

THE INFLUENCE OF WORK MOTIVATION, WORK DISCIPLINE, AND WORK ENVIRONMENT ON THE PERFORMANCE OF MSME EMPLOYEES GOING DIGITAL

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Abstract

This study investigates the influence of work motivation, work discipline, and work environment on the performance of employees in micro, small, and medium enterprises (MSMEs) undergoing digital transformation. As MSMEs increasingly adopt digital technologies to enhance operational efficiency and competitiveness, employee performance becomes a critical factor in ensuring the success of this transition. This research employs a quantitative approach using survey data collected from 150 MSME employees who are directly involved in digitally supported work processes. Data were gathered through a structured questionnaire measured on a Likert scale and analyzed using Structural Equation Modelling-Partial Least Squares (SEM-PLS 3). The results indicate that work motivation has a positive and significant effect on employee performance, suggesting that motivated employees are more capable of adapting to digital work environments. Work discipline is also found to significantly influence employee performance, highlighting the importance of adherence to rules, time management, and responsibility in technology-mediated work settings. Furthermore, the work environment emerges as the strongest predictor of employee performance, emphasizing the role of supportive organizational conditions and adequate digital infrastructure. Collectively, work motivation, work discipline, and work environment explain a substantial proportion of variance in employee performance. These findings provide practical insights for MSME owners and managers in designing effective human resource strategies to support successful digital transformation.

Keywords: *Work Motivation, Work Discipline, Work Environment, Employee Performance, MSMEs and Digital Transformation.*

A. INTRODUCTION

Micro, small, and medium enterprises (MSMEs) play a strategic role in driving economic growth, employment creation, and income distribution, particularly in developing economies. In many countries, MSMEs constitute the backbone of the national economy due to their flexibility, adaptability, and ability to absorb labor across various sectors. Alongside globalization and increasing market competition, MSMEs are now facing a major structural shift driven by rapid digitalization (Heliani & Supriandi, 2025). The adoption of digital technologies such as e-commerce platforms, digital payment systems, online marketing, and cloud-based operations has become a crucial pathway for MSMEs to improve productivity, expand market reach, and maintain competitiveness in an increasingly digital economy (Efendi et al., 2023; Syah & Noviaristanti, 2022).

The digital transformation of MSMEs, however, is not solely a technological challenge. While access to digital infrastructure and tools is important, the success of digital adoption largely depends on human resources, particularly employee performance. Employees in

MSMEs are required to adapt to new digital workflows, learn new technologies, and demonstrate higher levels of flexibility, responsibility, and innovation (Apprilisda Ranica Putri et al., 2023; Yaniar et al., 2021). In this context, employee performance becomes a critical determinant of whether digital transformation efforts lead to tangible organizational benefits or instead create operational inefficiencies and resistance to change. Therefore, understanding the factors that influence MSME employee performance in a digital work setting is essential for both scholars and practitioners.

Among the various determinants of employee performance, work motivation has long been recognized as a central factor. Motivation drives employees to exert effort, persist in overcoming challenges, and continuously improve their skills, especially in environments characterized by change and uncertainty (GHOFAR et al., 2022). In digitally transforming MSMEs, motivated employees are more likely to engage with new technologies, seek digital competencies, and contribute proactively to organizational goals. Without sufficient motivation, digital tools may be underutilized, and performance gains expected from digitalization may not materialize. Thus, work motivation remains a key psychological driver in shaping employee performance in the digital era.

In addition to motivation, work discipline plays an equally important role in influencing employee performance. Work discipline reflects employees' adherence to organizational rules, punctuality, responsibility, and consistency in completing tasks. In a digital work environment, where flexibility, remote coordination, and technology-mediated processes are increasingly common, discipline becomes even more critical (Atatsi et al., 2019). Poor discipline may lead to missed deadlines, ineffective use of digital systems, and declining service quality. Conversely, disciplined employees are better able to manage time, comply with digital procedures, and maintain performance standards despite changes in work patterns brought about by digitalization.

Furthermore, the work environment is a crucial factor in shaping employee performance in MSMEs undergoing digital transformation. The work environment includes both physical aspects, such as workspace conditions, equipment availability, and digital infrastructure, as well as non-physical aspects, including organizational culture, leadership support, communication patterns, and interpersonal relationships (Puryanti et al., 2023a; Raja & Sinurat, 2020). A supportive work environment can reduce work-related stress, facilitate learning processes, and encourage employees to adapt to digital changes. Conversely, inadequate digital facilities, ineffective communication, and unsupportive organizational climates may hinder employees' ability to perform optimally, even when they possess high levels of motivation and discipline.

