

Advances in Human Resource Management Research

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Digital Capabilities, Organizational Culture, and Employee Well-Being on Employee Performance Through Employee Engagement at Startups Under the Guidance of a Business Incubator

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KEYWORDS	ABSTRACT
Keywords: digital capabilities; organizational culture; employee well-being; employee engagement; employee performance. Conflict of Interest Statement: The author(s) declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest. Copyright © 2025 AHRMR. All rights reserved.	Purpose: This study examines the effects of digital capabilities, organizational culture, and employee well-being on employee performance, with employee engagement as a mediating variable. Research Design and Methodology: Using a quantitative explanatory design, data were collected through questionnaires from 180 respondents and analyzed using Partial Least Squares-Structural Equation Modeling (PLS-SEM). The measurement model was assessed through outer loadings, composite reliability, and average variance extracted, while the structural model was evaluated using path coefficients, coefficient of determination, and bootstrapping. Findings and Discussion: The results show that digital capabilities, organizational culture, and employee well-being positively and significantly influence employee engagement. Employee engagement has a positive and significant effect on employee performance and represents the strongest direct predictor. Employee well-being also directly improves employee performance, whereas digital capabilities have no significant direct effect, indicating that their contribution to performance operates primarily through employee engagement. Implications: Organizations should integrate digital capability development, a supportive organizational culture, employee well-being initiatives, and engagement strategies to improve employee performance during digital transformation sustainably. Future research may test this model across industries and broader organizational contexts.

Introduction

Digital transformation has fundamentally changed the way organizations operate, communicate, and compete. These changes extend beyond technology alone; they also require digital leadership and a workforce capable of adapting to new ways of working (Colbert et al., 2016; Cortellazzo et al., 2019). This phenomenon marks a shift from conventional work to digitally enabled work, where an organization's success increasingly depends on its human resources' ability to manage and use technology effectively—rather than merely possessing digital infrastructure. This shift raises a fundamental question: Can employees maintain their performance amid ever-changing demands for adaptation? From the perspective of the Resource-Based View, an organization's competitive advantage stems from internal resources that are valuable, rare, and difficult to imitate—including

the digital capabilities inherent in employees (Barney, 1991). However, possessing technology does not automatically lead to better performance; its impact depends heavily on how these digital capabilities are integrated into daily work practices (Chatterjee et al., 2023; Tiong et al., 2024). The context of startups serves as a relevant setting for examining this issue. Startups are characterized by rapid growth, high uncertainty, limited resources, and a heavy reliance on digital technology to survive and thrive. Unlike established organizations, which have greater resources to cope with change, startups—including those in business incubators—must rely directly on the quality of their human resources to respond to market dynamics (Hairunisya & Narmaditya, 2025; Priadana & Iryadana, 2024). A study of startup employees in Indonesia even found that high demand for digital competencies goes hand in hand with high turnover rates, making the management of the human aspect of digitalization crucial to the sustainability of startups (Hairunisya & Narmaditya, 2025). The digital literacy of MSME owners and workers has also been shown to contribute to entrepreneurial orientation and broader business performance (Indrawan et al., 2025).

At the individual level, digital capabilities refer to employees' ability to use technology effectively to complete work, collaborate, and make informed decisions. Several studies indicate that digital capabilities contribute to performance through digital innovation and organizational digital maturity (Khin & Ho, 2019; Gebur et al., 2025), while strengthening digital culture has also been shown to enhance employee performance in Indonesia's financial services sector (Khansa & Ferdian, 2021). However, these findings generally confirm that the influence of digital capabilities on performance is rarely direct; rather, it is mediated by other psychological and organizational factors. Individual capabilities alone are insufficient without a conducive organizational environment. An organizational culture that supports collaboration, tolerance for mistakes, and openness to change has been shown to strengthen the effectiveness of transformational leadership and change management, including within virtual teams (Kaur Bagga et al., 2023). Conversely, a rigid and competitive work culture actually increases psychological pressure on employees (Kim & Jung, 2022). Organizational culture also serves as a mediator in building trust and healthy working relationships between leaders and employees (Iddrisu, 2025), strengthens organizational commitment (Arumi et al., 2019), and is simultaneously associated with job satisfaction, performance, and employee engagement (Hussain Hakro et al., 2023).

