



THE INFLUENCE OF DIGITAL LEADERSHIP AND DIGITAL CULTURE ON EMPLOYEE PERFORMANCE AT PT. XYZ SUBANG

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Abstract

This research is motivated by the digital transformation challenges faced by manufacturing companies, particularly in terms of digital literacy and adaptation to technology-based work systems. The purpose of this study is to determine the influence of Digital Leadership and Digital Culture on Employee Performance at PT. XYZ Subang is a speaker manufacturing company. This study employs a quantitative, descriptive-associative design to examine the relationship between variables systematically. A total of 103 participants were selected as research subjects through purposive sampling, with the main criterion being active involvement in work activities that use digital systems and technology. The data collection tool used a structured questionnaire distributed to all employees of PT. XYZ. The data processing and testing were carried out using multiple linear regression, complemented by testing individual influences with t-tests and joint influences with F-tests. The research findings revealed that digital-based leadership and digital cultural values had a significant impact on employee performance, both when tested separately and simultaneously. These findings emphasize the importance of digitally literate leaders and a technology-adaptive work culture in encouraging employee productivity and work effectiveness in the Industry 4.0 era.

Keywords: Digital Leadership, Digital Culture, Employee Performance, Industry 4.0, Manufacturing Companies.

INTRODUCTION

In the era of Industrial Revolution 4.0, technological advancements in industry are developing rapidly. Technology plays a crucial role in supporting large-scale work efficiency, thereby meeting increasing consumer demand and needs. Globalization has also strengthened competition dynamics, ultimately accelerating technological transformation and driving digitalization across various aspects of life, including the workplace. (Setiawan & Harsono, 2020) Adapting to digitalization is crucial for companies to remain relevant and competitive. (Firdaus & Kuswinarno, 2024) The flexibility offered by technological advances also provides various conveniences for daily work activities. (Driyantini et al., 2020).

In an era of globalization marked by technological advancements, companies are required to excel and utilize technology effectively. Therefore, competent human resources (HR) are needed to design and operate these technological systems. However, employee performance is often hampered by a lack of job satisfaction and motivation, leading to suboptimal performance that falls short of company standards (Agustiansyah et al., 2025). One significant implication of the rapid technological development is the emergence of digital leadership, which plays a strategic role in reforming systems and designing work programs based on the latest

technology.(Andini, 2021).Digital leadership plays a central role in determining direction and accelerating organizational change to enable the organization to adapt and integrate fully with the demands and characteristics of the Industry 4.0 era. (Purwanti et al., 2021). The government, through the Ministry of Industry, has introduced the Making Indonesia 4.0 roadmap as a strategic policy designed to address the dynamics and challenges arising from the industrial revolution.(Tjakradirana et al., 2024).This approach focuses on five strategic manufacturing sectors in efforts to strengthen the foundation of the national industry, including food and beverage, motor vehicles, electronic devices, chemicals, and textile and fashion.(Ferdian & Rahmawati, 2020).

XYZ Company is a manufacturer of electronics, specifically active speakers. It requires sophisticated, continually upgraded technology to accelerate production and remain competitive with similar companies. Therefore, XYZ Company needs a digital leader who can quickly adapt and drive technological change. In addition to leadership, digital culture impacts the production process and employee performance. In this context, digital leadership is essential. Digital leadership is the ability to leverage digital assets to achieve business goals, whether by managing new technologies, optimizing work processes, or empowering employees to adopt them rapidly.(Maryati & Siregar, 2022).

However, PT. XYZ's journey towards digital transformation is not without challenges. According to the HR Manager at PT. XYZ, starting from the human aspect or element, which poses the main obstacle to this digital transformation: employees who are not digitally literate or lack knowledge. In addition to these two aspects, some machines require systems to be in that language, which makes it difficult for employees to work within those systems due to limitations. Employee. Employees' understanding of foreign languages is also a significant challenge in company operations, affecting performance. PT. XYZ has implemented advanced production technology that uses a foreign-language-based system, but many employees have difficulty understanding the machine's work instructions. As a result, work efficiency decreases, and the production process often experiences delays.

These constraints have a significant impact on employee performance, which, in turn, affects company productivity. Based on the established production target, PT. XYZ should be able to produce 100 sound systems per day. However, due to technological and language barriers, production output is limited to 40 units per day. This mismatch between targets and results indicates the need for digital skills development and language training for employees to adapt to modern work systems and support the optimal achievement of company targets.

