 for digital leadership, TMP1–TMP4 for talent management, and EP1–EP4 for employee performance. The numbers on the arrows represent the t-statistics of each path, confirming the significance of the relationships among the variables. This model emphasizes the strategic role of digital capabilities and digital leadership in improving the effectiveness of talent management practices and employee performance within organizations.

Table 5. Direct Test Results (Bootstrapping)

Hypothesis	Relationship	Coefficient	t-statistic	p-value
H1	Digital Transformation → Talent Management Practices	0.371	4.982	0.000
H2	Digital Leadership → Talent Management Practices	0.452	6.137	0.000
H3	Digital Transformation → Employee Performance	0.219	2.964	0.003
H4	Digital Leadership → Employee Performance	0.241	3.287	0.001
H5	Talent Management Practices → Employee Performance	0.486	6.804	0.000

The findings of hypothesis testing regarding the impact of talent management strategies, digital leadership, and digital transformation on worker performance are shown in Table 5. The results demonstrate that talent management practices are positively impacted by digital transformation ( $\beta = 0.371$ ;  $t = 4.982$ ;  $p < 0.001$ ), suggesting that companies adopting digital initiatives can improve the efficiency of human resource systems by integrating technology into planning, development, and evaluation procedures. Digital leadership also positively affects talent management practices ( $\beta = 0.452$ ;  $t = 6.137$ ;  $p < 0.001$ ), suggesting that leaders with strong digital capabilities encourage more responsive, innovative, and strategically aligned talent management strategies. In addition, digital transformation directly improves employee performance ( $\beta$

= 0.219;  $t = 2.964$ ;  $p = 0.003$ ) by increasing operational efficiency, facilitating access to information, and providing technological support for work processes.

Digital leadership also has a significant positive effect on employee performance ( $\beta = 0.241$ ;  $t = 3.287$ ;  $p = 0.001$ ), demonstrating that visionary and adaptive leadership fosters a work environment that supports innovation, engagement, and adaptability in technology-driven organizations. Talent management practices positively affect employee performance ( $\beta = 0.486$ ;  $t = 6.804$ ;  $p < 0.001$ ), confirming that structured and sustainable human resource practices are critical for improving productivity and organizational competitiveness. The results of the strategic role of integrating digital transformation and digital leadership with talent management practices to enhance employee performance. These findings highlight the importance of aligning digital initiatives with human resource strategies to achieve sustainable performance improvements and maintain a competitive advantage.

**Table 6.** Talent Management Mediation Test Results

Mediation Path	Direct Effect	Indirect Effect	Total Effect	VAF (%)	Types of Mediation
Digital Transformation → Talent Management Practices → Employee Performance	0.219	0.180	0.399	45.1%	Partial Mediation
Digital Leadership → Talent Management Practices → Employee Performance	0.241	0.220	0.461	47.7%	Partial Mediation

The effect of digital transformation on worker performance is mediated by talent management methods, as Table 6 demonstrates. This hypothesis examines how talent management strategies mediate the link between employee performance and digital transformation. With a VAF of 45.1%, the analysis findings indicate a direct influence of 0.219, an indirect effect of 0.180, and a total effect of 0.399. With partial mediation, hypothesis H6 is approved based on VAF values between 20% and 80%. This result suggests that digital transformation enhances employee performance both directly and indirectly by fortifying talent management procedures inside the company. The effect of digital leadership on worker performance is mediated by talent management strategies. This hypothesis examines how talent management strategies function as a mediating factor in the connection between employee performance and digital leadership. With a VAF of 47.7%, the test findings indicate a direct effect of 0.241, an indirect effect of 0.220, and a total effect of 0.461. Hypothesis H7 is accepted since VAF values show partial mediation. These results show that when effective and integrated people management strategies are in place, the impact of digital leadership on worker performance is greater.

**DISCUSSION**

The findings of this study highlight the relationship between digital transformation, digital leadership, talent management practices, and employee performance. The results show that digital transformation positively influences talent management practices by enabling organizations to implement more systematic, efficient, and data-driven approaches in recruitment, training, performance evaluation, and workforce planning. This finding is consistent with prior studies indicating that digital transformation strengthens the effectiveness of talent management systems through the integration of advanced technologies into HR processes (Guerra et al., 2023). Similar results were reported by Banerjee and Sharma (2025), who emphasize the strategic role of digitalization in enhancing HR practices. In addition, digital technologies support data-driven workforce management, which improves talent retention and strategic workforce planning (Dang et al., 2023; Pergelova & Yordanova, 2025).

