

HRM Perspective on Transformational Leadership and Employee Performance: The Mediating Role of Digital Information Technology and Work Environment

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ABSTRACT

Purpose: This study aims to examine and explain the effect of transformational leadership on employee performance, with digital information technology and work environment serving as mediating variables in West Java's Islamic banking sector.

Design/methodology/approach: This study employed a quantitative survey design using non-probability purposive sampling. Data were collected from 280 supervisors and employees of Islamic banking institutions in West Java, Indonesia. The proposed hypotheses were tested using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS software.

Findings: The results demonstrate that transformational leadership has a significant and positive effect on digital information technology adoption, work environment, and employee performance. Specifically, the work environment significantly mediates the relationship between transformational leadership and employee performance, as indicated by the indirect effect coefficient ($\beta = 0.559$, $p < 0.000$). In contrast, the mediating effect of digital information technology was found to be statistically insignificant. This is further supported by a p-value of 0.113, which is greater than the 0.05 significance level. Although transformational leadership encourages the use of digital information technology, technological factors alone do not significantly translate into improved employee performance without a supportive work environment.

Research Implications: Islamic banking institutions should strengthen transformational leadership and prioritize a supportive work environment that fosters collaboration and employee well-being. Additionally, investments in digital technology must be accompanied by organizational improvements to maximize their impact on employee performance.

Originality/Value: This study contributes to leadership and HRM literature by proving that in Islamic banking, the work environment is a much stronger mediator than digital information technology in explaining how transformational leadership enhances employee performance.

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1. Introduction

Employee performance has become a critical factor in determining the sustainability and competitiveness of Islamic banking institutions in the increasingly dynamic financial industry. The issue of employee performance remains an interesting topic to be studied until today (Shao et al., 2024; Rosmi, R., & Syamsir, 2020 ;Pawirosumarto et al., 2017). Islamic banks are currently facing significant challenges arising from digital transformation, changes in customer behavior, increasing service expectations, and intensified competition within both the conventional and Islamic financial sectors. In the context of Human Resource Management (HRM), employee performance is not solely determined by employees' technical competencies but also by leadership effectiveness, technological support, and the quality of the work environment.

In the context of the digital era, the implementation of Digital HRM is highly relevant as it supports the creation of organizations that are more adaptive, responsive, and data-driven. Recent studies indicate that HRM digitalization improves operational efficiency and enhances organizational effectiveness through data-driven decision-making and improved employee experience. For instance, a study by Jeroen Meijerink and Boons (2021) emphasized that algorithm-based digital HRM can enhance the effectiveness of human resource management through automation and HR analytics. In addition, recent research shows that the application of AI in digital HRM contributes to increased innovation and employee productivity in modern organizations (Ali & Cicho, 2026). In line with these developments, the literature also confirms that Digital HRM in the digital economy era strengthens organizational capabilities in improving workforce productivity and overall organizational performance through the development of more adaptive human capital in response to changes in the digital environment (Alexandro 2025).

The growing importance of information technology is evident in its extensive influence on human activity and business operations. As a primary driver, it facilitates major shifts in organizational structures, operational processes, and managerial systems, ultimately enhancing convenience and efficiency for individuals. According to Kenneth C. Laudon, (2020), interconnected hardware is a key component of information technology adoption and software systems to support information processing and communication. This technology facilitates process transformation, leading organizations to invest heavily as a strategic effort to enhance competitiveness, increase efficiency, improve adaptability, and respond to evolving demands (Kadir, 2014). Sharia banking is becoming more digital is essential at this moment a significant changes within the banking sector have emerged as a result of rapid developments in data and voice transmission systems.

Among the factors affecting employee performance in Islamic banking, the workplace is important. The workforce strives to achieve organizational goals in the workplace. This covers all factors that influence employee performance, both favorably and unfavorably, including tools, systems, infrastructure, and policies. Among the various influencing factors, the work environment plays a crucial role in determining how well employees perform. A conducive work environment can stimulate effective work. Consequently, the workplace serves as the foundation for employee development and performance (Ángel et al., 2007). The quality of work and performance of employees are primarily influenced by the condition of the work environment (Stalmasekova, 2017). When workers are interested in their workplace, their inclination to develop new skills increases, along with higher levels of motivation, performance, and productivity (Bushiri, 2014). According to Schultz (2016), one definition of

the work environment is defined as the collection of factors unique to an organization's workplace that affect the attitudes and behaviors of its employees," with a focus on how employees' psychological well-being is impacted by their work experiences and other relevant aspects. This encompasses factors such as work-related boredom, monotony, and fatigue that organizations must continually address.

To address these challenges, transformational leadership has emerged as an important approach in Islamic banking organizations. Transformational leadership is crucial in influencing staff productivity (Baškarada et al., 2017). The utilization of transformational leadership encourages a positive work environment. As a result, the staff performance is elevated. Transformational leadership is a critical factor influencing employee performance in Islamic financial institutions. Innovation is fostered by leaders who practice transformational leadership and collaborate in using new technology, thereby increasing employee performance and the organization's capacity to compete proficiently in the 4.0 epoch. Transformational leadership is crucial for motivating employees to adjust to rapid technological developments and work productively in dynamic environments.