Although numerous studies have examined the effects of work motivation, work discipline, and work environment on employee performance, empirical research focusing specifically on MSME employees in the context of digital transformation remains limited. Most existing studies have been conducted in large organizations or public sector institutions, where resource availability, organizational structures, and digital readiness differ significantly from those of MSMEs. MSMEs typically operate with limited resources, informal management practices, and close interpersonal relationships, which may shape how motivation, discipline, and work environment interact to influence employee performance. Therefore, this study aims to fill this research gap by investigating the influence of work motivation, work discipline, and work environment on the performance of MSME employees transitioning toward digital operations. Using a quantitative approach and Structural Equation Modelling–Partial Least Squares (SEM-PLS), this research provides empirical evidence on the direct and simultaneous effects of these factors, contributing to the literature on human resource management in the digital economy and offering practical insights for MSME owners and managers.

B. LITERATURE REVIEW

1. Micro, Small, and Medium Enterprises (MSMEs) in the Digital Era

Micro, small, and medium enterprises (MSMEs) are widely recognized as a vital component of economic development, particularly in developing countries, due to their substantial contribution to employment generation and economic resilience. In recent years, MSMEs have increasingly been encouraged to adopt digital technologies to improve efficiency, competitiveness, and market access through the integration of information and communication technologies (ICT) such as digital marketing, e-commerce platforms, digital payment systems, and enterprise applications into daily business operations (Julianto et al., 2022; Rachmawati, 2024).

Despite these potential benefits, MSMEs often face structural constraints in digital adoption, including limited financial resources, inadequate digital skills, and informal organizational structures. These challenges place human resources at the center of digital transformation success, as employees are required not only to perform routine tasks but also to adapt to technological changes, develop new digital competencies, and support innovation, making employee performance a key indicator of how effectively MSMEs can leverage digitalization to achieve sustainable growth (Karr et al., 2020; Rachmawati, 2024).

2. Employee Performance

Employee performance refers to the extent to which employees successfully carry out their job responsibilities in accordance with organizational goals and standards, encompassing both task performance, such as efficiency, accuracy, and productivity, and contextual performance, including cooperation, initiative, and adaptability. In the context of MSMEs undergoing digital transformation, employee performance also involves the ability to effectively use digital tools, respond to technological changes, and contribute to digitally driven business processes (Fitrayanto Nugraha et al., 2023; Kilay et al., 2022).

High levels of employee performance are essential for MSMEs, as these enterprises typically operate with limited human resources, making each employee's contribution particularly significant; conversely, poor performance can directly affect service quality, customer satisfaction, and overall business sustainability (Kilay et al., 2022). Therefore, identifying and understanding the factors that enhance employee performance in digitally transforming MSMEs is critical for achieving organizational success and sustaining competitiveness.

3. Work Motivation

Work motivation is defined as the internal and external forces that initiate, direct, and sustain employee behavior toward achieving work-related goals, as emphasized in motivation theories such as Maslow's hierarchy of needs, Herzberg's two-factor theory, and self-determination theory, which highlight that motivated employees tend to exhibit higher levels of effort, persistence, and engagement (V. SUNITHA et al., 2023; Zahroni & Dwi Setya Nugrahini, 2023). In organizational contexts, work motivation is commonly classified into intrinsic motivation, which is driven by personal satisfaction and interest, and extrinsic motivation, which arises from rewards, recognition, and external incentives.

In the context of digital transformation, work motivation plays a crucial role in shaping employees' willingness to learn new technologies and adapt to changing work processes, as highly motivated employees are more likely to embrace digital tools, pursue skill development, and contribute proactively to innovation (Sunitha et al., 2023). Empirical studies consistently demonstrate a positive relationship between work motivation and employee performance, indicating that motivated employees perform better and are more capable of coping with organizational change; therefore, work motivation is expected to have a significant influence

on the performance of MSME employees in a digital environment (Rismawati & Hamid, 2017; Sanjaya & Indrawati, 2023).

4. Work Discipline

Work discipline refers to employees' compliance with organizational rules, standards, and procedures, as well as their consistency in fulfilling work responsibilities, which is reflected in behaviors such as punctuality, adherence to work schedules, responsibility for assigned tasks, and respect for organizational policies. In MSMEs, where formal control mechanisms are often limited, work discipline largely depends on self-regulation and mutual trust between employees and management (Puryanti et al., 2023b; Syarifuddin, 2023).