The study also shows that digital leadership significantly contributes to the implementation of effective talent management practices. Leaders with strong digital competencies are better able to encourage the adoption of innovative HR practices and

foster continuous learning and collaboration within organizations. This result supports previous research indicating that digitally capable leaders can guide organizations in integrating technology with talent development strategies (Widodo & Mawarto, 2020; Miharja & Hayati, 2021). Likewise, Kafetzopoulos et al. (2022) emphasize that leadership capable of leveraging digital tools strengthens employee development systems and organizational innovation. The findings are also consistent with studies suggesting that digital leadership enhances organizational agility and ensures that talent management strategies remain adaptive to technological change and dynamic market conditions (Kumari et al., 2025; Lin, 2025).

Furthermore, the results reveal that digital transformation and digital leadership both contribute positively to employee performance. The adoption of digital technologies enables employees to work more efficiently through improved access to information, automation of routine processes, and better communication systems. These findings align with studies showing that digital transformation improves work efficiency and operational processes by Teng et al. (2022) and strengthens employee productivity through improved technological infrastructure Qiao et al. (2024). In addition, digital leadership creates a supportive and innovative work environment that motivates employees and enhances collaboration, which ultimately strengthens performance (Khaw et al., 2022; Chatterjee et al., 2023).

Another important finding is that talent management practices positively influence employee performance. Effective talent management systems enable organizations to develop employee competencies, increase engagement, and improve productivity. This finding is consistent with previous research emphasizing that structured talent management practices play a crucial role in improving individual and organizational performance (Mensah, 2015). Similarly, Sopiah et al. (2020) and Abdullahi et al. (2022a) highlight that organizations with strong talent development and performance management systems tend to achieve higher levels of employee performance and competitiveness.

The findings show that the connections between employee performance, digital leadership, and digital transformation are mediated by talent management techniques. This implies that leadership skills and digital initiatives affect employee outcomes both directly and indirectly through enhancements to talent management systems. These results are in line with past research that shows talent management to be a key relationship between organizational capabilities and better performance outcomes. For example, Ali et al. (2017) demonstrated that talent management mediates the relationship between knowledge management and firm performance, while Jia et al. (2022) showed that leadership influences performance through HR practices. More recent studies also confirm that talent management plays a strategic role in translating digital capabilities and leadership competencies into improved employee performance (Mahroof et al., 2025). The findings highlight the importance of integrating digital transformation and digital leadership with effective talent management practices to maximize employee and organizational performance.

## **CONCLUSION**

This study provides empirical evidence on the significant roles of digital transformation, digital leadership, and talent management practices in enhancing employee performance. The findings indicate that digital transformation positively affects talent management practices and directly improves employee performance, while digital leadership also exerts positive effects on both talent management and employee performance. Furthermore, talent management practices partially mediate the relationships between digital transformation, digital leadership, and employee performance, highlighting the strategic importance of integrating human resource management with digital initiatives. Organizations are encouraged to develop digital competencies among leaders and implement comprehensive talent management systems to strengthen employee performance and sustain competitive advantage. Leveraging

digital tools can optimize workforce planning, enhance skill development, and foster an innovative work environment that aligns with evolving technological and market demands.

Despite these contributions, the study has several limitations. The research population was not fully defined, covering diverse types and sizes of digital organizations, which may affect generalizability. The study was geographically limited to secondary cities in Central Java, potentially restricting the applicability of the findings to other regions. In addition, not all relevant variables influencing employee performance, such as organizational culture, employee engagement, or digital readiness, were included. Future research should consider expanding the population to include a broader range of industries, organizational sizes, and geographic regions across Indonesia or beyond. Researchers are also encouraged to examine additional mediating or moderating variables, such as digital culture, employee motivation, or organizational support, to provide a more comprehensive understanding of how digital transformation and leadership drive employee outcomes, thereby enhancing both theoretical and practical relevance in the context of Industry 4.0.