Numerous studies classify organizational work environments as either toxic or conducive, as evidenced by the research of (Iqra Hafeez, Zhu Yingjun, Saba Hafeez & Rehman, 2019) and (Akinyele, 2007). Stalmasekova(2017) posits that an organization's structure and design, particularly its physical conditions, influence employee work behavior. Numerous studies on the workplace indicate that employees express their pleasure through the work environment. Proper natural lighting, air circulation, acoustic circumstances, air quality, a nice aroma, temperature, and Employees place a high value on, and consider crucial to their performance and satisfaction in the workplace, aspects such as a nice work environment (Veitch, J. A.; Charles, K. E.; Newsham, G. R.; Marquardt & Geerts, 2003). Research by Hansika (2016), Dilani (2004), and Jennifer A. Veitch & Newsham (1997) has also shown that ergonomic furniture can improve worker health, leading to higher levels of productivity. Unhealthy and dangerous working circumstances, as indicated by Chandrasekar (2011), adversely affect employees' health and effectiveness. These situations include overly noisy workplaces, inadequate lighting, poor air quality, and improper temperature.

A study by Ly, (2023) found that transformational leadership positively and significantly influences digitalization. However, an empirical study conducted by Hooi & Chan, (2022) concluded that transformational leadership does not significantly affect digitalization. According to previous research findings, transformational leadership significantly affects organizational and job performance (Khan et al., 2020) as well as employee performance (Donkor et al., 2021; Qalati et al., 2022). In contrast, transformational leadership was found to have no significant effect on job performance Eliyana et al. (2019) and task performance Lai et al.(2020). Meanwhile, previous studies have found that transformational leadership influences the work environment (Simamora et al., 2020; Jabbar, 2020; Kaban & Wimko, 2024). Some studies conducted by Matutyana (2026), Lestary (2017), and Kusumastuti et al. (2019) stated that a good work environment can improve employee performance. However, Zhenjing et al. (2022) found that the work environment has no effect on employee performance. Yohana (2017) showed that the work environment does not significantly affect employees' ability to perform their jobs.

Many recent studies argue that digitalization does not significantly affect performance because digital technology alone is insufficient to achieve successful performance outcomes (Heredia

et al., 2022; Hooi & Chan, 2022; Usai et al., 2021). Several previous studies have also found that technology does not directly affect performance but rather has an indirect effect through agility as a mediating variable (Felipe et al., 2020). These findings challenge the common assumption that digital technology automatically improves performance (Usai et al., 2021). These studies contradict the findings of Tortorella et al. (2023), who concluded that technology directly and indirectly affects performance through several leadership behaviors.

This study offers novelty by integrating transformational leadership, digital tools, and work environment dynamics within an HRM framework. To address existing literature gaps, this study investigates the mediating roles of digital information technology and the work environment on employee performance, thereby offering a more nuanced understanding of dual-mediation mechanisms in the digital era.

2. Literature Review & Hypothesis Development

2.1 Transformational leadership and digital information technology

From the perspective of Job Demands–Resources (JD-R) Theory, transformational leadership and digital information technology can be viewed as job resources that help employees cope with job demands, enhance motivation, and improve performance. Numerous scholarly works have explored the relationship between changing leadership and implementing IT systems. Suriyanti (2020) found that the Sulsel Provincial Education Office's performance is greatly affected by transformational leadership, HR competencies, and information technology, both directly and indirectly. Change-making leadership can use technology in the workplace to connect people, competency management and productivity in the workplace. Duan & Duan (2021) conducted a study on the enhancement of performance in digital work through facilitating access to digital technology. According to her findings, digital technology has the potential to boost efficiency in freelance digital work. Research by Putranto et al. (2024) lends credence to the idea that Sharia cooperatives can greatly benefit from implementing transformational leadership and Using technology well to get good results. Evidence from previous studies, including Kurnia, S., J. Gao, K. Rong, (2016), suggests that sophisticated information technology applications, particularly big data and analytics, support organizational competitiveness and enhance employee performance.

H₁: Transformational leadership is important and significantly impacts digital information technology.

2.2 Transformational leadership and work environment

According to the Job Demands–Resources (JD-R) Theory, employees' well-being and performance are influenced by the balance between job demands and job resources. Within this framework, transformational leadership and a supportive work environment are considered important job resources that foster employee motivation, engagement and performance. Empirical evidence from previous studies, including Bernarto et al. (2020), demonstrates that transformational leadership significantly shapes the work environment, which in turn positively affects employee performance. According to Naeem, M., & Nawaz, (2017), the work environment can be improved by integrating the load fusion feature with the leadership approach. Empirical research, including Prameswari, Sujana W (2020) and Purwanto et al. (2020) found a substantial link between leadership style, work environment, and employee performance, with leadership style shown to directly influence workplace conditions. Hackman and Oldham (1976) showed that a work environment that facilitates

varied tasks, provides feedback, and grants decision-making autonomy to employees contributes to higher levels of performance. Several studies have shown that transformational leadership affects the workplace. Further research conducted by Parker, S. K., & Wall, (1998) showed that a work environment that gives social support, awards, and Giving employees chances to grow and learn can help them do their jobs better and learn new skills.

H₂: The application of transformational leadership contributes significantly to making the workplace better.

