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Building Sustainable Managerial Performance in Modern Organizations

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Abstract

This study explains how perceived sustainability-oriented managerial performance is maintained in dynamic and digitalized workplaces by integrating strategic leadership, digital leadership capability, and perceived organizational support with two human-centered mechanisms. Sustainable managerial performance is defined and measured at the individual manager level as managers' self-reported ability to sustain consistent, resilient, and adaptive performance over time through managerial actions in economic, environmental, and social domains within their area of responsibility. Survey data from 360 managers in Indonesia were analyzed using PLS-SEM to test direct effects and parallel mediation. The results show that strategic leadership, digital leadership capability, and perceived organizational support significantly strengthen manager well-being and managerial engagement, which in turn enhance sustainable managerial performance. In terms of magnitude, manager well-being is the stronger predictor of sustainable managerial performance compared with managerial engagement, indicating that psychological capacity is a more influential pathway than motivational involvement alone. Among the exogenous drivers, strategic leadership shows the largest direct contribution to sustainable managerial performance, followed by digital leadership capability and perceived organizational support. The parallel mediation pattern suggests that leadership and support sustain managerial performance simultaneously by improving well-being and reinforcing engagement rather than through a single sequential mechanism. These findings extend sustainable performance theory at the managerial level and imply that organizations should prioritize leadership development that strengthens strategic direction and digital readiness while implementing support practices that protect well-being and maintain engagement to sustain managerial effectiveness over time.

KEYWORDS

strategic leadership; digital leadership capability; perceived organizational support; manager well-being; managerial engagement; sustainable managerial performance.

Introduction

Modern organizations operate in an increasingly complex and dynamic business environment characterized by rapid technological advancement, intensified competition, and continuous organizational change (Nayeemunnisa & Gomathi, 2020). These conditions place unprecedented demands on managers, who are expected not only to achieve short-term performance targets but also to sustain effectiveness over time while navigating uncertainty and ongoing transformation (Lomineishvili, 2021). As a result, managerial performance is no longer viewed merely as an outcome of individual capability or technical competence, but as a multidimensional construct shaped by leadership practices, organizational conditions, and human-centered factors that support long-term sustainability (Van Der Voet et al., 2023).

In recent years, the concept of sustainable managerial performance has gained growing attention in management and organizational studies. Sustainability in performance emphasizes consistency, resilience, and adaptability, rather than episodic or short-lived achievements (De Prins et al., 2020). However, prior research has often examined the key relationships in a fragmented way. Leadership studies commonly link

leadership to engagement and performance without simultaneously modeling supportive context and well-being mechanisms, such as studies connecting authentic leadership with work engagement and related outcomes and leader member exchange with work engagement and employee performance (Santalla-Banderali & Alvarado, 2022); (Silva et al., 2023). Separately, digital leadership research tends to emphasize digital outcomes and capability pathways rather than sustainable managerial performance and human-centered mechanisms (Zada et al., 2025). In addition, perceived organizational support is frequently tested with work engagement and performance or well-being as partial mechanisms, but rarely integrated with differentiated leadership drivers in a single framework (Krishna et al., 2022). These limitations justify an integrative model that combines strategic leadership, digital leadership capability, and perceived organizational support while testing Manager Well-Being and managerial engagement as parallel mediators to explain sustainable managerial performance more comprehensively.

Managers are increasingly required to maintain high levels of effectiveness while balancing strategic responsibilities, employee expectations, and personal well-being (Ahmadi et al., 2024). This shift reflects a broader movement in organizational research that recognizes performance as a dynamic and socially embedded process, influenced by both structural and psychological mechanisms within organizations (Nasta et al., 2026).Leadership has consistently been identified as a critical driver of managerial effectiveness in contemporary organizations. Strategic and digital-oriented leadership approaches play a pivotal role in shaping how managers respond to environmental changes, leverage technology, and align organizational goals with evolving business demands (Cortellazzo et al., 2019). Leaders who are able to provide strategic direction, foster adaptability, and support managerial autonomy contribute significantly to the development of a work environment that enables sustainable performance (Rosário & Boechat, 2025). At the same time, organizational support systems such as fair policies, access to resources, and supportive organizational climates have become increasingly important in helping managers cope with complexity and workload pressures (Mandhyan & Sybol, 2025).