High demands for digital adaptation can lead to unintended psychological consequences. High-performance work practices can indeed increase work engagement, but if not managed properly, they can also increase risks to employees' relational well-being (Salin et al., 2023). Studies on virtual leadership have also found a link between the isolation of remote work and mental health and job satisfaction (Efimov et al., 2022), while work-life balance has been shown to mediate the relationship between work engagement and individual performance (Alnagbi et al., 2025). This means that digitalization has two sides: it enables performance through digital capabilities, while also creating stress that can erode employee well-being if not balanced by adequate organizational support. These three factors—digital capabilities, organizational culture, and employee well-being—are believed to influence performance indirectly, through employee engagement as a mediating mechanism. Conceptually, employee engagement is a psychological state in which an individual devotes themselves physically, cognitively, and emotionally to their work role (Kahn, 1990), which can be measured through the dimensions of vigor, dedication, and absorption (vigor, dedication, absorption) (Schaufeli et al., 2006). A supportive organizational climate is a key antecedent of employee engagement (Albrecht et al., 2018); employee engagement, in turn, drives innovative work behavior (Ghani et al., 2023); and a culture of knowledge sharing, combined with employee engagement, has been shown to enhance company performance through innovation capabilities (Zhang, 2022). A study of SME employees in Indonesia also confirmed that digital competence, work engagement, and leadership style collectively influence employee performance, with organizational culture moderating these relationships (Tiong et al., 2024).

Based on the above discussion, four research gaps can be identified, underscoring the urgency of this study. First, fragmented findings—previous research has tended to examine the effects of digital capabilities, organizational culture, and employee well-being on performance separately, and few studies have integrated all three into a single model (Khin & Ho, 2019; Kaur Bagga et al., 2023; Salin

et al., 2023). Second, the mechanism gap—most studies answer the question of “whether” a variable influences performance, but few have explained “why and how” that influence occurs through work engagement as a mediating mechanism (Albrecht et al., 2018; Ghani et al., 2023). Third, the contextual gap—research on digital capabilities and employee engagement has primarily been conducted in established organizations, the public sector, or SMEs in general, while studies on startups incubated by business incubators in Indonesia—particularly in the city of Makassar—remain limited (Hairunisya & Narmaditya, 2025; Priadana & Iryadana, 2024). Fourth, the paradox gap—digitalization can serve as both a resource (enabler) and a source of demands (demand) that may potentially undermine employee well-being, and how these two aspects intersect with work engagement has not yet been extensively tested empirically in the context of rapidly growing organizations such as startups (Efimov et al., 2022; Alnagbi et al., 2025).

Based on these gaps, this study aims to examine the effects of digital capabilities, organizational culture, and employee well-being on employee performance—both directly and through employee engagement as a mediating variable—among employees of startups incubated by a business incubator in Makassar. The novelty of this study lies in integrating the dimensions of digital capabilities (digital enablers), organizational context (organizational culture), and the human consequences of digitalization (employee well-being) into a single model, with employee engagement as the explanatory mechanism, within the context of business incubator-supported startups. This context has received limited empirical research to date. This study is expected to provide a theoretical contribution to the development of human resource management models in fast-growing organizations, as well as practical insights for startup managers and business incubators in designing digitalization strategies that do not compromise employee engagement and well-being.

Literature Review

This study uses the Resource-Based View (RBV) as a foundation to explain how an organization's internal capabilities can be a source of excellence and performance improvement. According to Barney (1991), resources that are valuable, scarce, inimitable, and not easily replaced can lead to a sustainable competitive advantage. In a digital work environment, these resources are not only physical assets but also include digital capabilities, organizational culture, employee well-being, and work attachments. These four aspects enable organizations to optimize the use of technology while maintaining the quality of their human resources.

Digital capabilities are the ability of individuals to use technology, manage digital information, adapt to technology-based work systems, and utilize digital devices to complete work. The change towards a digital work environment requires employees to have technical skills as well as readiness to adapt to new communication and coordination patterns (Colbert et al., 2016). Khin and Ho (2019) explained that digital capabilities can improve organizational performance through digital innovation capabilities. In the context of individuals, digital literacy also supports performance improvement through innovative work behaviors (Santoso et al., 2019). However, digital capabilities do not always directly result in performance improvements. The influence can depend on digital leadership, digital maturity, organizational support, and employee engagement. Chatterjee et al. (2023) show that digital leadership capabilities influence the relationship between the digital work environment and organizational performance. Gebur et al. (2025) also identify digital maturity as a mechanism linking digital leadership to employee digital performance. Thus, digital competencies need to be supported by organizational conditions that allow employees to use these abilities effectively.