2.3 Transformational leadership and employee performance

According to the Job Demands–Resources (JD-R) Theory, transformational leadership is considered an organizational resource that can enhance the job resources available to employees. Bass, BM(1994) said that transformational leadership raises employee performance by making them more motivated, committed to the company, and trusting. The same thing was said by Walumbwa, FO, (2003) in 2003: transformational leadership makes employees work better. Jiang (2017) provides further evidence that innovative leadership improves employee performance over time and for a long time. Furthermore, transformational leaders considerably increase employee output (Yu & Jang, 2024). According to studies conducted by Khan et al. (2020), transformational leadership boosts employee performance, which in turn boosts financial performance, organizational product development, and overall job performance. According to the following research Shang (2023), transformational leadership affects worker productivity. Comparable findings were also reported in the study of Rizky (2022), Magasi (2021), Joko Dwiarto & Agung Surya Dwianto (2025) and Top (2020). There is substantial evidence from a variety of empirical studies that link transformational leadership to higher levels of employee performance. These studies include Chammas, CB (2019), Buil et al., (2019), and Rita et al., (2018). Considering all the data, it is clear that transformational leadership significantly affects employee productivity.

H₃: The implementation of transformational leadership markedly enhances employee performance.

2.4 Digital information technology and employee performance

Technology information is applied in a company with the hope that human resources who are users of the system can produce increasingly greater output and performance will be increased. Danuri (2019) revealed that digital technology prioritizes activities performed on a computer or digitally over those performed using human power. An organization's performance can be greatly enhanced by the strategic use of information technology, especially by increasing operational efficiency and costs will give a very high economic value (Melville et al., 2004). Therefore, if there is no technology information, the performance target of employees will still be fulfilled. This is possible because employees already know their duties and responsibilities in the organization they occupy. Previous research confirms that organizational productivity improves through the effective utilization of digital technology and employee performance (Lindsjörn et al., 2016 ; Somayya Madakam, Rajesh M. Holmukhe, 2019). According to Liang et al. (2020), digital technology greatly enhances knowledge sharing and transfer within organizations, which in turn boosts employee performance.

H₄: Employee performance is positively and significantly impacted by digital information technology.

2.5 Work Environment and employee performance

Based on the Job Demands–Resources (JD-R) Theory, transformational leadership represents an organizational resource that helps create a more supportive, safe, collaborative, and conducive work environment. In a healthy work environment, personnel exhibit heightened motivation and enthusiasm for their work, which in turn helps the organization reach its goals more efficiently and effectively. Some research conducted by Matutyana (2026), Lestary (2017) and Kusumastuti et al. (2019), also stated that a good work environment will be capable of giving satisfaction to employees, which will lead to optimal work results. Chandrasekar (2011) explained that an inadequately designed work environment characterized by incomplete facilities, poor ventilation, improper lighting, high noise levels, insufficient emergency safety systems, and limited personal protective equipment can increase employees' susceptibility to health problems and negatively affect their performance. In line with this view, Wibowo (2017) stated that a comfortable work setting improves both employee performance and how well workers get along with one another at work, as well as between superiors and subordinates and between colleagues.

H₅: The work environment significantly influences employee performance in a good manner.

2.6 The mediating Role of Digital information technology

Based on the JD-R Theory and the Technology Acceptance perspective, transformational leaders encourage the adoption and use of digital technology by providing vision, support, guidance, and inspiration to employees. A prior study indicates that digital leadership, a form of transformational leadership, significantly influences digital maturity (Kieser, 2017). Digital leadership is crucial for enhancing digital skills within organizations, influencing digital maturity, and generating value for the organization (Senadjki et al., 2023). An empirical study conducted by Hooi and Chan (2022) concluded that transformational leadership does not significantly affect digitalization. There are many recent studies arguing that digitalization does not significantly affect performance because digital technology alone is insufficient to achieve successful performance outcomes (Heredia et al., 2022; Hooi & Chan, 2022; Usai et al., 2021). Several previous studies have also found that technology does not directly affect performance but rather has an indirect effect through agility as a mediating variable (Felipe et al., 2020). Meanwhile, research by Ary Aditya (2024) found that the adoption of information technology had a negative and insignificant effect on strengthening the relationship between transformational leadership and employee performance. These results indicate that the presence of information technology does not always bridge or strengthen the influence of leadership on performance.

H₆: Digital information technology mediates connection between transformational leadership with performance employee

2.7 The Mediating role of Work environment

The effectiveness of leadership style is closely linked to better employee performance and a more conducive work environment (Hanifah, H., Susanthi, N., & Setiawan, 2014). Employee workload throughout the firm is influenced by leadership style (Naeem, M., & Nawaz, 2017). Elqadri et al. (2015) show that the way leaders act and the surroundings at work are both closely related to how well their employees do their jobs. Rasyid Almer, Hamid Djamhur, (2017) have stated that research shows significant results, proving that the way a boss acts and The performance of personnel is directly influenced by the conditions of the workplace.

Pratama et al., (2023) found that the way a boss acts and the work environment significantly impacts the efficiency with which people do their tasks. Leadership is a medium through which the environment and work affect employee performance (Nugroho et al., 2020). The workplace is strongly associated with improved performance levels, according to Rouf et al. (2022). The results show that transformational leadership has a noticeable effect on organizational performance.

H₇: The work environment acts as a mediator when considering transformational leadership and employee performance.