Beyond leadership and structural factors, recent literature highlights the importance of human-centered mechanisms in explaining how organizational practices translate into sustainable performance outcomes. Manager Well-Being and managerial engagement have emerged as key psychological and behavioral pathways through which leadership and organizational conditions influence performance (Bakker & Albrecht, 2018). Well-being reflects managers' ability to maintain physical, psychological, and emotional balance in the face of work demands, while engagement captures their level of involvement, dedication, and energy in performing managerial roles. Together, these factors help explain why similar organizational practices may lead to different performance outcomes across individuals and contexts (Lu et al., 2023).

Despite growing interest in sustainable performance and human-centered management, empirical research integrating leadership, organizational support, and psychological mechanisms within a single analytical framework remains limited, particularly in emerging market contexts (Tran & Khoa, 2025). Many existing studies focus on isolated relationships or short-term performance indicators, offering limited insight into the complex processes that underpin sustainable managerial outcomes (Pencle, 2023); (Hong et al., 2019); (Lahtinen & Yrjölä, 2019). For instance, (Santalla-Banderali & Alvarado, 2022) links leader–member exchange to engagement and self-rated performance, but it remains employee-focused and does not incorporate organizational support or sustainability-oriented outcomes. Similarly, (Silva et al., 2023) explains authentic leadership effects on engagement through meaningfulness and work–family enrichment, yet it does not connect these mechanisms to sustained managerial performance. On the digital leadership side, (Zada et al., 2025) emphasizes firm-level sustainability outcomes through green innovation, which shifts the level of analysis away from managers' sustained effectiveness and does not test human-centered psychological mechanisms. Relatedly, (Krishna et al., 2022) includes perceived organizational support, but it is positioned as a boundary condition within an employee retention model rather than an integrated driver of sustainable managerial performance alongside differentiated leadership types. These limitations suggest that prior frameworks often treat leadership as a broad antecedent, examine organizational support separately, and rely on a single dominant mechanism, which leaves unclear how sustainable managerial performance is produced through two simultaneous human-centered processes. Therefore, this study differentiates strategic leadership and digital leadership capability, integrates perceived organizational support as a complementary contextual driver, and tests Manager Well-Being and managerial engagement as parallel mediators to capture both psychological sustainability conditions and motivational investment that jointly sustain managerial performance (Elezaj & Kuqi, 2023).

To make the novelty explicit and testable, this study departs from prior leadership engagement performance research in a specific way. Existing studies typically examine one leadership perspective at a time, or treat leadership as a single broad antecedent, and then link it to engagement and performance without simultaneously incorporating a digital capability dimension and organizational support as a complementary contextual driver (Singh et al., 2025); (Shin et al., 2023). In addition, many models use a single mediator or assume a single dominant psychological mechanism, which limits explanation of why sustained performance can remain uneven under similar leadership practices ((Rego et al., 2019); (Guo & Ling, 2020). By bringing together strategic leadership, digital leadership capability, and perceived organizational support in one model and testing Manager Well-Being and managerial engagement as parallel mediators, this study captures two distinct human-centered pathways that can operate simultaneously. This combination is expected to change theoretical understanding by showing that sustainable managerial performance is sustained not only through motivational investment reflected in engagement, but also through psychological capacity reflected in well-being, both of which are shaped by different leadership and support inputs.

The proposed framework is anchored in conservation of resources theory and social exchange logic. From a conservation of resources perspective, strategic leadership, digital leadership capability, and organizational support can be understood as resource-enabling conditions that protect managers from resource depletion and strengthen their capacity to cope, which is reflected in higher well-being and more sustainable performance over time (Alam et al., 2025); (Albannai et al., 2026). From a social exchange perspective, supportive leadership and organizational support foster a reciprocal orientation that encourages managers to invest consistent effort and dedication, which is reflected in higher managerial engagement. Anchoring the model in these theories clarifies why well-being and engagement are treated as parallel mechanisms and prevents the framework from being interpreted as a mere collection of (Carrell et al., 2022); (Iqbal & Parray, 2025).