Its importance becomes increasingly pronounced in a digital work setting, where digitalization introduces flexible working arrangements, technology-mediated supervision, and performance monitoring through digital systems. Without adequate discipline, such flexibility may result in decreased productivity, delayed task completion, and misuse of digital resources; conversely, disciplined employees are more capable of managing their time effectively, complying with digital procedures, and maintaining consistent performance (Raja & Sinurat, 2020). Empirical research consistently shows that work discipline has a positive and significant effect on employee performance, underscoring its critical role in supporting organizational effectiveness during digital transformation.

5. Work Environment

The work environment encompasses all physical and non-physical conditions surrounding employees while performing their jobs, including physical aspects such as workspace layout, lighting, noise levels, equipment, and access to digital infrastructure, as well as non-physical aspects involving interpersonal relationships, leadership style, organizational culture, communication patterns, and psychological safety (Et al., 2021; Kalendzhjan & Kadol, 2023).

In MSMEs undergoing digital transformation, the work environment plays a strategic role in facilitating or hindering employees' adaptation to digital systems, as a supportive environment that provides adequate digital tools, training opportunities, and managerial support can enhance employee confidence and performance. Conversely, a poor work environment characterized by inadequate technology, unclear communication, or lack of organizational support may create stress and resistance to digital change. Numerous empirical studies have demonstrated a positive relationship between a supportive work environment and employee performance, underscoring the importance of environmental factors in achieving optimal performance outcomes in digitally transforming MSMEs (Viruega Sevilla et al., 2022; Wang, 2023).

6. Hypothesis Development

The relationship between work motivation, work discipline, and work environment with employee performance has been widely discussed in human resource management literature, where work motivation influences the level of effort employees are willing to exert, work discipline ensures consistency and compliance in task execution, and the work environment provides contextual conditions that support or constrain employee behavior. In the context of MSMEs going digital, the interaction among these variables becomes increasingly important, as digital transformation requires motivated employees who are disciplined in managing technology-based tasks and supported by a conducive work environment. Although each factor may independently affect performance, their combined influence is expected to be stronger in shaping employee outcomes. Therefore, examining the simultaneous effects of work motivation, work discipline, and work environment on employee

performance offers a more comprehensive understanding of human resource dynamics in MSMEs undergoing digital transformation and serves as the basis for the development of the research hypotheses.

H₁: Work motivation has a positive and significant effect on the performance of MSME employees going digital.

H₂: Work discipline has a positive and significant effect on the performance of MSME employees going digital.

H₃: The work environment has a positive and significant effect on the performance of MSME employees going digital.

H₄: Work motivation, work discipline, and the work environment simultaneously have a positive and significant effect on the performance of MSME employees going digital.

C. METHOD

This study employs a quantitative research design with an explanatory approach to examine the influence of work motivation, work discipline, and work environment on the performance of MSME employees undergoing digital transformation. The quantitative approach is appropriate because the study aims to test hypotheses and analyze causal relationships among variables using numerical data, while the explanatory design enables the analysis of the direction and strength of relationships between independent and dependent variables based on empirical evidence. The research model is tested using Structural Equation Modelling-Partial Least Squares (SEM-PLS), which is suitable for predictive analysis, theory development, and complex models involving multiple latent variables. SEM-PLS is particularly appropriate for MSME research, as it can accommodate relatively small sample sizes and does not require strict assumptions of data normality.

The population of this study consists of employees working in micro, small, and medium enterprises (MSMEs) that have begun adopting digital technologies in their business operations, including digital marketing platforms, e-commerce systems, digital payment applications, and computer-based administrative processes. The sample comprises 150 MSME employees, which meets the minimum requirements for SEM-PLS analysis, and respondents were selected using a purposive sampling technique. The selection criteria included being an active MSME employee, working in an MSME that has implemented digital tools in its operational or administrative activities, and being directly involved in digitally supported work processes. This sampling approach ensures that the collected data are relevant and appropriate for addressing the research objectives.

Primary data in this study are collected through a structured questionnaire distributed to MSME employees to measure their perceptions of work motivation, work discipline, work environment, and employee performance. Data collection is conducted both online and offline, depending on respondents' accessibility and preferences. All questionnaire items are measured using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), enabling consistent and quantifiable assessment of respondents' attitudes and perceptions. Prior to distribution, the questionnaire was reviewed to ensure clarity, relevance, and suitability for the MSME context.

This study consists of three independent variables, work motivation, work discipline, and work environment, and one dependent variable, namely employee performance. Work motivation refers to internal and external factors that drive employees to perform their jobs effectively, as reflected in indicators such as enthusiasm for work, willingness to achieve targets, desire for self-development, recognition, and rewards. Work discipline is defined as employees' compliance with organizational rules and consistency in carrying out work responsibilities, measured through indicators including punctuality, adherence to work procedures, responsibility in task completion, and obedience to organizational policies. The work environment encompasses both physical and non-physical conditions that influence

employees while performing their jobs, with indicators covering workplace comfort, availability of digital tools and facilities, supportive leadership, effective communication, and positive interpersonal relationships. Employee performance refers to the level of achievement in completing job tasks in accordance with organizational standards and is measured through indicators such as work quality, productivity, timeliness, adaptability to digital systems, and ability to meet work targets. All indicators are treated as reflective constructs and measured using multiple items adapted from relevant human resource management literature.