3. Methodology

Both observational and explanatory surveys were used in this study to explain the connection between variables through hypothesis testing in the field. The unit of analysis in this study is supervisory employees in Islamic banks in West Java. This study employed purposive sampling for data collection. According to Sekaran-Bougie (2013), purposive sampling is a method in which a researcher obtains information from those who are most prepared and fulfill the required criteria to provide the desired information. The reason for applying Judgment sampling was applied because, researchers have different views on related samples with research problems (Mason, 2017; Robinson, 2014). The sampling technique used was purposive sampling, in which respondents were selected based on specific criteria, such as being permanent employees, holding supervisory positions, having worked for at least five years, being involved in the use of digital banking technology, and working in the operational or service units. The population in this study included all employees working in Islamic banking in West Java, including employees of Bank Syariah Indonesia, Bank BJB Syariah, Bank Muamalat Indonesia, Bank Mega Syariah, BCA Syariah, Panin Dubai Syariah Bank, Bank Victoria Syariah, Bank Syariah Nasional, and CIMB Niaga Syariah. This study focused on supervisor-level employees in Islamic banking in West Java. This research uses 9 Islamic banks spread across West Java, Indonesia, which are distributed to employees at the supervisor level, so the sample used is 280 supervisors.

Data were collected from 280 employees of Islamic banking institutions in West Java using a structured questionnaire. The survey was conducted between January and March 2025 using online distribution methods. The respondent recruitment process was carried out in coordination with the management and human resource divisions of each Islamic bank. Questionnaires were distributed online using a digital survey platform, and some were distributed directly to several branch offices willing to participate in the study. A total of 300 questionnaires were distributed to potential respondents. Of these, 290 questionnaires were returned, and after the data screening process, 280 questionnaires were deemed valid and suitable for further analysis. Thus, the response rate of this study reached 96,7%. Furthermore, this study obtained research approval from the relevant institutions and ensured that all respondents provided informed consent before completing the questionnaire. The researchers also guaranteed the confidentiality of respondents' identities and ensured that the data would be used only for academic purposes.

Transformational leadership was measured using the dimensions developed by Bass and Riggio (2006): ideological sway, inspirational drive, intellectual encouragement, and tailored

attention. A rating scale variable on a scale from 1 to 5, Likert scale, with 4 items in the questionnaire for this variable. Digital information technology is measured using dimensions developed by DeLone, W. H., & McLean, (2016): computer hardware, computer software, networks and communications, databases, and information technology personnel. The measurement scale variable uses a five-level Likert measurement scale, with 5 items in the questionnaire for this variable.

The work environment is measured using dimensions developed by Robbins (2019): lighting, environmental factors such as noise and temperature, use of color, space motion in the work environment, employee security at work, and cooperation in the workplace. A rating scale variable on a scale from 1 to 5, Likert scale, with 7 items in the questionnaire for this variable. Employee performance was measured using the dimensions developed by Koopmans (2014): task execution, contextual execution, and adaptive execution. A rating scale variable on a scale from 1 to 5, Likert scale, with 3 items in the questionnaire for this variable.

Prior to the main survey, a pilot test involving 30 Islamic banking employees was conducted to assess the clarity, readability, and reliability of the questionnaire. Feedback from the participants was used to refine several statements before the final survey was administered.

Data analysis was applied using a quantitative approach regarding the developed hypotheses for the tests. This study applies descriptive and inferential analyses, along with SEM, to analyze the aggregated data. The analytical approach utilizes PLS, a variance-based SEM technique implemented through SmartPLS software.

Prior to data collection, all respondents were informed of the purpose of the study and the intended use of the data. Participation was entirely voluntary, and respondents could withdraw from the survey at any time, without penalty. No personally identifiable information was collected, ensuring the anonymity of the respondents. All responses were treated confidentially and analyzed only in aggregate form for academic purposes. Where applicable, this study complied with the institutional ethical guidelines for research involving human participants.

4. Result and Discussion

4.1 Result

As presented in Table 1, the distribution of the sample in this study was 76.4% men and 23.6% women. The education level includes 85.4% with a college degree, 11.1% with a diploma degree, and 3.6% with a master's degree. The distribution of work periods included <5 years (1.4%), 6-10 years (11.1%), 11-15 years (68.6%), 16-20 years (17.1%), and >20 years (1.8%).