At XYZ Company, the attendance system, previously manual, was replaced by fingerprint recognition and now uses a mobile app, requiring a higher level of digital literacy. As a result of this digital transformation, the company should have achieved 100% daily attendance. However, due to low employee digital literacy, the attendance rate reached only 65%. The change from a manual attendance system to a mobile app

complicated the situation, as many employees lacked smartphones or email, making it difficult for them to access and use the new system. It became a significant obstacle in ensuring employee attendance was recorded correctly and impacted their performance appraisals.

Digital culture is also a crucial foundation for driving organizational behavioral change. With a strong digital culture, employees will not only adapt more easily to new technologies such as IoT and cloud-based automation, but also increase productivity. This transformation depends not only on technology but also on people's readiness to change the way they think, work, and collaborate in a digital ecosystem.(Ferdian & Rahmawati, 2020). Therefore, the importance of digital leadership and digital culture on employee performance is crucial in a company's digitalization process. Employee performance is defined as the manifestation of ability, expressed in tangible results or work produced through the implementation of the tasks and responsibilities assigned by the company. (Priansa, 2017)

The pre-survey results on employee performance showed an average score of 2.49, placing it in the "less than ideal" category. The highest-scoring dimension was teamwork, indicating employees' ability to work effectively within a team. However, the punctuality dimension scored the lowest, indicating challenges in completing tasks within specified deadlines.

Therefore, considering the above phenomenon, it is crucial for PT. XYZ is to strengthen its digital leadership role and build a more adaptive digital culture to improve employee performance and enable the company to compete in an increasingly technology-driven industry.

LITERATURE REVIEW

Management

The term "management" is derived from the English word "to manage," which means to manage, organize, coordinate, direct, and lead various activities. According to Malay SP Hasibuan, management is understood as a scientific discipline and practical skill related to the optimal, planned, and efficient utilization of human resources and other resources to achieve predetermined goals.(Hasibuan, 2020)According to Andrew F. Sikula, translated by Malayu SP Hasibuan (2020), management generally consists of the activities of planning, organizing, controlling, placing, directing, motivating, communicating, and making decisions by an organization. The purpose of these activities is to coordinate available resources to create products or services efficiently. James Stoner's view, as translated by Desilia and Harjoyo, explains that management is a series of systematic stages that include planning, organizing, directing, and supervising all organizational efforts, all directed towards realizing the goals set from the beginning (Dewi, 2019). Meanwhile, Malayu SP Hasibuan (2020) states that management is built on six interrelated main components, known as the 6M concept, namely human resources (man), funding (money), materials

(material), equipment and technology (machine), work procedures (method), and the market as the target of organizational activities (market).

Human Resource Management

Human resource management (HRM) is a strategic aspect of an organization. This field is no longer understood narrowly as workforce management, but rather as a broader approach to managing individuals effectively. Therefore, HRM requires a deep understanding of human behavior and the skills to manage it optimally. According to Malayu SP Hasibuan (2020:11), HRM is the science and art of managing the roles and relationships of the workforce efficiently and effectively, to support the achievement of company goals, employee welfare, and the interests of stakeholders as a whole.(Irmayani, 2022).

Employee performance

Performance refers to the overall results achieved by an individual over a specific period of time in carrying out their work, as assessed by company standards. However, a company must encourage its employees to develop appropriate plans to prevent poor performance. Adhari (2020)states that employee performance is an achievement resulting from carrying out work tasks and responsibilities within a specific time period, which shows the results of the work carried out(Adhari, 2021)According to Sinaga (2020), performance is the result of carrying out tasks or activities within a company, which is influenced by various aspects, to achieve company targets within a specified time.(Sinaga et al., 2020)

Digital Leadership

Digital leadership is a manifestation of an authority's strategic capacity within an organization to read technological developments, coordinate the use of information systems, and integrate modern communication tools into all work processes, thereby sustainably increasing organizational productivity and effectiveness. In the dynamics of a fast-moving and innovation-filled business environment, the change towards a digital-based work system cannot be seen as merely an alternative, but rather as a fundamental demand that determines the sustainability of the organization, because the ability to adapt to technological advances is a key factor in maintaining competitive advantage, strengthening relevance in the market, and responding to stakeholder needs more responsively and efficiently.(Mudjiono & Fatoni, 2024)According to Maryati and Ichsan (2022), digital leadership is not only about the application of technology but also encompasses leadership qualities such as active involvement, employee development, and adaptability to change.