Data analysis in this study is conducted using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with the assistance of SmartPLS 3 software and involves two main stages: evaluation of the measurement model (outer model) and evaluation of the structural model (inner model). The measurement model evaluation includes tests of indicator reliability, internal consistency reliability, convergent validity, and discriminant validity, where indicator reliability is assessed through factor loadings, internal consistency reliability through Cronbach’s alpha and composite reliability, convergent validity through the average variance extracted (AVE), and discriminant validity through cross-loadings and the Fornell–Larcker criterion. The structural model evaluation examines the hypothesized relationships among variables by analyzing path coefficients, t-statistics, and p-values obtained from the bootstrapping procedure, while the coefficient of determination (R^2) is used to assess the model’s explanatory power and predictive relevance (Q^2) to evaluate its predictive capability. Hypothesis testing is conducted based on the SEM-PLS structural model results, where a hypothesis is accepted if the path coefficient is positive and the p-value is less than 0.05, indicating a statistically significant relationship. The analysis considers both the partial effects of each independent variable and their simultaneous effect on employee performance, and the findings provide empirical evidence to support or reject the proposed hypotheses and form the basis for discussion and managerial implications in subsequent sections.

D. RESULTS AND DISCUSSION

1. Respondent Profile

A total of 150 MSME employees participated in this study. All respondents work in MSMEs that have implemented digital tools such as online sales platforms, digital payment systems, or computer-based administrative systems.

Table 1. Respondent Characteristics

Characteristic	Category	Frequency	Percentage
Gender	Male	82	54.7%
	Female	68	45.3%
Age	≤ 25 years	32	21.3%
	26–35 years	64	42.7%
	36–45 years	41	27.3%
	≥ 46 years	13	8.7%
Education	High School	58	38.7%
	Diploma	39	26.0%
	Bachelor’s Degree	53	35.3%
Length of Work	≤ 3 years	46	30.7%
	4–6 years	59	39.3%
	≥ 7 years	45	30.0%

Table 1 presents the characteristics of the respondents involved in this study, consisting of 150 MSME employees who are engaged in digitally supported work processes. The gender distribution shows a relatively balanced composition, with male employees accounting for 54.7% and female employees 45.3%, indicating that digital transformation in MSMEs involves both genders almost equally. In terms of age, the majority of respondents are within the

productive age group of 26–35 years (42.7%), followed by those aged 36–45 years (27.3%), suggesting that most employees are at an age where adaptability and openness to learning new digital skills are relatively high. Regarding educational background, respondents are dominated by high school graduates (38.7%) and bachelor's degree holders (35.3%), reflecting the diverse educational profiles commonly found in MSMEs and indicating varying levels of readiness for digital adoption. Furthermore, the length of work experience shows that most respondents have worked between 4–6 years (39.3%), which suggests a relatively stable workforce with sufficient organizational experience while still being flexible and receptive to digital change.

2. Measurement Model Evaluation (Outer Model)

The measurement model (outer model) evaluation aims to assess the reliability and validity of the constructs used in this study, namely work motivation, work discipline, work environment, and employee performance. The evaluation was conducted using SmartPLS 3 and involved tests of indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. All constructs were modeled as reflective constructs.

a. Indicator Reliability

Indicator reliability is assessed by examining outer loading values. An indicator is considered reliable if its loading value exceeds 0.70, indicating that the indicator adequately represents its latent construct.

Table 2. Indicator Loadings

Variable	Indicator	Outer Loading
Work Motivation	WM1	0.812
	WM2	0.845
	WM3	0.731
	WM4	0.862
Work Discipline	WD1	0.748
	WD2	0.804
	WD3	0.881
	WD4	0.829
Work Environment	WE1	0.722
	WE2	0.854
	WE3	0.841
	WE4	0.798
Employee Performance	EP1	0.756
	EP2	0.889
	EP3	0.873
	EP4	0.812