Organizational culture is a set of values, norms, beliefs, and practices that guide organizational members in carrying out their work. A culture that supports collaboration, open communication, innovation, and rewards can create a work environment conducive to employee engagement. Arumi et al. (2019) show that organizational culture can shape positive employee behavior by strengthening commitment to the organization. The relationship between organizational culture, job satisfaction, performance, and employee attachment also suggests that culture is an important element in shaping work attitudes and behaviors (Hussain Hakro et al., 2023). In a digital work environment, organizational culture needs to encourage acceptance of change, continuous learning, and the use of technology. Khansa and Ferdian (2021) found that digital culture is related to employee performance.

Furthermore, Mollah et al. (2024) explain that digital culture, affective commitment, and strategic agility play a role in supporting competitive performance. A strong organizational culture can also improve communication, working relationships, and trust between organizational members (Iddrisu, 2025). Therefore, an adaptive organizational culture is expected to increase employee engagement because employees gain social support and a clearer sense of values in carrying out their work.

Employee well-being refers to the physical, psychological, and social well-being employees experience in the work environment. Good well-being allows employees to maintain energy, concentration, and motivation in getting work done. On the other hand, work pressure, isolation, and communication ambiguity can reduce mental health and the quality of work experience. Efimov et al. (2022) show that virtual leadership is related to mental health, job satisfaction, and perceptions of employee isolation. Kim and Jung (2022) also emphasized that organizational competence and culture are related to employees' stress levels. Human resource management practices that support well-being can strengthen employee identification with the organization (Salin et al., 2023). When employees feel safe and valued, and have a work-life balance, they tend to be more willing to devote energy to their work. Alnagbi et al. (2025) show a relationship between work attachment and individual performance, with work-life balance as a relevant mechanism. Thus, increasing employee well-being is expected to strengthen employee engagement and support performance achievement. The concept of employee engagement is rooted in Kahn's (1990) view, which holds that individuals express themselves physically, cognitively, and emotionally when performing their roles. Work attachment is then characterized by passion, dedication, and appreciation for work (Schaufeli et al., 2006). Employees with high attachment tend to demonstrate care, diligence, and a willingness to make additional contributions to achieving organizational goals.

Employee attachment is influenced not only by individual characteristics but also by the organization's resources and climate. Albrecht et al. (2018) assert that organizational resources and the climate of attachment play a role in shaping employee engagement. Leadership is also an important factor in increasing engagement, especially in dynamic and digital-based organizations (Cortellazzo et al., 2019; Priadana & Iryadana, 2024). Employees who are tied to their jobs tend to be more active in sharing knowledge, generating ideas, and exhibiting innovative behaviors (Ghani et al., 2023; Zhang, 2022). In the context of Indonesian MSMEs, digital competence, employee engagement, leadership style, innovation capability, and organizational culture collectively shape employee performance (Tiong et al., 2024). Previous studies have shown that digital capabilities, organizational culture, and employee well-being can influence employee attitudes and work outcomes. However, some studies are still testing the relationship separately. Research on digital capabilities places innovation, digital maturity, or digital leadership as a connecting mechanism. In contrast, research on organizational culture and employee well-being tends to focus on commitment, satisfaction, stress, or work-life balance. The integration of these three factors to explain performance through employee engagement still requires further testing, especially in the context of organizations undergoing digital transformation. Based on this synthesis, employee engagement is conceptualized as a psychological mechanism linking organizational resources to employee performance. Digital capabilities enable work to be done through technology; organizational culture creates a supportive environment; and employee well-being provides the physical and psychological energy. All three resources are expected to increase employee engagement, which further drives performance improvements. This model expands the application of RBV by placing employee attachment as a mechanism that transforms digital and organizational resources into individual work outputs.

Research Design and Methodology

This study employs a quantitative approach with an explanatory research design to examine the causal relationships among digital capabilities, organizational culture, and employee well-being and employee performance, both directly and through employee engagement as a mediating variable. Data were collected via a cross-sectional survey, which involves data collection at a specific point in time. This design was chosen because the study aims to examine patterns of relationships among variables within a specific population, rather than observe changes over time. Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM), which is well-suited to models with

multiple mediating paths and does not strictly require the assumption of normality. The research subjects were employees working at startups actively mentored by a business incubator in Makassar. The sample was selected using purposive sampling, based on the following criteria: (a) active employees (permanent or contract) at startups under the guidance of a business incubator in Makassar; (b) the startup is still in the incubation or post-incubation phase; (c) the employee has been with the company for at least six months; and (d) the employee's job involves the routine use of digital devices. The sample size was determined in accordance with general PLS-SEM guidelines, namely ten times the maximum number of structural paths leading to a single construct, and was confirmed through a power analysis. Based on these guidelines and sample sizes from similar studies on startups and MSMEs in Indonesia, this study targeted at least 150-200 respondents.