Digital Culture

Digital culture is seen as a value construct composed of seven fundamental elements, including innovation, data-driven decision-making, collaboration, open culture, a digital-first mindset, agility and flexibility, and customer centricity (Buvat et al., 2017), which collectively shape organizational mindsets and behaviors in the face of technological developments. This concept represents a set of fundamental assumptions and deeply embedded beliefs, accompanied by shared norms that guide how companies utilize digital technology in operational activities and decision-making, so that work processes can be more responsive, accurate, and efficient, while supporting the achievement of organizational goals and increasing competitiveness in a dynamic business environment. (Ferdian & Rahmawati, 2020) Digital culture refers to the influence of new media and the process of digitalization on the culture of a given environment. In some views, digital culture emerged as a phenomenon that developed alongside the advancement of new media. (Yegen, 2019) Meanwhile, according to Turkoglu and Turkoglu (2019), digital culture can be understood as a new culture created by digitalization (Türkoğlu & Türkoğlu, 2023).

Digital Leadership on Employee Performance

According to Sarijito, a leader in a digital context is characterized by their capacity to inspire, motivate, and encourage employees to express, champion, and defend their ideas. Optimal digital leadership is characterized by adaptive, agile management patterns that are not rigidly tied to structural levels, by prioritizing collaboration, and by emphasizing teamwork. In practice, this often generates innovation and creativity within the organization. Research findings by Ashari, Nurhayati, and Halimatusadiah (2019) further support this view by demonstrating that the implementation of a leadership style that involves active employee participation significantly contributes to increasing the effectiveness of system utilization, as employees feel involved in the decision-making process and are more responsible for the use of the technology implemented. Research by Roya & Jaya (2023) indicates that leadership practices impact employee performance. This finding aligns with other research confirming a positive, meaningful relationship between the application of a democratic leadership style and employee work capacity, which, in turn, affects employee performance at the Sukabumi Doll Factory.

Furthermore, Purwanto stated that digital leadership plays a crucial role in shaping organizational commitment and impacting employee performance. Organizational commitment reflects the extent to which individuals demonstrate sincerity in carrying out their job responsibilities, loyalty to the organization they work for, and willingness to exert additional effort to support the achievement of organizational goals. It includes employees' emotional attachment and self-identification with the shared goals.

The Impact of Digital Culture on Employee Performance

According to Putri, all successful companies rely on a digital culture. Therefore, implementing digital technologies within a company is appropriate and encouraged to improve product quality. Standards and practices implemented together within a digital culture will create an organizational work culture. It means that every individual within the organization who can use digital technology in their work can produce better products and complete them more quickly. According to Cahyono, digital culture is a key element in the digital transformation process. (Cahyono, 2018) With a digital culture, various aspects of a business will be faster and easier to achieve. Furthermore, digital culture plays a crucial role in developing and enhancing employee skills and achieving optimal work performance.

The Influence of Digital Leadership and Digital Culture on Employee Performance

According to research by Singgih Danu Widodo (2023), leadership is a person's effort to become a leader in achieving an organization's goals through ongoing activities. (Cahyono, 2018) Therefore, the role of a leader is to influence and motivate subordinates to carry out their tasks and achieve organizational goals enthusiastically. A conducive leadership style is supported by an organizational culture that shapes the work culture.

METHODS

This study applies a quantitative approach as its methodological basis. The conceptual model was designed to empirically demonstrate the extent to which the two independent variables influence the dependent variable, as illustrated in the conceptual framework presented below.



Figure 1. Analysis Model

Types of research

The author's research is associative and descriptive. As shown by previous research cited in (Ibrahim et al., 2023), the task is a study that aims to find out what the impact and final results are between the two factors, the variables themselves, namely the dependent variable and the independent variable.

Time and Location of Research

This research was conducted in the Subang region, with the implementation location being PT. XYZ. The timeframe for preparing the research proposal was approximately 6 months, from December 2025 to July 2025.

Population and Sample

In this study, the population studied was 300 active employees at PT XYZ. Based on efficiency considerations and time and resource limitations, the researcher set a margin of error of 8% ($e = 0.08$).