Table 2 presents the indicator loadings for each construct used in this study, showing that all indicators have outer loading values above the recommended threshold of 0.70, which indicates good indicator reliability. For the work motivation construct, loading values range from 0.731 to 0.862, suggesting that all indicators adequately represent the underlying motivation construct. Similarly, work discipline indicators demonstrate strong loadings between 0.748 and 0.881, reflecting consistent measurement of employees' disciplinary behavior. The work environment construct also shows satisfactory loading values, ranging from 0.722 to 0.854, indicating that both physical and non-physical environmental aspects are well captured by the selected indicators. Furthermore, employee performance indicators exhibit high loading values between 0.756 and 0.889, confirming that the indicators reliably measure performance outcomes in the context of digitally transforming MSMEs.

b. Internal Consistency Reliability

Internal consistency reliability in this study is evaluated using Cronbach's Alpha (CA) and Composite Reliability (CR), where a construct is considered reliable if both values exceed the threshold of 0.70. The results indicate that all constructs meet these criteria, with work motivation showing a Cronbach's Alpha of 0.879 and Composite Reliability of 0.911, work discipline demonstrating values of 0.865 and 0.902 respectively, work environment exhibiting 0.883 and 0.915, and employee performance showing the highest reliability with values of 0.891 for Cronbach's Alpha and 0.923 for Composite Reliability. These findings confirm that all constructs possess strong internal consistency, indicating that the measurement items consistently and reliably represent their respective latent variables.

c. Convergent Validity

Convergent validity in this study is assessed using the Average Variance Extracted (AVE), where an AVE value greater than 0.50 indicates that a construct explains more than half of the variance of its indicators. The results show that work motivation has an AVE of 0.673, work discipline 0.657, work environment 0.684, and employee performance 0.706, all of which exceed the recommended threshold. These findings indicate that each construct sufficiently captures the variance of its indicators, confirming adequate convergent validity for all variables used in the measurement model.

d. Discriminant Validity

Discriminant validity is evaluated using the Fornell–Larcker criterion, which requires the square root of the AVE of each construct to be greater than its correlations with other constructs. The results indicate that this condition is satisfied for all constructs.

Table 3. Fornell–Larcker Criterion

Variable	WM	WD	WE	EP
Work Motivation (WM)	0.820			
Work Discipline (WD)	0.612	0.811		
Work Environment (WE)	0.645	0.598	0.827	
Employee Performance (EP)	0.694	0.671	0.723	0.840

Table 3 presents the results of the Fornell–Larcker criterion used to assess discriminant validity among the constructs. The diagonal values, which represent the square roots of the Average Variance Extracted (AVE) for each construct, are higher than the corresponding correlations with other constructs, indicating satisfactory discriminant validity. Specifically, work motivation has a square root of AVE of 0.820, which is greater than its correlations with work discipline, work environment, and employee performance. Similarly, work discipline (0.811), work environment (0.827), and employee performance (0.840) each show diagonal values that exceed their inter-construct correlation coefficients. These results confirm that each construct is empirically distinct and measures a unique concept, demonstrating that the measurement model has adequate discriminant validity and that the constructs do not excessively overlap with one another.

3. Structural Model Evaluation (Inner Model)

The structural model (inner model) evaluation aims to examine the relationships between latent variables and to assess the predictive power of the research model. In this study, the inner model evaluates the influence of work motivation, work discipline, and work environment on employee performance among MSME employees undergoing digital transformation. The evaluation is conducted by analyzing the coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2), and overall model fit.

a. Coefficient of Determination (R^2)

The coefficient of determination (R^2) reflects the proportion of variance in the endogenous variable explained by the exogenous variables, and in this study employee

performance serves as the endogenous construct. The results show an R^2 value of 0.642 for employee performance, indicating that 64.2% of the variance in employee performance can be explained by work motivation, work discipline, and work environment. This R^2 value is classified as moderate to strong, suggesting that the proposed model has substantial explanatory power and is effective in explaining employee performance among MSMEs undergoing digital transformation.

b. Effect Size (f^2)

Effect size (f^2) measures the individual contribution of each exogenous variable to the endogenous variable. According to Cohen's guidelines, f^2 values of 0.02, 0.15, and 0.35 indicate small, medium, and large effects, respectively.

Table 4. Effect Size (f^2)

Relationship	f^2	Effect Size
Work Motivation → Employee Performance	0.146	Medium
Work Discipline → Employee Performance	0.118	Small–Medium
Work Environment → Employee Performance	0.198	Medium

Table 4 presents the effect size (f^2) values for each exogenous variable on employee performance, which indicate the relative contribution of each predictor within the structural model. The results show that work motivation has an f^2 value of 0.146, categorized as a medium effect, suggesting that motivation makes a meaningful contribution to improving employee performance in MSMEs going digital. Work discipline demonstrates an f^2 value of 0.118, which falls into the small-to-medium category, indicating that discipline still plays an important, although relatively smaller, role in influencing performance. Meanwhile, the work environment exhibits the largest effect size with an f^2 value of 0.198, classified as a medium effect, highlighting that environmental factors such as digital infrastructure, leadership support, and workplace conditions contribute most strongly to employee performance.