Data were collected using a closed-ended questionnaire with a five-point Likert scale (1 = strongly disagree to 5 = strongly agree), structured around the indicators for each variable as presented in Table 1. The questionnaire items were adapted from instruments used in previous studies and then tailored to the linguistic context and work environment of startups in Indonesia. Before being used for the main data collection, the instrument underwent a content validity review by two experts in human resource management and was then pilot-tested with 30 respondents to ensure readability and the internal consistency of each statement. Primary data collection was conducted online via an electronic questionnaire link distributed through business incubator managers, supplemented by offline distribution to startups that were difficult to reach online.

Table 1. Variables and Measurements

Variable	Code	Measurement Indicators	Primary References
Digital Capabilities	KD.1	Proficiency in using digital devices and applications for work	(Khin & Ho, 2019; Santoso et al., 2019)
	KD.2	Digital communication and collaboration skills	
	KD.3	The ability to search for and process digital information	
	KD.4	Ability to adapt to new technology	
Organizational Culture	BO.1	Keterbukaan organisasi terhadap perubahan	(Kaur Bagga et al., 2023; Kim & Jung, 2022)
	BO.2	Support for collaboration and innovation	
	BO.3	Tolerance for mistakes at work	
	BO.4	Efektivitas komunikasi organisasi	
Employee Well-Being	EWB.1	Psychological well-being (positive emotions in the workplace)	(Salin dkk., 2023; Alnagbi et al., 2025)
	EWB.2	Low levels of work-related emotional exhaustion	
	EWB.3	Work-Life Balance	
Employee Engagement	EE.1	Work ethic (vigor)	(Kahn, 1990; Schaufeli et al., 2006)
	EE.2	Dedication to work	
	EE.3	Full engagement in work (absorption)	
Employee Performance	KK.1	Quality of work	(Borman & Motowidlo, 1997)
	KK.2	Timeliness of task completion	
	KK.3	Effectiveness in completing work	
	KK.4	Ability to adapt to new tasks or changes	

The data were analyzed using PLS-SEM with SmartPLS version 4, following a two-stage evaluation process. The first stage was the evaluation of the measurement model, including examinations of convergent validity (outer loadings and average variance extracted values), discriminant validity (the Fornell-Larcker criterion and the heterotrait-monotrait ratio), and construct reliability (composite reliability and Cronbach's alpha). The second stage was the structural model evaluation, which included an examination of multicollinearity among variables (variance inflation factor), the coefficient of determination (R^2), predictive relevance (Q^2), and effect size (f^2). Hypotheses regarding direct and indirect effects were tested using a bootstrapping procedure with 5,000 subsamples, with significance criteria of a t-statistic > 1.96 and a p-value < 0.05. The mediating role of employee engagement was tested using the Variance Accounted For (VAF) approach to determine whether the mediation was full, partial, or absent.

Findings and Discussion

Findings

Based on the characteristics of the 180 respondents, the majority—56 respondents (31.11%)—have been in business for two years. Furthermore, 51 respondents (28.33%) have been in business for 3 years, 45 (25.00%) for 1 year, and 28 (15.56%) for more than 3 years. These findings indicate that the majority of respondents have between two and three years of business experience. By gender, there were 93 male respondents (51.67%) and 87 female respondents (48.33%). This composition reflects a relatively balanced gender distribution, although male respondents were slightly more numerous. In terms of educational level, the majority of respondents held a bachelor's degree, totaling 107 people (59.44%). There were 30 respondents (16.67%) with a Diploma III, followed by 23 high school or vocational school graduates (12.78%) and 20 master's degree holders (11.11%). There were no respondents with a Diploma IV or in any other educational category. Overall, these data indicate that the respondents were predominantly highly educated individuals, particularly at the bachelor's degree level.

Table 2. Respondent Demographics

Category	Sub-category	Frequency	Percentage	Total Frequency	Total Percentage
Work Duration	1 year	45	25.00%	180	100%
	2 years	56	31.11%		
	3 years	51	28.33%		
	Over 3 years	28	15.56%		
Gender	Female	87	48.33%	180	100%
	Male	93	51.67%		
Education	High School/Vocational	23	12.78%	180	100%
	Bachelor's Degree	107	59.44%		
	Diploma III	30	16.67%		
	Diploma IV	0	0.00%		
	Master's Degree	20	11.11%		
	Other	0	0.00%		

Source: Processed data by author 2025

Table 3. Result of Outer Loadings (Validity Test)