Table 1. Respondent Profile

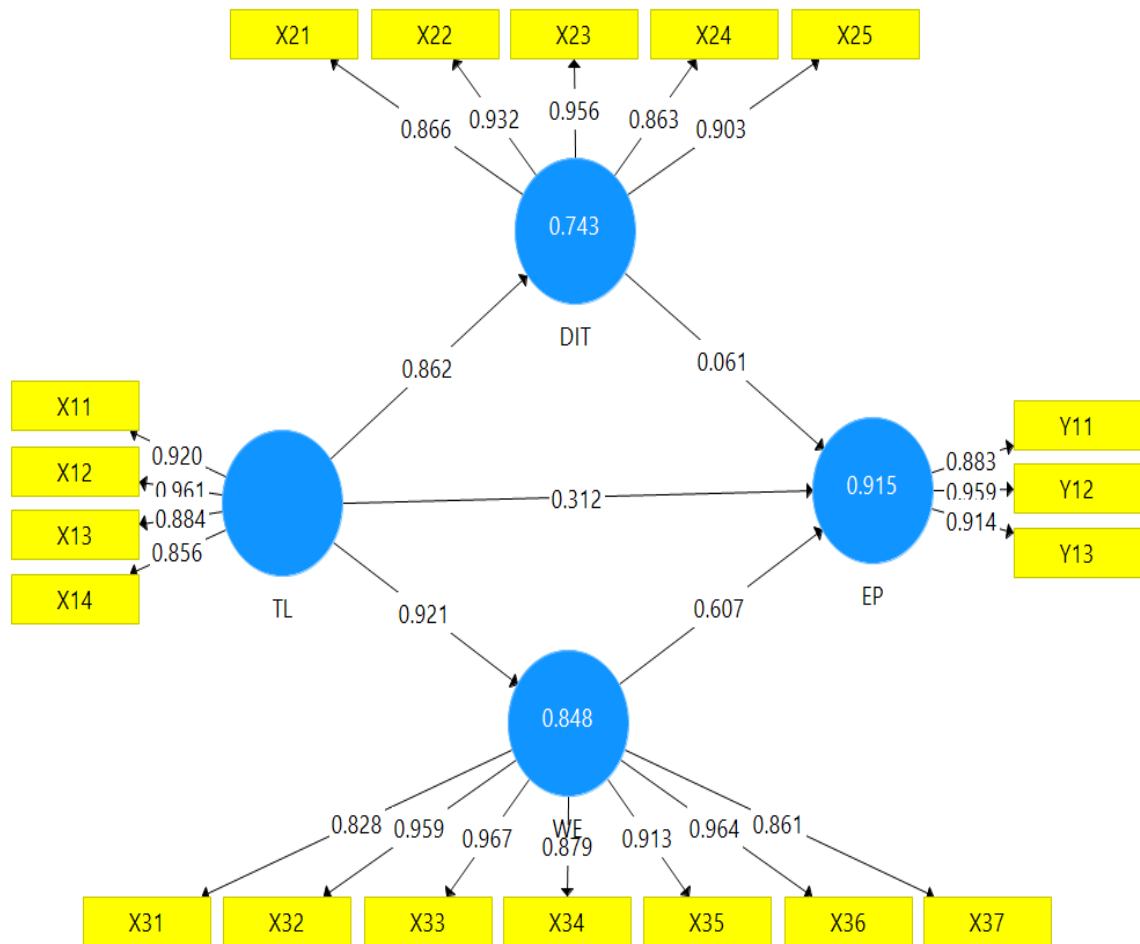
No.	Profile of Respondents	Information	Rate (%)
1.	Sex	Man	76,4%
		Woman	23,6%
2.	Education Level	Diploma	11,1%
		Bachelor	85,4%
		Master	3,6%

3.	Years of service	> 5 year old	1,4%
		Age 6 to 10	11,1%
		Age 11to15	68,6%
		Age16 to 20	17,1%
		> 20 years old	1,8%

Source: processed data, 2026

Testing indicators were measured by evaluating the loading factor criteria, discriminant validity, composite reliability, and average variance extracted (AVE) using the structural model. The results obtained using SmartPLS are illustrated in Figure 1.

Figure 1. Smart PLS Structural Model



The structural model illustrated in figure above can be described as follows: The path analysis results revealed that Transformational Leadership (TL) had a very strong positive impact on the Work Environment (WE) ($\beta=0,921$) and Digital Information Technology (DIT) ($\beta= 0,862$), confirming the leader's central role in driving organizational culture and technology adoption. This finding shows that transformational leadership plays a highly dominant role in creating supportive, comfortable, and positive work environments for employees. This strong relationship can be understood by considering the characteristics of the sampled organizations, where the role of leaders is highly central in shaping policies,

organizational culture, and both physical and psychological comfort in the workplace. Conversely, TL's direct effect on Employee Performance (EP) is only moderate ($\beta = 0.312$). Furthermore, while WE significantly boosts EP ($\beta= 0.607$), DIT exerts a negligible direct effect on it ($\beta= 0.061$). In conclusion, transformational leadership optimizes employee performance more effectively by fostering a conducive work environment rather than relying solely on the implementation of digital technology.

Testing validity was conducted to determine whether the measurement tool used effectively measured its intended function. In SmartPLS, validity can be assessed from the loading factor value for every dimension and for every variable, as seen from the convergent validity results, and variables are considered valid if they have a correlation value of more than 0,7. Although, for the study stage, during the preliminary stage of instrument development, loading coefficients between 0,5 and 0,6 are still tolerable (Ghozali, 2021). The results of the load factor testing for convergent validity are shown in the table below.

Table 2. Results of Convergent Validity

Item	TL	DIT	WE	EP	Info.
X11	0,920				
X12	0,961				
X13	0,884				
X14	0,856				
X21		0,866			
X22		0,932			
X23		0,936			
X24		0,863			
X25		0,903			
X31			0,828		
X32			0,959		
X33			0,967		
X34			0,879		
X35			0,913		
X36			0,964		
X37			0,861		
Y11				0,883	
Y12				0,959	
Y13				0,914	

Source : Processed data, 2026

Note: TL = Transformational Leadership, DIT= Digital Information Technology, WE= Work Environment, EP= Employee Performance

According to the data, the dimension loading factors for digital information technology, employee performance, work environment, and transformational leadership were all more than 0,5, according to the data, proving that all of the aforementioned dimensions were

legitimate. Furthermore, to see the Average Variance Extracted (AVE) value, the table below illustrates the convergent validity.