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## REFERENCES

- [1] Abdullahi, M. S., Adeiza, A., Abdelfattah, F., Fatma, M., Fawehinmi, O., & Aigbogun, O. (2022a). Talent management practices on employee performance: a mediating role of employee engagement in institution of higher learning: quantitative analysis. *Industrial and Commercial Training*, 54(4), 589-612.
- [2] Abdullahi, M. S., Raman, K., & Solarin, S. A. (2022b). Talent management practices on employee performance among academic staff of Malaysian private universities: employee engagement as a mediator. *Journal of Applied Research in Higher Education*, 14(1), 135-158.
- [3] Afshari, L., & Hadian N, A. (2021). Enhancing organizational learning capability through managing talent: mediation effect of intellectual capital. *Human Resource Development International*, 24(1), 48-64.
- [4] Al Aina, R., & Atan, T. (2020). The impact of implementing talent management practices on sustainable organizational performance. *Sustainability*, 12(20), 83-92.
- [5] Alakaş, E. Ö. (2024). Digital transformational leadership and organizational agility in digital transformation: Structural equation modelling of the moderating effects of digital culture and digital strategy. *The Journal of High Technology Management Research*, 35(2), 100-117.
- [6] Ali, M., Lei, S. H. E. N., & Hussain, S. T. (2017). Relationship of external knowledge management and performance of Chinese manufacturing firms: the mediating role of talent management. *International Business Research*, 10(6), 248-258.
- [7] Alkhozaim, S. M., Alshiha, F. A., Alnasser, E. M., & Alshiha, A. A. (2024). How green performance is affected by green talent management in tourism and hospitality businesses: A mediation model. *Sustainability*, 16(16), 70-93.
- [8] Al-Romeedy, B. S. (2024). HRM and digital leadership: Exploring the mediating role of digital talent and digital culture in driving innovative performance in Saudi Arabia's tourism and hospitality industry. In *HRM, Artificial Intelligence and the Future of Work: Insights from the Global South* (pp. 101-123). Cham: Springer Nature Switzerland.
- [9] Al-Romeedy, B. S., & Alharethi, T. (2024). Sustainable tourism performance through green talent management: The mediating power of green entrepreneurship and climate. *Sustainability*, 16(22), 99-107.