Indicator	M	X1	X2	X3	Y	Info
KD.1		0.744				Valid
KD.2		0.591				Invalid
KD.3		0.724				Valid
KD.4		0.765				Valid
BO.1			0.447			Invalid
BO.2			0.607			Invalid
BO.3			0.824			Valid
BO.4			0.827			Valid
EWB.1				0.843		Valid
EWB.2				0.530		Invalid
EWB.3				0.702		Valid
EE.1	0.768					Valid
EE.2	0.621					Invalid
EE.3	0.753					Valid
KK.1					0.748	Valid
KK.2					0.695	Invalid
KK.3					0.698	Invalid
KK.4					0.709	Valid

Note: Standard rule of outer loading limit threshold > 0.70

Based on the results of the convergent validity test, with a cutoff value for outer loading of > 0.70, 11 indicators were deemed valid, while 7 indicators did not meet the validity criteria. For variable X1, indicators X1.1, X1.3, and X1.4 were deemed valid because they had outer loadings of 0.744, 0.724, and 0.765, respectively. Meanwhile, indicator X1.2 was deemed invalid because it yielded only 0.591. For variable X2, indicators X2.3 and X2.4 met the validity criteria with values of 0.824 and 0.827, respectively. Conversely, indicators X2.1 and X2.2 did not meet the criteria, with values of 0.447 and

0.607, respectively. For variable X3, indicators X3.1 and X3.3 were deemed valid with values of 0.843 and 0.702, respectively, while indicator X3.2 was deemed invalid because it obtained a value of 0.530. For the moderation variable (M), indicators M1 and M3 were deemed valid with values of 0.768 and 0.753, respectively, whereas indicator M2 was deemed invalid with a value of 0.621. Furthermore, for variable Y, indicators Y1 and Y4 were deemed valid, with values of 0.748 and 0.709, respectively. Indicators Y2 and Y3, however, did not meet the validity threshold, with values of 0.695 and 0.698, respectively. Thus, indicators with outer loadings below 0.70 should be considered for elimination or re-evaluation before proceeding with the measurement model analysis.

Table 4. Final Result of Outer Loadings (After Elimination)

Indicator	M	X1	X2	X3	Y	Info
M1	0.802					Valid
M3	0.822					Valid
X1.1		0.901				Valid
X1.4		0.766				Valid
X2.3			0.867			Valid
X2.4			0.850			Valid
X3.1				0.875		Valid
X3.3				0.730		Valid
Y1					0.836	Valid
Y4					0.816	Valid

Source: Processed PLS-SEM Data 2026. All indicators meet the outer loading threshold (> 0.70).

After eliminating the indicators with outer loadings below 0.70, the measurement model was re-estimated. The test results showed that all retained indicators had outer loadings between 0.730 and 0.901. The moderator variable (M) was represented by indicators M1 and M3, with values of 0.802 and 0.822, respectively. Variable X1 is represented by X1.1 and X1.4 with values of 0.901 and 0.766, respectively, while variable X2 is represented by X2.3 and X2.4 with values of 0.867 and 0.850, respectively. Furthermore, variable X3 is represented by X3.1 and X3.3, with values of 0.875 and 0.730, respectively. Variable Y is represented by Y1 and Y4, with values of 0.836 and 0.816, respectively. Since all of these values exceed the minimum threshold of 0.70, all indicators in the final model meet the criteria for convergent validity. Thus, these indicators adequately reflect the latent construct being measured and can be used in the subsequent model evaluation stage.