Table 3. Results of Construct Validity and Reliability

Variable	Cronbach's Alpha	rho_A	Composite Reliability	AVE
EP	0,908	0,918	0,942	0,845
TL	0,926	0,930	0,948	0,821
WE	0,966	0,969	0,972	0,831
DIT	0,944	0,947	0,957	0,819

Source : Processed data, 2026

The results of the construct validity and reliability assessment are presented in Table 3. Composite Reliability and Cronbach's alpha values above 0,70 show that the PLS measurement model is reliable. This indicates that the model fulfills acceptable reliability standards. Overall, the measurement items that measure each variable have high reliability and consistency in measuring their respective variables. Next, convergent validity with AVE size can be accepted, meeting the criterion of $AVE > 0,50$. The analysis confirms that the variance explained by the measurement items in each dimension exceeds 50%, which is a condition for convergent validity.

Table 4. Fornell-Larcker Criterion

Variable	DIT	EP	TL	WE
DIT	0,905			
EP	0,848	0,919		
TL	0,862	0,924	0,906	
WE	0,852	0,947	0,921	0,912

Source : Processed data, 2026

The results of the discriminant validity assessment based on the Fornell–Larcker criterion are presented in Table 4. Based on the results presented in the table above, the square root of the Average Variance Extracted (AVE) for each construct exceeds its correlations with other constructs. Therefore, the discriminant validity assessment based on the Fornell–Larcker criterion was considered satisfactory, indicating that each construct was empirically distinct from the others.

Table 5. Heterotrait Monotrait Ratio (HTMT)

Variable	DIT	EP	TL	WE
DIT				
EP	0,785			
TL	0,824	0,698		
WE	0,866	0,847	0,756	

Source : Processed data, 2026

The results of the discriminant validity assessment using the Heterotrait–Monotrait Ratio (HTMT) are presented in Table 5. In the HTMT table above, the HTMT values for each pair of variables were less than 0.90. This indicates that all variables have good discriminant validity and that the HTMT criterion has been fulfilled.

All indicators demonstrated higher loadings on their respective constructs than on other constructs, thereby satisfying the cross-loading criterion for discriminant validity. Consequently, no measurement items were removed from this model.

Table 6. Collinearity Statistic (VIF)

Variable	DIT	EP	TL	WE
DIT		4,267		
EP				
TL	1,000	4,124		1,000
WE		4,365		

Source: Processed data, 2026

The collinearity statistics (VIF) results are presented in Table 6. Based on the VIF values reported in the table above, all VIF values are below the threshold of 5, indicating that multicollinearity is not a concern for the model.

Table 7. Structural Model Quality

Construct	R ²	Adjusted R ²	Q ²
DIT	0,743	0,742	0,602
EP	0,915	0,914	0,767
WE	0,848	0,847	0,701

Source : Processed data, 2026

The structural model quality assessment results are presented in Table 7. The R² value of 0,743 indicates that 74,3% of the variance in Digital Information Technology (DIT) is explained by the predictors in the model, while the remaining 25,7% is attributed to other factors outside the model. The closeness between the R² and adjusted R² values suggests that the model is stable and does not suffer from overfitting.

The R² value of 0,915 indicates that 91,5% of the variance in employee performance is explained by the model, reflecting a very high level of explanatory power. The similarity between R² and the adjusted R² further confirms the robustness and stability of the model.

The Q² value of 0,767 (> 0) demonstrates strong predictive relevance for employee performance. Similarly, the Q² value of 0,602 (> 0) indicates that the model exhibits satisfactory predictive relevance for the DIT construct.

The R² value of 0,848 shows that 84,8% of the variance in the work environment is explained by the model, while the remaining variance is due to external factors not included in the study. The adjusted R² value, which is nearly identical to R², indicates model stability and the absence

of overfitting. Furthermore, the Q^2 value of 0,701 (> 0) confirms that the model has strong predictive relevance for the work environment construct.

Table 8. Effect Size (f^2)

Path	f^2	Interpretation
DIT -> EP	0,010	Little
TL -> DIT	0,895	Large
TL -> EP	0,149	Medium
TL -> WE	0,575	Large
WE -> EP	0,603	Large

Source : Processed data, 2026

The effect size (f^2) results are presented in Table 8. The results indicate that the effect of Transformational Leadership (TL) on Digital Information Technology (DIT) is large ($f^2 = 0,895$), suggesting that TL substantially contributes to explaining the variance in DIT. Similarly, TL has a large effect on the Work Environment (WE) ($f^2 = 0,575$), indicating its strong influence on shaping the work environment. Furthermore, the Work Environment (WE) has a large effect on Employee Performance (EP) ($f^2 = 0,603$), highlighting its substantial contribution to employee performance. The effect of Transformational Leadership (TL) on Employee Performance (EP) is moderate ($f^2 = 0,149$), indicating a meaningful but less substantial contribution compared to the other relationships.

In contrast, the effect of Digital Information Technology (DIT) on Employee Performance (EP) is negligible ($f^2 = 0,010$), suggesting that DIT contributes very little to the explanation of employee performance. Overall, the results demonstrate that Transformational Leadership and Work Environment are the most influential factors in the structural model, while Digital Information Technology has a limited practical impact on employee performance.