This study makes three contributions. First, it extends sustainable performance research by positioning sustainable managerial performance as a managerial-level outcome and explaining it through two simultaneous human-centered

mechanisms, Manager Well-Being and managerial engagement. Second, it advances leadership research by differentiating strategic leadership and digital leadership capability and testing their joint effects alongside perceived organizational support within a single integrative model. Third, it provides actionable implications for emerging market organizations by identifying leadership and support inputs that strengthen managers' psychological capacity and sustained involvement, thereby helping maintain managerial effectiveness over time.

Methods

Research Type

The links between strategic leadership, digital leadership competence, perceived organizational support, Manager Well-Being, managerial engagement, and sustainable management performance were investigated in this research using a quantitative method with a cross-sectional survey methodology.A quantitative design is appropriate because it enables the systematic testing of theoretically grounded hypotheses and the examination of causal relationships among latent constructs using numerical data (Creswell & Creswell, 2022); (Bougie & Sekaran, 2020). Cross-sectional data collection allows managerial perceptions and behavioral responses to be captured at a single point in time, which is suitable for organizational research aimed at explaining complex leadership–psychological mechanism–performance linkages within contemporary business contexts ((Chua, 2023).

Population and Sample/Informants

The population of this study consists of organizational managers working in companies operating in Indonesia across various industries and sectors. Managers were selected as the unit of analysis because they play a critical role in translating leadership practices, organizational support, and human-centered mechanisms into sustainable managerial performance through their involvement in both strategic and operational functions (Creswell & Creswell, 2022). Respondents were recruited using purposive sampling through professional networks and organizational contacts across multiple industries in Indonesia, targeting managers at supervisory, middle-management, and senior-management levels. To be included, participants had to hold a formal managerial position, have a minimum of one year of managerial experience in their current organization, and be actively employed at the time of the survey. Responses were excluded if the participant did not hold a managerial role or submitted incomplete questionnaires.

To justify sample adequacy, this study does not rely solely on the ten-times rule. Instead, an a priori statistical power analysis was conducted using G*Power (F-tests, linear multiple regression: fixed model, R^2 deviation from zero) based on the maximum number of predictors pointing to a single endogenous construct. In the structural model, sustainable managerial performance is the most complex endogenous construct and is predicted by five constructs: strategic leadership, digital leadership capability, perceived organizational support, manager well-being, and managerial engagement. Using a significance level of 0.05, statistical power of 0.80, and a small-to-medium effect size ($f^2 = 0.05$), the minimum required sample size was 269. Therefore, the final sample of 360 managers exceeds the minimum requirement and provides adequate precision for estimating the proposed model relationships (Hair et al., 2022). The survey distribution resulted in 360 usable responses out of 500 invitations, yielding a response rate of 72%. Missing data were handled through case-wise deletion during the screening stage; incomplete questionnaires were removed, resulting in 360 complete and valid responses retained for analysis.

Research Location

The study was conducted in Indonesia, involving managers from organizations across multiple industries (manufacturing, services, technology, and others). This setting provides a relevant context for examining leadership practices, organizational support, well-being and engagement mechanisms, and sustainability-oriented managerial performance within diverse organizational environments.

Instrumentation or Tools

Responses were measured using a Likert-type scale. The instrument structure including dimensions, indicators, and sources is summarized as follows. Strategic Leadership was measured using three dimensions, namely Leadership Integrity and Ethics consisting of Integrity and Trust and Ethical Orientation and Responsibility, Strategic Decision-Making consisting of Decision-Making and Problem-Solving, and Organizational and Change Management consisting of Innovation and Change Management and Communication and Collaboration, adapted from (Tikas, 2024) and (Salman & Ibrahim, 2024). Digital Leadership Capability was operationalized through Human-Centric Capabilities consisting of Growth Mindset and Ethical AI Use, Technical Digital Capabilities consisting of Digital Literacy and Big Data Analytical Capabilities, and Strategic–Organizational Capabilities consisting of Vision and Innovation and Strategy and Governance, adapted from (Abbu et al., 2025), (Mollah et al., 2025), and (Khurniawan & Supriadi, 2024). Perceived Organizational Support was measured using Managerial Support consisting of Rewards and Supportive Policies and Procedures, Supervisory Support consisting of Leader or Supervisor Support and Supportive Leader Behavior, and Social–Emotional Support consisting of Coworker Support and Emotional Support, adapted from (Caesens et al., 2017) and (Saleh & Haidar, 2022).