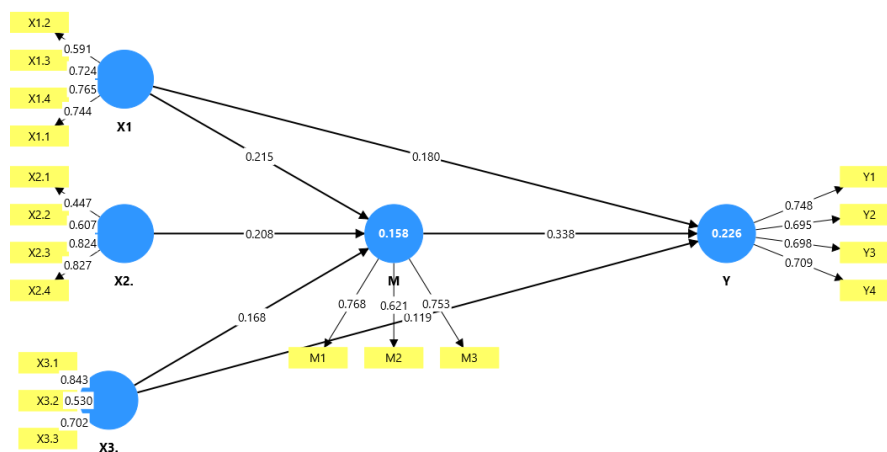


Figure 1. SmartPLS (PLS-SEM) path diagram

Figure 1 shows the results of the initial estimates for the measurement and structural equation models. In the measurement model, the outer loadings of the indicators range from 0.447 to 0.843. Several indicators met the criteria for convergent validity because they had outer loadings above 0.70, namely X1.1, X1.3, X1.4, X2.3, X2.4, X3.1, X3.3, M1, M3, Y1, and Y4. Meanwhile, the indicators X1.2, X2.1, X2.2, X3.2, M2, Y2, and Y3 have values below 0.70 and therefore need to be evaluated or eliminated before re-estimation. In the structural model, X1, X2, and X3 have positive influences on the moderator or mediator variable M, with path coefficients of 0.215, 0.208, and 0.168, respectively.

The variable M, in turn, shows a positive influence on Y with a coefficient of 0.338. The direct effects of X1 and X3 on Y are 0.180 and 0.119, respectively. The coefficient of determination indicates that X1, X2, and X3 account for 15.8% of the variation in variable M, while the predictor constructs in the model account for 22.6% of the variation in variable Y. Thus, the model's explanatory power remains relatively low. However, the direction of the path coefficients indicates positive relationships among the constructs.

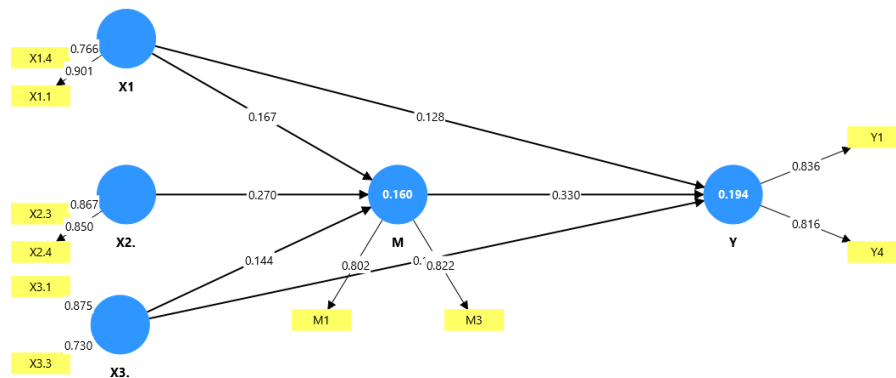


Figure 2. SmartPLS (PLS-SEM) path diagram

After evaluating the initial measurement model, indicators that did not meet the criteria for convergent validity were eliminated, and the model was re-estimated. The results of the re-estimation showed that all retained indicators had outer loadings above 0.70. Variable X1 was represented by indicators X1.1 and X1.4, with values of 0.901 and 0.766, respectively. Variable X2 is represented by indicators X2.3 and X2.4, with values of 0.867 and 0.850, respectively, while variable X3 is represented by indicators X3.1 and X3.3, with values of 0.875 and 0.730. Furthermore, variable M is represented by M1 and M3 with values of 0.802 and 0.822, while Y1 and Y4 represent variable Y with values of 0.836 and 0.816. These results confirm that the final measurement model meets the criteria for convergent validity. In the re-estimated structural model, X1, X2, and X3 showed positive effects on M with path coefficients of 0.167, 0.270, and 0.144, respectively. Compared to the initial model, the effect of X2 on M increased from 0.208 to 0.270, making it the strongest effect among the three exogenous variables. Conversely, the coefficients of X1 and X3 on M decreased. The variable M continued to exert a positive and relatively dominant influence on Y, although its coefficient declined slightly from 0.338 in the initial model to 0.330 in the final model. The direct effect of X1 on Y also decreased from 0.180 to 0.128.

The coefficient of determination for M increased from 0.158 to 0.160. This indicates that X1, X2, and X3 collectively account for 16.0% of the variation in M, while other factors outside the model influence the remaining 84.0%. Meanwhile, the coefficient of determination for Y decreased from 0.226 to 0.194 after model refinement. Thus, the predictor variables in the final model explain 19.4% of the variation in Y, while the remaining 80.6% is explained by other factors not analyzed. In general, the final model meets the criteria for convergent validity, but the structural model's explanatory power remains relatively low. Therefore, conclusions regarding the acceptance of the hypothesis and the mediating role of M must be based on bootstrapping results, including the t-statistic, p-value, and confidence interval. Based on the arrow directions in the model, M functions statistically as a mediating rather than a moderating variable.