The hypothesis testing results are presented in Table 9. Hypothesis testing in SmartPLS was conducted using a bootstrapping procedure. The p-value and t-statistic were used as guidelines to decide whether the presented hypotheses were accepted or rejected. SmartPLS estimates the path coefficients and uses t-statistics to determine statistical significance. If, at a significance level of 5% ($\alpha = 0,05$), the p-value and the t-statistic are both less than 0,05 and more than 1,96, respectively, then the hypothesis is considered supported. Given this, we can conclude that the alternative hypothesis (H_a) is more likely to be correct than the null hypothesis (H_0). In contrast, we accept the null hypothesis if and only if the p-value is bigger than 0,05 or the t-statistic is smaller than 1,96. The evidence does not support the alternative hypothesis, as shown. This table (Table 9) details the results of the hypothesis testing.

Table 9. Hypothesis Testing

Hypothesis	(O)	T-Value	P-Value	Lower	Upper	Result
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Transformational leadership -> Employee performance	0,312	6,617	0,000	0,224	0,407	Supported
Transformational leadership -> Environment Work	0,921	93,149	0,000	0,896	0,940	Supported
Transformational leadership -> Digital information Technology	0,862	55,073	0,000	0,828	0,889	Supported
Environment work -> Employee Performance	0,607	13,226	0,000	0,510	0,683	Supported
Digital information Technology > Employee performance	0.061	1,594	0,111	-0,005	0,137	Not Supported

Source : Processed data, 2026

Here is a quick rundown of the table that contains the outcomes of the tests conducted on the hypothesis.

The first hypothesis looks at how transformational leadership styles affect productivity in the workplace. According to the data, employee performance is positively affected by transformational leadership, and this effect is positive and statistically significant (t-statistic = 6,617, path coefficient = 0,312; critical value = 1,96).

In the second hypothesis, we examine how transformational leadership directly impacts employee performance. There was a strong positive association according to the results (r=0,921, t=93,149), which is consistent with accepting the null hypothesis.

Third, we tested the hypothesis that transformational leadership affects IT in the digital realm. The t-statistic for this variable is 55,073, and the coefficient is 0,862, showing a strong and positive effect, providing strong statistical evidence.

The fourth hypothesis investigates whether there is a correlation between the workplace and productivity. Statistically significant positive effects are a t-statistic of demonstrates that 13,266 and a coefficient value of 0,607, which are greater than the minimal significance level.

The fifth hypothesis looks at how digital information technology affects productivity in the workplace. The results demonstrate that digital information technology has little to no effect on workplace productivity. The coefficient value of 0,061 and t-statistic of 1,594, both below the critical value of 1,96, lend credence to this.

Table 10. Indirect Effects and Mediation Test Results

Hypothesis	(O)	T Stat.	P	Lower	Upper	Result
Transformational leadership -> Technology Digital Information -> Employee Performance	0,053	1,589	0,113	-0,005	0,119	Not Supported

Transformational leadership -> Environment work -> Employee performance	0,559	13,395	0,000	0,473	0,630	Supported (Partial Mediation)
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Source : Processed data, 2026

The indirect effects and mediation test results are presented in Table 10. The mediation analysis's findings show that the workplace considerably mediates the connection to how transformational leadership impacts employee productivity, as the chart demonstrates. The t-statistic was 13,395 and the estimated indirect impact was 0,559, with a significance level of 0,000 ($< 0,05$), proving this beyond a critical value of 1,96. The findings demonstrate that transformational leadership impacts employee performance in various ways, including the work environment. In contrast, the mediation test involving digital information technology reveals no significant indirect effect. The estimated value of 0,053 is accompanied by a p-value of 0,113 and a t-statistic of 1,589, which is less than the cutoff of 1,96 ($> 0,05$).

4.2 Discussion

The findings of this study demonstrate that transformational leadership significantly improves employee performance in Islamic banking institutions in West Java. This result indicates that leaders who provide inspiration, intellectual stimulation, individualized consideration, and a clear organizational vision can motivate employees to achieve higher performance levels. This finding is consistent with previous studies by Shang (2023), Khan et al.(2020), Rizky (2022), Magasi (2021), Joko Dwiarto & Agung Surya Dwianto (2025) and Top (2020), which reported that transformational leadership positively influences employee performance. Similarly, Buil et al. (2019), Rita et al.(2018), and Chammas, CB (2019) found that transformational leadership contributes significantly to organizational and employee performance through enhanced motivation, commitment, and engagement.

The study further reveals that transformational leadership has a significant positive effect on the work environment. This finding suggests that transformational leaders create a supportive, collaborative, and trust-based workplace atmosphere that encourages employees to perform effectively. According to Bojović & Sandra Stojadinović Jovanović (2020), leadership plays an important role in inspiring followers to work toward common organizational goals. Likewise, Khan et al. (2020) argued that transformational leaders enhance employee morale and motivation without creating excessive pressure. The present finding is also supported by Simamora et al.(2020), Jabbar (2020), and Kaban & Wimko (2024), who found that transformational leadership contributes to the development of a positive work environment. Within Islamic banking institutions, such leadership practices are particularly important because employees are required to balance their professional responsibilities with ethical and religious values in serving customers.