Data source

Primary data is information collected directly through the distribution of questionnaires to respondents, namely, employees of PT. XYZ. Meanwhile, secondary data come from various supporting materials, such as scientific articles, journals, theses, reference books, and other relevant sources related to the variables under focus in the research.

Analysis Method

Validity Test

The instrument's validity was tested using the Pearson Product-Moment correlation.

Reliability Test

Reliability testing is conducted using Cronbach's Alpha as a measure of internal consistency to assess the consistency of the research instrument's statements. An instrument is considered to have adequate reliability if the Cronbach's Alpha value exceeds 0.7.

Descriptive Statistics

Descriptive statistical analysis provides a general, preliminary overview of the data obtained in the study. This analysis process involves several statistical measures, including the mean, median, most frequently occurring value, the degree of data dispersion as measured by the standard deviation, and the data distribution pattern as indicated by the frequency distribution.

Classical Assumption Test

Normality Test

Data normality can be assessed using the One-Sample Kolmogorov–Smirnov Test. The decision-making criteria stipulate that data is normally distributed if the Asymp. Sig. value is equal to or greater than 0.05. If the value is below 0.05, the analyzed data is considered not to follow a normal distribution.

Multicollinearity test

Multicollinearity in this study can be assessed by examining the Variance Inflation Factor (VIF) and tolerance values in the regression model. A model is declared free of multicollinearity if the tolerance value is close to 1 and the VIF value does not exceed the specified limit of 10. Therefore, if the test results indicate a VIF value below 10, it can be concluded that the independent variables do not exhibit multicollinearity.

Heteroscedasticity Test

To detect heteroscedasticity in this study, the patterns in the graph were examined, and the Glejser Test was applied. The basis for decision-making determines that there is no heteroscedasticity if the resulting p-value is greater than 0.05. The absence of heteroscedasticity indicates that the error variance is homogeneous and stably distributed across all levels of the independent variables.

Hypothesis Testing

Partial t-Statistic Test

This test was conducted to assess the significance of the constants of each independent variable. The goal was to determine whether the variables Digital Leadership (X1) and Digital Culture (X2) had a partial or separate influence on the dependent variable, namely Employee Performance (Y).

f Statistical Test

Ghozali stated that the F-test is used to determine whether all independent variables in a model together influence the dependent variable.

Multiple Linear Regression Analysis Test

Multiple linear regression is an analytical technique used to examine the linear relationship between a single dependent variable and multiple independent variables. Applying this method requires that the data being analyzed be at the interval or ratio level of measurement, so that the relationships between variables can be estimated and interpreted quantitatively and accurately.

Coefficient of Determination Test

The coefficient of determination test assesses the extent to which the model explains changes or variations in the dependent variable. Technically, the coefficient of determination value is obtained by squaring the correlation coefficient (R), which describes the proportion of the independent variable's contribution to the dependent variable.

Research result

In this study, all company employees served as research participants, totaling 103. Respondent characteristics were analyzed to provide a general overview of participants' backgrounds, which were classified by job position, highest level of education, age range, and gender. The mapping results showed that respondents were predominantly operator-level employees. However, they still reflected the diversity of work positions within the company's organizational structure. Regarding education, the majority of respondents reported having a secondary education. Meanwhile, gender data showed that female respondents were more dominant, accounting for 66 percent (68 people), while male respondents numbered 35 (34 percent of the total participants).

Descriptive Statistical Analysis

Descriptive statistics were used to provide an initial summary of respondents' response patterns for each variable studied: Digital Leadership (X1), Digital Culture (X2), and Employee Performance (Y). Data were presented using several statistical measures, including the lowest value, the highest value, the average value (mean), and the level of data distribution indicated by the standard deviation, as shown in the following table:

Table 1. Descriptive Statistics Results

Variables	N	Minimum	Maximum	Average (Mean)	Standard Deviation (Std. Dev.)
Digital Leadership (X1)	103	21	90	73.69	11,574
Digital Culture (X2)	103	9	45	37.46	5,367
Employee Performance (Y)	103	16	40	34.58	4,723

Source: Data Processing Results (2025)

Based on the table, Digital Leadership (X1) has an average of 73.69 and a standard deviation of 11.574. It shows that respondents' perceptions of digital leadership are in the high category, but there is quite a significant variation in responses. Digital Culture (X2) has an average value of 37.46 with a standard deviation of 5.367. It indicates that the digital culture in respondents' work environments is also classified as high, with a high level of response homogeneity. Employee Performance (Y) obtained an average score of 34.58 and a standard deviation of 4.723, indicating that employee performance is considered quite high by respondents, with a relatively low data distribution.