Because the unit of analysis in this study is managers, the mediator is consistently defined as Manager Well-Being, referring to managers' perceived physical, psychological, and social functioning that enables them to sustain effectiveness over time. Manager Well-Being comprised Physical Well-Being consisting of Workplace Safety and Physical Health Support, Psychological Well-Being consisting of Stress Management and Emotional Support, and Social Well-Being consisting of Coworker Relationships and Supervisor Relationships, adapted from (Hakanen et al., 2018), (Dong & Yan, 2022), and (Mehta, 2020). Manager well-being is central to sustainable managerial performance because sustained effectiveness requires adequate psychological capacity, recovery, and social support to cope with prolonged demands and uncertainty.Managerial Engagement was defined as a persistent, positive, work-related state reflected in energetic involvement, dedication, and sustained focus in executing managerial roles. Accordingly, the engagement indicators were aligned with commonly accepted engagement content and captured managers' active involvement and commitment in their work, adapted from (Nienaber, 2022), (Mantarova & Toskov, 2019), and (Nienaber & Martins, 2020). Indicators that primarily reflect compliance or responsibility, such as commitment to OSH, were treated as part of the performance domain rather than engagement, to maintain construct validity and avoid conflating engagement with compliance behaviors.

Sustainable Managerial Performance was specified as perceived sustainability-oriented managerial performance at the managerial level, measured as managers' self-assessment of how consistently they deliver results while implementing sustainability-oriented actions in their area of responsibility. Therefore, SMP indicators were framed around managerial actions and controllable outcomes rather than organization-

wide metrics that managers may not directly observe. SMP was operationalized via Economic Performance consisting of perceived efficiency and target achievement in the manager's unit, Environmental Performance consisting of implementation of initiatives to improve energy efficiency and reduce waste within the manager's scope of work, and Social Performance consisting of practices that support occupational safety and health and employee satisfaction in the manager's team or unit, adapted from (Schmid et al., 2025), (Zharfpeykan & Akroyd, 2022), and (Kafka et al., 2025).

Data Collection Procedures

A cross-sectional survey that was given to qualified management respondents in Indonesia was used to gather data. Before completing the survey, participants received information about the research, guidance on how to complete the questionnaire, and an informed consent declaration; participation was optional. In a standardized format, the survey recorded managers' assessments on leadership techniques, perceived organizational support, Manager Well-Being, managerial engagement, and sustainable management success.

Data Analysis

The main analytical method used to evaluate the suggested study framework was structural equation modeling (SEM). Because it allows for the simultaneous estimate of many associations among latent variables while taking measurement error into account, SEM is suitable (Hair et al., 2022); (Kline, 2023). By assessing both direct and indirect impacts, the study made it possible to investigate management engagement and Manager Well-Being as mediating factors that connect perceived organizational support and leadership drivers to long-term managerial success. This method improves the validity and robustness of the empirical data and encourages a thorough assessment of the theoretical model (Hair et al., 2022).

Given that the data were collected using a single survey instrument, potential common method bias was addressed through both procedural and statistical remedies. Procedurally, participation was voluntary and anonymous, and respondents were informed that there were no right or wrong answers to reduce evaluation apprehension and social desirability bias. The questionnaire was organized by separating predictor and outcome constructs into different sections to reduce respondents' tendency to provide consistent answers, and item order was arranged to minimize order effects through counterbalancing where feasible. Statistically, this study applied the full collinearity VIF assessment recommended for PLS-SEM to evaluate whether common method variance substantially inflates the relationships in the model.