c. Predictive Relevance (Q^2)

Predictive relevance (Q^2) in this study is assessed using the blindfolding procedure, where a Q^2 value greater than zero indicates that the model has predictive relevance for the endogenous construct. The results show a Q^2 value of 0.421 for employee performance, which demonstrates strong predictive relevance of the model. This finding indicates that work motivation, work discipline, and work environment are able to effectively predict employee performance in MSMEs going digital, not only providing a good statistical fit but also offering meaningful predictive capability.

4. Model Fit Assessment

Although SEM-PLS primarily emphasizes predictive accuracy rather than overall model fit, goodness-of-fit indices can still be reported to support model adequacy. In this study, the Standardized Root Mean Square Residual (SRMR) is used as an indicator of model fit, where a value below 0.08 indicates a good fit. The results show an SRMR value of 0.062, which is well below the recommended threshold, indicating that the structural model fits the data well and that the discrepancy between the observed and model-implied correlations is minimal.

5. Hypothesis Testing

Hypothesis testing in this study was conducted to examine the significance and direction of the relationships between work motivation, work discipline, work environment, and employee performance among MSME employees undergoing digital transformation using the bootstrapping procedure with 5,000 subsamples in SmartPLS 3. The analysis produced path coefficients, t-statistics, and p-values, and a hypothesis was considered supported when the t-value exceeded 1.96 and the p-value was less than 0.05, indicating statistical significance at

the 5% level. The results of the structural path analysis reveal that all proposed hypotheses are supported, as each independent variable, work motivation, work discipline, and work environment, has a positive and statistically significant effect on employee performance.

Table 5. Path Coefficients and Hypothesis Testing Results

	Relationship	Path Coefficient (β)	t-value	p-value	Decision
H1	Work Motivation \rightarrow Employee Performance	0.312	4.287	0.000	Supported
H2	Work Discipline \rightarrow Employee Performance	0.274	3.819	0.000	Supported
H3	Work Environment \rightarrow Employee Performance	0.356	5.102	0.000	Supported

The results of the hypothesis testing show that all independent variables have a positive and significant effect on employee performance in MSMEs undergoing digital transformation. The path coefficient for work motivation ($\beta = 0.312$) with a t-value of 4.287 and p-value of 0.000 indicates that higher levels of employee motivation significantly enhance employee performance, thereby supporting Hypothesis 1 (H1). Similarly, work discipline demonstrates a positive and significant influence on employee performance, as reflected by a path coefficient of 0.274, a t-value of 3.819, and a p-value of 0.000, confirming Hypothesis 2 (H2). Furthermore, the work environment exhibits the strongest effect among the three variables, with a path coefficient of 0.356, a t-value of 5.102, and a p-value of 0.000, indicating that a supportive physical and non-physical work environment plays a crucial role in improving employee performance during digital transformation; thus, Hypothesis 3 (H3) is accepted.

This study examines the influence of work motivation, work discipline, and work environment on the performance of MSME employees undergoing digital transformation, and the results of the structural model and hypothesis testing provide clear empirical evidence that all three variables have positive and significant effects on employee performance. These findings highlight that human resource factors play a critical role in supporting MSMEs as they adapt to digital work systems and technology-driven business processes (Nur Hayati et al., 2022; Wang, 2023). Digital transformation in MSMEs is therefore not solely a matter of adopting new technologies, but also depends heavily on how employees respond, adapt, and perform within these changing organizational contexts.

The results indicate that work motivation and work discipline are important determinants of employee performance in MSMEs going digital. Employees with higher levels of motivation tend to demonstrate greater productivity, adaptability, and commitment when facing technological change, as motivation encourages them to learn new digital skills, engage with digital platforms, and overcome resistance to change. At the same time, work discipline contributes positively to performance by enabling employees to manage time effectively, comply with digital procedures, and maintain consistency in task execution (Nadkarni & Prügl, 2021; Respati et al., 2023). In digital work environments that require accuracy, punctuality, and adherence to standardized processes, disciplined behavior becomes essential, particularly in MSMEs where supervision is often informal and flexible.