Classical Assumption Test

Normality Test

In this study, determining whether the data follow a normal distribution is based on the significance value obtained from the test results. Data are considered normally distributed if the resulting p-value is

greater than 0.05; if it is less than 0.05, the data are considered not to meet the normality assumption. Based on the results of the Kolmogorov–Smirnov test, the Monte Carlo significance value (two-tailed) obtained was 0.106, which is greater than the α value of 0.05. This condition indicates that there is insufficient statistical evidence to reject the null hypothesis, so the residuals are deemed normally distributed. This finding is also supported by the distribution pattern of the residual graph, which tends to follow a normal distribution. Upon meeting both indicators, it can be concluded that the residuals in the regression model satisfy the normality assumption required for statistical analysis.

Multicollinearity Test

A multicollinearity test assesses whether the independent variables in a regression model are highly correlated. High levels of multicollinearity can reduce model stability by making it difficult to accurately separate the effects of independent variables and assess their influence on the dependent variable.

Table 2 Multicollinearity Test Results

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	8.818	2.154		4.093	<,001		
	TOTAL_X1	.152	.043	.373	3.548	<,001	.367	2.728
	TOTAL_X2	.389	.092	.442	4.207	<,001	.367	2.728

a. Dependent Variable: TOTAL_Y

Source: Data Processing Results (2025)

Based on the table results, the tolerance values for the TOTAL_X1 (Digital Leadership) and TOTAL_X2 (Digital Culture) variables are 0.367 and 0.367, respectively. This value is well above the commonly used minimum threshold of 0.10, which is often used as an indicator of multicollinearity. In addition, the Variance Inflation Factor (VIF) for both variables was 2.728, which is still well below the critical limit of 10. This finding indicates that the linear relationship among the independent variables is weak, suggesting that the regression model does not exhibit multicollinearity.

Table 3 Multiple Linear Analysis Test Results

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.818	2.154		4.093	<,001
	TOTAL_X1	.152	.043	.373	3.548	<,001
	TOTAL_X2	.389	.092	.442	4.207	<,001

a. Dependent Variable: TOTAL_Y

Source: Data Processing Results (2025)

The results of the analysis using the SPSS program above obtained the following multiple regression equation results:

$$Y = 8.818 + 0.152X_1 + 0.389X_2 + e$$

The constant, or intercept, value of 8.818 can be interpreted as the initial level of Employee Performance (Y) when the variables Digital Leadership (X1) and Digital Culture (X2) are assumed to have no effect, or are set to zero. In other words, this number represents the baseline performance score unaffected by the two independent variables. Furthermore, the variable Digital Leadership (X1) has a regression coefficient value of 0.152 with a significance level below 0.001, indicating that its influence is statistically significant. It indicates that an increase in the quality of digital leadership will be followed by a 0.152-point increase in employee performance for every one-unit increase in X1, provided that other variables remain unchanged. Meanwhile, Digital Culture (X2) shows a more substantial contribution, with a regression coefficient of 0.389 and a significance value of less than 0.001. This finding confirms that every one-unit increase in digital culture can drive a 0.389-point increase in employee performance, assuming other factors remain constant. This interpretation shows that, based on the beta coefficient, Digital Culture has a more substantial relative influence than Digital Leadership in explaining variations in Employee Performance.

Discussion

The Influence of Digital Leadership on Employee Performance

The results of the statistical tests show that the Digital Leadership variable (X1) had a t-value of 3.548 ($p < 0.001$) and a regression coefficient (β) of 0.152. Because the t-value is greater than the t-table ($3.548 > 1.984$) and the significance value is below the 0.05 limit, the first hypothesis (H_1) is accepted. This finding indicates a positive, meaningful relationship between digital leadership and employee performance. Therefore, the more effectively management implements digital leadership, the greater the improvement in employee performance within the organization. Leaders who can effectively use digital technology to provide direction, supervise, and build work coordination will foster an adaptive work environment that responds quickly to change and is oriented towards productivity. The results of this study align with the views of Maryati and Siregar (2022), who emphasized that digital leadership plays a strategic role in creating a resilient organization ready to face the dynamics of technology-based change. Therefore, the first hypothesis (H_1), that digital leadership has a positive and significant influence on employee performance, is supported.