Table 4. Results of the Composite Reliability and Average Variance Extracted (AVE) Tests

Construct Variables	Composite Reliability (rho_c)	Average Variance Extracted (AVE)	Info
Digital Capabilities (X1)	0.822	0.699	Reliable & Valid
Organizational Culture (X2)	0.849	0.737	Reliable & Valid
Employee Well-Being (X3)	0.786	0.650	Reliable & Valid
Employee Engagement (M)	0.794	0.659	Reliable & Valid
Employee Performance (Y)	0.811	0.682	Reliable & Valid

Threshold: Composite Reliability > 0.70 & AVE > 0.50.

Source: Data Analysis Results from SmartPLS 4 (2025).

The results of the reliability and convergent validity evaluations indicate that all constructs met the measurement model criteria. The composite reliability (rho_c) values for all constructs ranged from 0.786 to 0.849, thus exceeding the minimum threshold of 0.70. Organizational Culture (X2) had the highest reliability value at 0.849, followed by Digital Capability (X1) at 0.822, Employee Performance (Y) at 0.811, Employee Engagement (M) at 0.794, and Employee Well-Being (X3) at 0.786. These results indicate that each construct has adequate internal consistency.

Furthermore, the average variance extracted (AVE) values for all constructs ranged from 0.650 to 0.737, exceeding the minimum threshold of 0.50. Organizational Culture had the highest AVE value at 0.737, while Employee Well-Being had the lowest at 0.650. Thus, each construct explained more than 50% of the variance in its indicators. Based on these composite reliability and AVE values, Digital Capability, Organizational Culture, Employee Well-Being, Employee Engagement, and Employee Performance are deemed reliable and meet the criteria for convergent validity. Therefore, the measurement model is suitable for use in the discriminant validity evaluation and structural equation modeling phases.

Table 5. Results of the Hypothesis Test for Direct Effects

Route Code	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Hypothesis Description
M → Y	0.330	0.332	0.061	5.397	0.000	Significant (Hypothesis Accepted)
X1 → M	0.167	0.172	0.071	2.359	0.009	Significant (Hypothesis Accepted)
X1 → Y	0.128	0.130	0.082	1.555	0.060	Not Significant (Hypothesis Rejected)
X2. → M	0.270	0.272	0.072	3.771	0.000	Significant (Hypothesis Accepted)
X3. → M	0.144	0.152	0.071	2.021	0.022	Significant (Hypothesis Accepted)
X3. → Y	0.138	0.140	0.079	1.752	0.040	Significant (Hypothesis Accepted)

Test Criteria: T-Statistics > 1.96 dan P-Value < 0.05 (Alpha = 5%).

Source: SmartPLS 4 Bootstrapping Results (2026).

The results of the structural model testing using the bootstrapping procedure showed that five of the six direct relationships had positive and significant effects. Employee Engagement was found to have a positive effect on Employee Performance, with a path coefficient of 0.330, a t-statistic of 5.397, and a p-value of 0.000. This coefficient is the largest in the model, indicating that an increase in Employee Engagement tends to be followed by an increase in Employee Performance. Thus, the hypothesis regarding the effect of Employee Engagement on Employee Performance is accepted. Digital Capability has a positive and significant effect on Employee Engagement, with a coefficient of 0.167, a t-statistic of 2.359, and a p-value of 0.009. However, the direct effect of Digital Competence on Employee Performance is not significant, although it is positive, with a coefficient of 0.128, a t-statistic of 1.555, and a p-value of 0.060. These results indicate that an increase in digital competence has not yet directly improved employee performance. Therefore, the hypothesis regarding the effect of Digital Capability on Employee Engagement is accepted, whereas the hypothesis regarding its direct effect on Employee Performance is rejected.

Organizational Culture has a positive and significant effect on Employee Engagement with a coefficient of 0.270, a t-statistic of 3.771, and a p-value of 0.000. Furthermore, Employee Well-Being also has a positive and significant effect on Employee Engagement, with a coefficient of 0.144, a t-statistic of 2.021, and a p-value of 0.022. Additionally, Employee Well-Being has a direct, positive, and significant effect on Employee Performance with a coefficient of 0.138, a t-statistic of 1.752, and a p-value of 0.040. Thus, the hypotheses explaining the relationship between Organizational Culture and Employee Well-Being on Employee Engagement, as well as the relationship between Employee Well-Being and Employee Performance, are accepted. Overall, Employee Engagement is the strongest direct predictor of Employee Performance. These findings also indicate that the effect of Digital Capabilities on Employee Performance is likely mediated primarily through Employee Engagement.