Ethical Approval

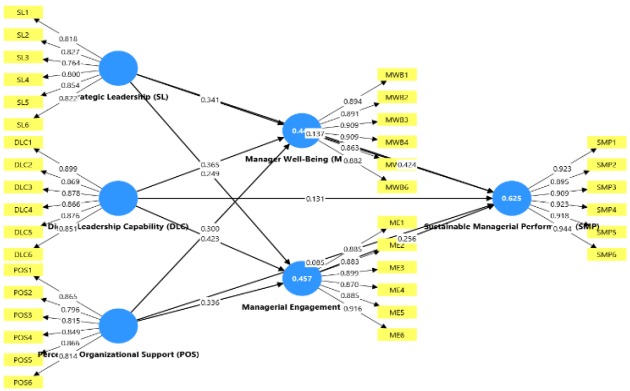
This study applied standard ethical principles for survey research. Respondents participated voluntarily and provided informed consent prior to participation. Confidentiality and anonymity were maintained by ensuring that responses were recorded and reported in aggregate form, and data were stored securely for research purposes only.

Measurement Model

Before analyzing the structural relationships, the measurement model was evaluated to ensure construct validity and reliability. In Figure 1, convergent validity was assessed by analyzing the factor loadings of the indicators and the average variance extracted (AVE) to ensure that each construct adequately captures the variance of its indicators. Internal consistency reliability was evaluated using Cronbach's alpha and composite reliability to ensure the stability and consistency of the measurement scale. Additionally, multicollinearity among indicators was evaluated via variance inflation factor (VIF) values to verify that multicollinearity does not compromise measurement quality; VIF results were interpreted based on generally accepted threshold values to ensure that indicator overlap remains within acceptable limits. Discriminant validity was further evaluated using the heterotrait–monotrait ratio (HTMT) and the Fornell–Larcker criteria to ensure that each construct is empirically distinct. Overall, this systematic assessment followed established methodological guidelines and ensured that the measurement instrument is suitable for subsequent structural equation modeling analysis.

Based on the analysis results, all constructs met the recommended criteria for reliability and convergent validity and did not indicate any critical multicollinearity issues. As shown in Table 1, the reliability of the indicators is adequate because all outer loading values exceed the 0.70 threshold. Internal consistency is also strong, with Cronbach's Alpha and composite reliability (rhoa and rhoc) values for all constructs above the recommended threshold of 0.70, thereby confirming the reliability of the measurement scale. Convergent validity is supported because all AVE values are above 0.50, indicating that each construct explains more than half of the variance in its respective indicator. Furthermore, the VIF values for all indicators ranged from 1.790 to 4.536 and remained below the commonly applied threshold of 5.00, indicating that multicollinearity is not a serious issue in the measurement model. Overall, the measurement model demonstrates satisfactory measurement quality and is suitable for further structural equation modeling analysis.

Figure 1. Measurement Model



Source : Data Processed SmartPLS 4, 2026

Result and Discussion

Table 1. Convergent Validity, Reliability Test, and Variance Inflation Factor

Construct	Indicator	Outer Loading	VIF	Cronbach's Alpha	Composite Reliability (rhoa)	Composite Reliability (rhoc)	Average Variance Extracted
Strategic Leadership (SL)	SL1	0.818	2.195	0.898	0.900	0.922	0.664
	SL2	0.827	2.293				

	SL3	0.764	1.790				
	SL4	0.800	2.057				
	SL5	0.854	2.517				
	SL6	0.822	2.203				
Digital Leadership Capability (DLC)	DLC1	0.899	3.700	0.938	0.939	0.951	0.762
	DLC2	0.869	2.865				
	DLC3	0.878	3.087				
	DLC4	0.866	2.958				
	DLC5	0.876	3.115				
	DLC6	0.851	2.553				
Perceived Organizational Support (POS)	POS1	0.865	2.630	0.913	0.919	0.932	0.697
	POS2	0.796	2.028				
	POS3	0.815	2.230				
	POS4	0.849	2.640				
	POS5	0.866	2.793				
	POS6	0.814	2.127				
Manager Well-Being (MWB)	MWB1	0.894	3.542	0.948	0.949	0.959	0.795
	MWB2	0.891	3.428				
	MWB3	0.909	4.103				
	MWB4	0.909	4.047				
	MWB5	0.863	2.922				
	MWB6	0.882	3.301				
Managerial Engagement (ME)	ME1	0.885	3.309	0.947	0.948	0.958	0.792
	ME2	0.883	3.166				
	ME3	0.899	3.692				
	ME4	0.870	3.002				
	ME5	0.885	3.307				
	ME6	0.916	4.319				
Sustainable Managerial Performance (SMP)	SMP1	0.923	4.536	0.963	0.963	0.970	0.844
	SMP2	0.895	3.687				
	SMP3	0.909	4.220				
	SMP4	0.923	4.704				
	SMP5	0.918	4.528				
	SMP6	0.944	4.389				