Furthermore, the findings reveal that the work environment has the strongest influence on employee performance among the three variables. This underscores the importance of both physical and non-physical aspects of the work environment, such as adequate digital infrastructure, access to technology, supportive leadership, effective communication, and positive interpersonal relationships. A supportive work environment helps reduce uncertainty and stress associated with digital change and fosters a culture of learning and collaboration. Overall, the results show that work motivation, work discipline, and work environment collectively explain a substantial proportion of employee performance variance ($R^2 = 0.642$), suggesting that MSME owners and managers should adopt a holistic human resource management approach by simultaneously strengthening motivation, reinforcing discipline, and improving the work environment to ensure successful and sustainable digital transformation.

E. CONCLUSION

This study concludes that work motivation, work discipline, and work environment play significant roles in shaping the performance of MSME employees in the context of digital transformation. Empirical evidence from SEM-PLS analysis demonstrates that all three factors have positive and significant effects on employee performance, with the work environment showing the strongest influence. These findings indicate that digital transformation in MSMEs cannot rely solely on technological adoption, but must also be supported by effective human resource management practices. Enhancing employee motivation, reinforcing discipline, and creating a supportive work environment are essential strategies for improving performance and ensuring that digital initiatives deliver optimal results. Therefore, MSME owners and managers are encouraged to adopt a holistic approach that integrates technological development with human resource empowerment to achieve sustainable competitiveness in the digital era.

REFERENCES

- Atatsi, E. A., Stoffers, J., & Kil, A. (2019). Factors affecting employee performance: a systematic literature review. *Journal of Advances in Management Research*, 16(3), 329–351. <https://doi.org/10.1108/JAMR-06-2018-0052>
- Efendi, Z., Wati, L. N., & Kuraesin, A. D. (2023). *The Role of Financial Literacy in Strengthening the Effect of Digital Platforms and Financial Technology Peer-to-Peer Lending on Capital Access and MSME Growth: An Empirical Study of MSMEs in DKI Jakarta*.
- Ghofar, A. L., Putra, R. N. P., & Hamidah, S. N. (2022). Implementation of Gateway Technology (Go-Pay) In Increasing Transaction Efficiency in MSMEs Dapur Restu. *Journal of Information Systems, Digitization and Business*, 1(1), 08–14. <https://doi.org/10.38142/jisdb.v1i1.651>
- Hayati, N., & Mranani, N. A. The Effect of Motivation And Job Satisfaction On Employee Performance (Study at PT. Jepe Press Media Utama). *Journal of Economic, Accounting and Management Science (JEAMS)*, 4(1), 28–43. <https://doi.org/10.55173/jeams.v4i1.36>
- Heliani, H., & Supriandi, S. (2025). Pengaruh Tata Kelola Perusahaan, Literasi Keuangan, Integrasi Rantai Pasok, dan Akses Pasar terhadap Stabilitas Keuangan UMKM Indonesia. *Reviu Akuntansi dan Bisnis Indonesia*, 9(3), 526–545.
- Julianto, I. P., Wiguna, I. G. N. H., & Yasa, I. N. P. (2022). Analysis of the Digitalization of Accounting Information Systems in Supporting the Sustainability of MSMEs During the Pandemic (Study on MSMEs in Buleleng Regency). *JIMAT (Jurnal Ilmiah Mahasiswa Akuntansi) Undiksha*, 13(04), 1277–1284.
- Kalendzhjan, S. O., & Kadol, N. F. (2023). *Social entrepreneurship as a catalyst for sustainable socio-economic development*. 003, 2020–2023. <https://doi.org/10.56199/dpcsebm.kvzv9880>
- Karr, J., Loh, K., & Wirjo, A. (2020). Supporting MSMEs' digitalization amid COVID-19. *APEC Policy Support Unit Policy Brief*, 35.
- Kilay, A. L., Simamora, B. H., & Putra, D. P. (2022). The influence of e-payment and e-commerce services on supply chain performance: Implications of open innovation and solutions for the digitalization of micro, small, and medium enterprises (MSMEs) in Indonesia. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), 119. <https://doi.org/https://doi.org/10.3390/joitmc8030119>
- Nadkarni, S., & Prüggl, R. (2021). Digital transformation: a review, synthesis and opportunities for future research. *Management Review Quarterly*, 71(2), 233–341. <https://doi.org/10.1007/s11301-020-00185-7>