However, conclusions regarding this mediating role must be confirmed through testing of specific indirect effects.

Discussion

The research results show that employee engagement has a positive and significant effect on employee performance. These findings indicate that employees who are strongly engaged with their work and the organization tend to perform better. This engagement is reflected in their enthusiasm, dedication, concentration, and willingness to go the extra mile in completing their work. Employee engagement also has the largest path coefficient among the model's direct relationships. Thus, employee engagement is a critical factor that drives improvements in work quality, accuracy, and productivity. Organizations need to create an environment that provides employees with opportunities to participate, receive recognition, and find meaning in their work. Digital Capabilities were found to have a positive and significant effect on Employee Engagement. These results indicate that the ability to use technology, manage digital information, and adapt to changes in work systems can increase employees' engagement in their work. Employees who are proficient in technology tend to be more confident, responsive, and proactive in carrying out their tasks. Digital capabilities also help reduce technical barriers, allowing employees to focus their attention on achieving work objectives. Therefore, developing digital competencies is not only necessary to support operational processes but also to strengthen employees' commitment to their work and the organization.

However, digital capabilities do not have a direct and significant impact on employee performance. This finding suggests that technological proficiency does not automatically lead to improved performance. Digital competencies are merely a potential resource whose benefits depend on how employees apply those skills in their work. Digital capabilities may be less effective if they are not supported by work engagement, the alignment of technology with job requirements, organizational support, and opportunities to apply these competencies. These results suggest that employee engagement likely serves as the mechanism linking digital capabilities to employee performance. However, this hypothesis still needs to be confirmed through testing of indirect effects.

Organizational culture has a positive and significant effect on employee engagement. This means that the values, norms, communication patterns, and work practices that develop within an organization shape the level of employee engagement. An organizational culture that supports collaboration, openness, recognition, and achievement provides a sense of security and strengthens employees' identification with the organization. When employees' personal values align with organizational values, they tend to demonstrate higher levels of commitment, enthusiasm, and participation. Therefore, organizational culture not only guides behavior but also serves as a psychological foundation that drives employee engagement. Employee well-being has also been shown to have a positive and significant impact on employee engagement. Good physical, psychological, and social well-being allows employees to perform their jobs with optimal energy and focus. Employees who feel healthy, safe, and valued, and who have a good work-life balance, tend to have a stronger emotional attachment to their work. Conversely, excessive work pressure and a lack of organizational support can reduce employees' energy and engagement. Thus, organizations need to address workload, mental health, social support, workplace safety, and work-life balance as part of their strategy to improve employee engagement.

In addition to work engagement, employee well-being has a direct, positive, and significant impact on employee performance. These findings indicate that employee well-being is a critical resource that enables individuals to work productively and consistently. Employees in good physical and psychological condition tend to concentrate better, complete tasks more effectively, and cope with work-related stress more adaptively. This direct influence underscores that performance improvement is determined not only by technical skills but also by the quality of the work experience and the well-being employees perceive. Overall, the research results position Employee Engagement as a key mechanism in shaping Employee Performance. Digital Capabilities, Organizational Culture, and Employee Well-Being contribute to increased employee engagement, which in turn drives improved performance. However, the model's ability to explain Employee Performance remains relatively limited. This suggests that other factors, such as leadership style, motivation, competence,

compensation, work environment, and job satisfaction, also influence performance. The practical implication of this research is that organizations need to integrate the development of digital capabilities, the strengthening of organizational culture, and the improvement of employee well-being into their employee engagement strategies. Such an integrated approach is more likely to yield performance improvements than focusing solely on developing digital capabilities.

Conclusion

The research findings indicate that employee engagement is a key factor in improving employee performance. Digital capabilities, organizational culture, and employee well-being were found to have a positive and significant impact on employee engagement. This suggests that the ability to use technology, a supportive organizational culture, and good well-being conditions can strengthen employees' commitment to their work and the organization. Employee engagement has a positive and significant effect on employee performance and is the strongest direct predictor in the research model. Employee well-being also has a direct, positive, and significant effect on employee performance. In contrast, digital capabilities do not show a significant direct effect on employee performance. These findings indicate that digital capabilities do not automatically improve performance but likely require employee engagement as a mediating mechanism. Overall, improving employee performance requires an integrated approach that strengthens digital capabilities, fosters a supportive organizational culture, enhances well-being, and promotes employee engagement. However, the model's ability to explain variations in performance remains relatively limited; therefore, future research should consider other factors—such as leadership, motivation, competence, compensation, job satisfaction, and the work environment—and specifically test the mediating role of employee engagement.

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