The Influence of Digital Culture on Employee Performance

In testing the Digital Culture variable (X2), the calculated t value was 4.207 with a regression coefficient (β) of 0.389 and a significance level below 0.001. This condition indicates that the calculated t value exceeds the t table ($4.207 > 1.984$) and the significance value is less than 0.05, so that the second

hypothesis (H₂) is accepted. These results indicate that digital culture has a positive and significant influence on employee performance, exceeding that of the digital leadership variable. In this study, digital culture is reflected in employees' ability to adapt to technological developments, utilize application-based work systems, and grow a shared awareness of the importance of digital efficiency and collaboration. The stronger the digital culture within the company's internal environment, the easier it is for the organization to accelerate work processes, provide flexibility in reporting, and clarify the division of responsibilities. This finding aligns with research by Ary Ferdian and Annisaa Rahmawati (2022), which emphasized that digital culture plays a crucial role in increasing organizational agility and shaping a modern work ethic. Therefore, the second hypothesis (H₂), which states that digital culture has a positive and significant influence on employee performance, is acceptable.

The Simultaneous Effect of Digital Leadership and Digital Culture on Employee Performance

Based on the results of the F statistical test, the calculated F value was 73.748, while the F table value was recorded at 3.09. Because the calculated F value was much larger than the F table ($73.748 > 3.09$) and was supported by a significance level below 0.001, the third hypothesis (H₃) is declared accepted. This finding indicates that Digital Leadership and Digital Culture together have a positive and significant influence on Employee Performance. In addition, the Adjusted R² of 0.588 indicates that the combination of these two variables explains 58.8 percent of the variation in Employee Performance. In contrast, the remaining 41.2 percent is influenced by factors outside the research model, such as the incentive system, physical work environment, and the quality of relationships among individuals within the organization. This result confirms that consistent implementation of digital leadership, supported by a strong digital culture, will yield a greater impact on performance. A digitally oriented work environment led by a visionary figure can form an organization that is not only effective and efficient but also well prepared to face the challenges of the Industry 4.0 era. Therefore, the third hypothesis (H₃), which states that digital leadership and digital culture simultaneously have a positive and significant influence on employee performance, is acceptable.

CONCLUSION

The descriptive analysis findings indicate that respondents' perceptions of the implementation of Digital Leadership are generally high. This condition aligns with the results of partial testing using the t-test, which indicate a significant influence of Digital Leadership on Employee Performance at PT XYZ. Respondents' assessment of Digital Culture also shows the same category, namely high, which is further supported by the t-test, which confirms that Digital Culture has a significant influence on improving employee performance. A work environment that encourages the integrated use of technology and digital

systems plays a vital role in increasing individual productivity and effectiveness within the organization. Meanwhile, the overall assessment of Employee Performance is also in the high category, supported by the results of a simultaneous test using the F test (ANOVA), which indicates that Digital Leadership and Digital Culture together have a significant influence on Employee Performance at PT XYZ. Quantitatively, the contribution of these two variables simultaneously in explaining variations in employee performance reaches 58.8 percent. In contrast, the remaining 41.2 percent is influenced by other factors outside the scope of this study.

The company's digital leadership is quite good. It should be maintained and further improved, particularly in the use of digital systems to monitor performance, provide direction, and conduct data-based evaluations. The digital culture that has been formed in the PT. XYZ Subang's work environment must be continuously strengthened, for example, by encouraging the use of paperless work systems, expanding employee digital literacy, and improving supporting infrastructure such as networks and digital devices. For future researchers, it is recommended to expand the scope of the study by adding a variety of variables and enriching the measurement indicators used, so that a more comprehensive understanding of the determinants of employee performance can be obtained, especially in the technology-based manufacturing industry environment. Future research is also recommended to include additional factors beyond digital leadership and digital culture, as this study indicates that these two variables together explain only 58.8 percent of the variation in employee performance, with the remaining 41.2 percent influenced by other variables that have not been studied. Several additional factors worth considering include the condition of the work environment, reward and compensation systems, level of work motivation, effectiveness of organizational communication, and workload balance, which are believed to play a role in driving improved employee performance, especially in the electronics industry sector.

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