- [10] Attar, R. W., Alanazi, A., & Alhazmi, A. H. (2025). Investigating the effect of talent management practices on sustainable competitive advantage in private-sector organizations. *Sustainability*, 17(21), 99-109.
- [11] Banerjee, P., & Sharma, N. (2025). Digital transformation and talent management in industry 4.0: a systematic literature review and the future directions. *The Learning Organization*, 32(4), 620-640.
- [12] Borah, P. S., Iqbal, S., & Akhtar, S. (2022). Linking social media usage and SME's sustainable performance: The role of digital leadership and innovation capabilities. *Technology in Society*, 68(12), 101-109.
- [13] Chacón, E. V. (2025). Digital leadership and its link to digital performance in MSME employees in Arequipa, Peru: The mediating effect of human resource management and dynamic capabilities. In *International Conference on Digital Economy* (pp. 184-204). Cham: Springer Nature Switzerland.
- [14] Chatterjee, S., Chaudhuri, R., Vrontis, D., & Giovando, G. (2023). Digital workplace and organization performance: Moderating role of digital leadership capability. *Journal of Innovation & Knowledge*, 8(1), 100-114.
- [15] Chen, Q., Gong, Z., Wu, J., & Wang, T. (2024). Does digital transformation affect carbon performance through talent? The moderating role of employee structure. *Journal of Cleaner Production*, 435(19), 140-151.
- [16] Dang, N. T. T., Tuong, V. P. D., & Ha, V. D. (2023). Talent management and digital transformation: empirical investigation in the Vietnamese banking sector. *Journal for Global Business Advancement*, 16(5), 712-735.
- [17] Datta, S., Budhwar, P., Agarwal, U. A., & Bhargava, S. (2023). Impact of HRM practices on innovative behaviour: mediating role of talent development climate in Indian firms. *The International Journal of Human Resource Management*, 34(6), 1071-1096.
- [18] Ferreiro-Seoane, F. J., Miguéns-Refojo, V., & Atrio-Lema, Y. (2021). Can talent management improve training, sustainability and excellence in the labor market?. *Sustainability*, 13(12), 66-75.
- [19] Guerra, J. M. M., Danvila-del-Valle, I., & Méndez-Suárez, M. (2023). The impact of digital transformation on talent management. *Technological Forecasting and Social Change*, 188(15), 122-131.
- [20] Jia, J., Jiao, Y., & Han, H. (2022). Inclusive leadership and team creativity: A moderated mediation model of Chinese talent management. *The International Journal of Human Resource Management*, 33(21), 4284-4307.
- [21] Kafetzopoulos, D., & Gotzamani, K. (2022). The effect of talent management and leadership styles on firms' sustainable performance. *European Business Review*, 34(6), 837-857.
- [22] Khaira, N., Triyonggo, Y., & Sukmawati, A. (2023). Examining the mediating role of digital culture on digital talent in the telecommunication sector. *Jurnal Aplikasi Manajemen*, 21(2), 439-454.
- [23] Khaw, T. Y., Teoh, A. P., Khalid, A. S. N., & Letchmunan, S. (2022). The impact of digital leadership on sustainable performance: a systematic literature review. *Journal of Management Development*, 41(10), 514-534.
- [24] Kumari, A., Khan, M., Singh, S., Niyati, Bajpai, P., & Nagpal, M. (2025). Innovative talent management practices for a seamless digital employee experience with mediation of shared leadership in the information technology (IT) industry. *Journal of Innovation and Entrepreneurship*, 14(1), 96-105.
- [25] Lin, Q. (2025). Digital leadership: a systematic literature review and future research agenda. *European Journal of Innovation Management*, 28(6), 2469-2488.
- [26] Mahroof, J., Rafi, A., & Ahmad, A. (2025). Talent management during digital transformation: Role of transformational leadership and resistance to change. *Technology in Society*, 83(10), 102-114.
- [27] Martínez-Morán, P. C., Urgoiti, J. M. F. R., Diez, F., & Solabarrieta, J. (2021). The digital transformation of the talent management process: A Spanish business case. *Sustainability*, 13(4), 22-34.
- [28] Masri, N. E., & Abubakr, S. U. L. I. M. A. N. (2019). Talent management, employee recognition and performance in the research institutions. *Studies in Business & Economics*, 14(1), 56-66.
- [29] Mensah, J. K. (2015). A "coalesced framework" of talent management and employee performance: For further research and practice. *International Journal of Productivity and Performance Management*, 64(4), 544-566.
- [30] Miharja, R., & Hayati, N. (2021). The importance of visionary leadership and talent management to improve the employee performance. *Holistica Journal of Business and Public Administration*, 12(2), 93-101.
- [31] Montero, G., J. M., & Danvila, D.V. I. (2024). Exploring organizational change in the age of digital transformation and its impact on talent management: trends and challenges. *Journal of Organizational Change Management*, 37(6), 1273-1294.
- [32] Muftiyanto, R. T. N., & Jatmika, D. (2025). Transformational leadership, organizational culture, and religious values impact on employee performance. *Jurnal Ilmiah Manajemen Kesatuan*, 13(5), 4101-4112.
- [33] Muhdar, H. M., Maguni, W., Muhtar, M., Bakri, B., Rahma, S. T., & Junaedi, I. W. R. (2022). The impact of leadership and employee satisfaction on the performance of vocational college lecturers in the digital era. *Frontiers in Psychology*, 13(5), 895-906.