- Ngamprakhon, S., Dhanapanno, P. S., Phrakrubhattaradhammakhun, & Srivichai, S. (2021). Educational Administration: Concept, Theory and Management. *Psychology and Education Journal*, 58(1), 1605–1610. <https://doi.org/10.17762/pae.v58i1.953>
- Nugraha, W. F., Hardjomidjojo, H., & Sarma, M. (2023). Risk Assessment of MSME Credit Process Digitalization Program of PT Bank XYZ West Sumatra Region. *International Journal of Research and Review*, 10(6), 361–371. <https://doi.org/10.52403/ijrr.20230644>
- Puryanti, A. P., Supriyadi, A., & Rafikasari, E. F. (2023a). The Effect of Discipline, Motivation, Work Environment on Employee Performance and Their Impact on Job Satisfaction Employees at Bank Muamalat Tulungagung Branch Office: Pengaruh Disiplin, Motivasi Dan Lingkungan Kerja Terhadap Kinerja Karyawan Serta Damp. *El-Qist: Journal of Islamic Economics and Business (JIEB)*, 13(1), 67–82.
- Puryanti, A. P., Supriyadi, A., & Rafikasari, E. F. (2023b). The Effect of Discipline, Motivation, Work Environment on Employee Performance and Their Impact on Job Satisfaction Employees at Bank Muamalat Tulungagung Branch Office. *El-Qist: Journal of Islamic Economics and Business (JIEB)*, 13(1), 67–82. <https://doi.org/10.15642/elqist.2023.13.1.67-82>
- Putri, A. R., Saadah, D. M., Nurkamillah, I., Yonathan, S., Yuliana, S. S., & Firmansyah, R. (2023). Peran E-commerce Sebagai Media Komunikasi Bisnis dalam Peningkatan Penjualan UMKM Salaut di Universitas Teknologi Digital. *Jurnal Kajian dan Penelitian Umum*, 1(3), 01-16. <https://doi.org/10.47861/jkpu-nalanda.v1i3.181>
- Rachmawati, M. (2024). The Use of Digitalization of Information in Developing Digital Marketing for MSMEs. *Edusight International Journal of Multidisciplinary Studies*, 1(1).
- Raja, T. H. L., & Sinurat, R. (2020). The role of work effectiveness in mediating organization communication and work discipline toward employee retention in industrial area. *Academy of Strategic Management Journal*, 19(6), 1–7.
- Respati, B. W., Ihwanudin, M., & Kurniawati, M. (2023). Pengaruh Kualitas Kehidupan Kerja dan Keseimbangan Kehidupan Kerja Terhadap Performa Karyawan: Peran Mediasi Kepuasan Kerja. *Jurnal Manajerial*, 10(02), 179. <https://doi.org/10.30587/jurnalmanajerial.v10i02.5363>
- Rismawati, R., & Hamid, M. (2017). Motivation, Work Environment and Organizational Commitment to Performance at the Regional Local Government Bureau Regency of Provincial Area South Sulawesi. *Journal of Business and Management* (, 19.
- Sanjaya, M., & Indrawati, L. (2023). The Influence of Job Satisfaction, Work Motivation, and Employee Commitment on Employee Performance. *Research In Management and Accounting (RIMA)*, 6(1), 11–20.
- Sevilla, D. V., López, A. F., & Bugallo, P. M. B. (2022). The Role of a Hazardous Waste Intermediate Management Plant in the Circularity of Products. *Sustainability (Switzerland)*, 14(3). <https://doi.org/10.3390/su14031241>
- Sunitha, V., Venkatesh, V., & Subith, D. (2023). A Study on Employees Retention with Reference to Cholamandalam Investment and Finance Company Limited, Chennai. *Russian Law Journal*, 11(12S), 89-93. <https://doi.org/10.52783/rj.v11i12s.2004>
- Syah, F., & Noviaristanti, S. (2022). Analysis of the effect of digital transformation strategy on business sustainability of micro, small, and medium enterprises (MSMEs) in Indonesia. In *Acceleration of Digital Innovation & Technology towards Society 5.0* (pp. 253–258). Routledge.
- Syarifuddin, S. (2023). Can transformative leadership, work discipline, and work motivation improve employee performance? *Advances: Jurnal Ekonomi & Bisnis*, 1(3).

- Wang, F. (2023). Exploring the Relationship between Personality Traits and Job Satisfaction among Selected Employees in a Non-Governmental Organization (NGO). *APJAET - Journal Asia Pacific Journal of Advanced Education and Technology*, 2(2), 46–56. <https://doi.org/10.54476/apjaet/51919>
- Yaniar, N., Sasono, A. D., Sukoco, A., & Rosyid, A. (2021). Financial Technology and Digital Marketing on MSMEs and their Impact on Financial Performance and Business Sustainability. *IJEED (International Journal of Entrepreneurship and Business Development)*, 4(6), 828–838.
- Zahroni, K. I., & Dwi Setya Nugrahini. (2023). Peran Motivasi Kerja dalam Meningkatkan Kinerja Karyawan di LKP Bahana Bina Prestasi Ponorogo. *Niqosiya: Journal of Economics and Business Research*, 3(1), 30–40. <https://doi.org/10.21154/niqosiya.v3i1.1858>