The results also indicate that the work environment significantly influences employee performance. This finding supports the Job Demands–Resources (JD-R) Theory, which posits that favorable working conditions function as job resources that increase employee motivation and effectiveness. This result is consistent with previous studies by Shifaa et al. (2019), Parashakti et al.(2020), Dulloh et al. (2024), and Ardista & Marpaung (2022), which demonstrated that a conducive work environment positively affects employee performance. In Islamic banking institutions, a positive work environment may strengthen teamwork,

reduce work-related stress, and improve service quality, ultimately leading to higher employee performance.

Furthermore, the mediation analysis revealed that the work environment significantly mediated the relationship between transformational leadership and employee performance. This finding suggests that transformational leadership enhances employee performance through two pathways. First, leaders directly improve employee performance by motivating, guiding, and inspiring them. Second, leaders indirectly improve performance by creating supportive work environments that function as valuable job resources. This finding is consistent with Nugroho et al.(2020), Pawirosumarto et al. (2017), and Rouf et al. (2022), who reported that the work environment serves as an important mechanism through which transformational leadership influences employee outcomes.

The study also demonstrates that transformational leadership significantly influences digital information technology. This finding indicates that transformational leaders encourage employees to adopt and utilize digital technology more effectively. Leaders who possess digital awareness and promote innovation are more capable of supporting the digital transformation of organizations. This result is consistent with the findings of Prakasa et al. (2020) and Antonopoulou et al. (2023), who reported that transformational leadership facilitates digital technology adoption and organizational digitalization. Similarly, Ghasabeh (2020) argued that transformational leaders utilize technology as a strategic organizational resource to improve communication, knowledge sharing, and organizational effectiveness. Holst (2021) further suggested that transformational leadership is particularly effective in supporting Industry 4.0 implementation and digital transformation initiatives.

However, digital information technology was found to have no significant effect on employee performance and failed to mediate the relationship between transformational leadership and employee performance. This finding suggests that technology availability alone is insufficient to improve employee performance. One possible explanation is that digital technologies in Islamic banking institutions have become standardized operational tools that support daily activities rather than serving as strategic differentiators of employee performance. Consequently, employee performance may be influenced more strongly by leadership quality, work environment, employee competence, and organizational culture than by technology itself. The insignificant effect of digital information technology on employee performance suggests that technology availability alone is insufficient to improve employee outcomes. Although transformational leadership successfully encourages the adoption of digital technologies, the benefits of these technologies may not be fully realized due to differences in employees' digital competencies, readiness, and utilization levels. This finding supports the argument of Alos-Simo et al. (2017), who suggested that organizations often fail to achieve digital maturity when leaders are unable to influence employee values, behaviors, and readiness for change. The result is also consistent with Ary Aditya (2024) and Azura et al. (2026), who found that digital systems and digital workplaces do not necessarily mediate or directly influence employee performance. Conversely, the findings differ from those reported by Tikno (2020), Duan & Duan (2021), Bangun et al. (2021), and Hidayat et al. (2023), who found significant positive effects of digital technology on employee performance.

From the Resource-Based View (RBV), digital technology can generate performance benefits only when combined with complementary organizational resources, including employee competencies, leadership support, training, and a conducive work environment. Therefore, technology should be viewed as an enabling resource rather than a direct determinant of

employee performance. In the context of Islamic banking, where customer service quality, ethical behavior, and trust are critical success factors, human and organizational factors appear to play a more dominant role than technological infrastructure alone. The findings can be explained through the Job Demands–Resources (JD-R) Theory. Transformational leadership serves as an organizational resource that helps create a supportive work environment, which, in turn, functions as a job resource that enhances employee motivation, engagement, and performance. This mechanism explains why the work environment significantly mediates the relationship between transformational leadership and employee performance.

5. Conclusion and Suggestion

This study confirms that transformational leadership significantly influences the performance of Islamic bank employees in West Java, both directly ($\beta=0.312$) and indirectly, through the work environment ($\beta=0.559$). Furthermore, transformational leadership significantly influenced digital information technology ($\beta=0.852$) and the work environment ($\beta=0.921$). Furthermore, digital information technology does not mediate the effect of transformational leadership on employee performance ($\beta=0.053$), and digital information technology does not influence employee performance ($\beta=0.061$). The work environment significantly influences employee performance ($\beta=0.607$). Theoretically, this study refines prior frameworks by integrating transformational leadership, digital information technology, and the work environment into a single, comprehensive structural model.

The practical implications for organizational practitioners, particularly within the Islamic banking sector, indicate that the transformational leadership model must be guarded and maintained as a primary pillar of performance enhancement.

Despite its contributions, this study has some limitations. The research was conducted exclusively among employees of Islamic banking institutions in West Java, limiting the generalizability of the findings to other sectors and geographical contexts, and the study examined only transformational leadership, digital information technology, work environment, and employee performance.

Future studies should integrate other determinant variables such as employee engagement, work motivation, and compensation systems to provide a more comprehensive view of organizational success. Furthermore, the scope could be extended through comparative analyses involving conventional banking and non-banking sectors.

Declaration of AI and AI-assisted technologies in the writing process

The author states that the use of artificial intelligence (AI) in the preparation of this manuscript is limited to language editing assistance, summarization, and grammar improvement. The entire content, analysis, interpretation, and conclusions remain the sole responsibility of the author.

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