- [34] Mulyono, B. E., Ahman, E., Gaffar, V., & Rofaida, R. (2025). Leadership and talent management trends: A bibliometric approach. In *9th Global Conference on Business, Management and Entrepreneurship (GCBME 2024)* (pp. 821-831). Paris: Atlantis Press.
- [35] Öngel, V., Günsel, A., Gençer Çelik, G., Altındağ, E., & Tatlı, H. S. (2023). Digital leadership's influence on individual creativity and employee performance: a view through the generational lens. *Behavioral Sciences, 14*(1), 3-6.
- [36] Palmucci, D. N., Giovando, G., & Vincurova, Z. (2025). The post-Covid era: digital leadership, organizational performance and employee motivation. *Management Decision, 63*(7), 2452-2485.
- [37] Pergelova, A., & Yordanova, D. (2025). The human element in digital transformation: The role of talent management for SMEs. *Journal of the International Council for Small Business, 6*(2), 269-283.
- [38] Priyanto, T., Hadna, A. H., Indrayanti, & Darwin, M. (2025). The impact of talent management towards digital leadership competencies through learning organization: an exploratory analysis in state-owned enterprises in Indonesia. *Cogent Business & Management, 12*(1), 251-281.
- [39] Purwanto, A., Purba, J. T., Bernarto, I., & Sijabat, R. (2023). Investigating the role digital transformation and human resource management on the performance of the universities. *International Journal of Data and Network Science, 7*(4), 44-55.
- [40] Qiao, G., Li, Y., & Hong, A. (2024). The strategic role of digital transformation: Leveraging digital leadership to enhance employee performance and organizational commitment in the digital era. *Systems, 12*(11), 457-466.
- [41] Samir, B. (2024). HRM and digital leadership: exploring the mediating role of digital talent. *HRM, Artificial Intelligence and the Future of Work: Insights from the Global South, 4*(2), 101-110.
- [42] Sánchez-Rodríguez, A., Pérez-Campdesuñer, R., García-Vidal, G., Fernández-Ochoa, Y., Martínez-Vivar, R., & Alvarez-Subía, F. I. (2025). Human behavioral drivers of sustainable supply chains: the role of green talent management in Ecuadorian MSMEs. *Sustainability, 17*(19), 88-99.
- [43] Semaihi, S. O., Ahmad, S. Z., & Khalid, K. (2023). Talent management and performance in the public sector: the mediating role of line managerial support. *Journal of Organizational Effectiveness: People and Performance, 10*(4), 546-564.
- [44] Shaikh, M. (2021). Talent retention: A mediator of the relationship between talent management strategies and succession planning. *Asian Academy of Management Journal, 6*(3), 33-40.
- [45] Shin, J., Mollah, M. A., & Choi, J. (2023). Sustainability and organizational performance in South Korea: The effect of digital leadership on digital culture and employees' digital capabilities. *Sustainability, 15*(3), 20-27.
- [46] Sopiah, S., Kurniawan, D. T., Nora, E., & Narmaditya, B. S. (2020). Does talent management affect employee performance?: The moderating role of work engagement. *The Journal of Asian Finance, Economics and Business, 7*(7), 335-341.
- [47] Subramaniam, S. N., Dorasamy, M., & Malarvizhi, C. A. N. (2025). Personality trait and employee performance in digital transformation: the mediating effect of employee dynamic capability. *Cogent Business & Management, 12*(1), 2448-2464.
- [48] Teng, X., Wu, Z., & Yang, F. (2022). Research on the relationship between digital transformation and performance of SMEs. *Sustainability, 14*(10), 60-72.
- [49] Thuy, N. T. T., Thanh, H. P. T., Ngoc, T. T. B., & Si, L. T. (2023). Determinants of employee digital transformation readiness and job performance: A case of SMEs in Vietnam. *Problems and Perspectives in Management, 21*(4), 226-235.
- [50] Valle, D. D. I., Montero Guerra, J. M., & Méndez Suárez, M. (2023). The impact of digital transformation on talent management. *Journal International Management, 5*(4), 34-43.
- [51] Wang, G., Mansor, Z. D., & Leong, Y. C. (2024). Linking digital leadership and employee digital performance in SMEs in China: The chain-mediating role of high-involvement human resource management practice and employee dynamic capability. *Heliyon, 10*(16), 55-64.
- [52] Warman, A., Affandi, M. J., Sukmawati, A., Maarif, M. S., Alfiany, H., & Hanifah, R. I. (2022). Digital leadership: develop perceived organizational support in the perception of talent mobility at employment social security supervisory agency. *Jurnal Aplikasi Bisnis dan Manajemen (JABM), 8*(3), 769-769.
- [53] Widodo, W., & Mawarto, M. (2020). Investigating the role of innovative behavior in mediating the effect of transformational leadership and talent management on performance. *Management Science Letters, 10*(10), 2175-2182.
- [54] Yildiz, K., Akoğlu, H. E., Emir, E., Angosto, S., & García-Fernández, J. (2025). The perceived effect of digital transformation and resultant empowerment on job performance of employees in the fitness family business. *Journal of Family Business Management, 15*(1), 102-121.
- [55] Zahoor, N., Christofi, M., Nwoba, A. C., Donbesuur, F., & Miri, D. (2024). Operational effectiveness in post-pandemic times: Examining the roles of digital technologies, talent management and employee engagement in manufacturing SMEs. *Production planning & control, 35*(13), 1625-1638.
- [56] Zhou, Q., Huang, R., & Mao, J. Y. (2025). A serial mediation effect of digital transformation on employee performance: An ability-motivation-opportunity framework and employee unlearning. *Journal of Business Research, 201*(20), 115-126.

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