Source : Data Processed SmartPLS 4, 2026

Table 2. Discriminant Validity

	Heterotrait–Monotrait Ratio					
	Digital Leadership Capability (DLC)	**Manager Well-Being (MWB)**	**Managerial Engagement (ME)**	**Perceived Organizational Support (POS)**	**Strategic Leadership (SL)**	**Sustainable Managerial Performance (SMP)**
Digital Leadership Capability (DLC)						
Manager Well-Being (MWB)	0.513					
Managerial Engagement (ME)	0.557	0.528				
POS	0.137	0.404	0.441			
Strategic Leadership (SL)	0.259	0.496	0.414	0.110		
Sustainable Managerial Performance (SMP)	0.540	0.743	0.653	0.404	0.503	
Fornell–Larcker criterion						
Digital Leadership Capability (DLC)	0.873					
Manager Well-Being (MWB)	0.485	0.892				
Managerial Engagement (ME)	0.526	0.503	0.890			
Perceived Organizational Support (POS)	0.128	0.380	0.414	0.835		
Strategic Leadership (SL)	0.239	0.458	0.383	0.099	0.815	
Sustainable Managerial Performance (SMP)	0.514	0.711	0.625	0.382	0.468	0.919

Source : Data Processed SmartPLS 4, 2026

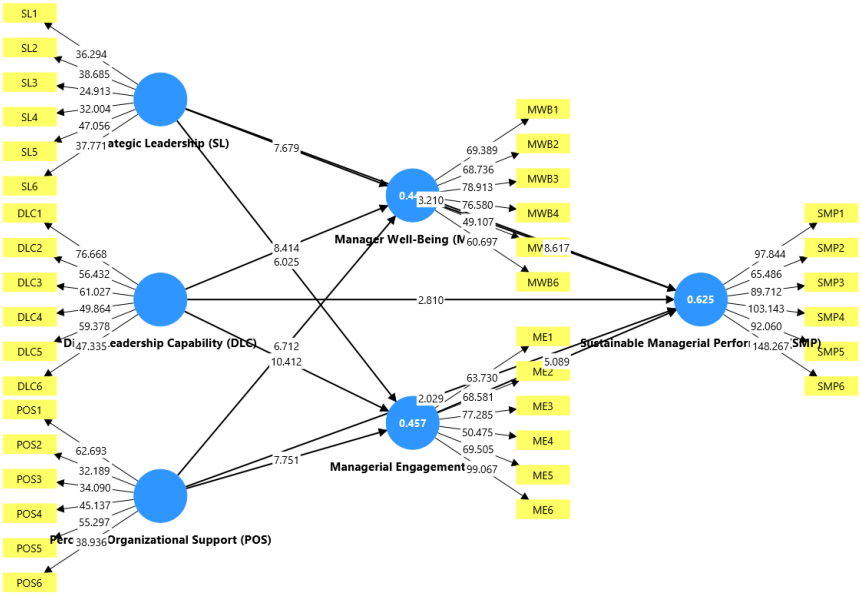


Figure 2. Structural Model

Source : Data Processed SmartPLS 4, 2026

Table 3. R Square, F Square, Q Square, Model Fit

R Square						
					R-square	**R-square adjusted**
Manager Well-Being (MWB)					0.448	0.443
Managerial Engagement (ME)					0.457	0.452
Sustainable Managerial Performance (SMP)					0.625	0.619
F Square						
	Digital Leadership Capability (DLC)	**Manager Well-Being (MWB)**	**Managerial Engagement (ME)**	**Perceived Organizational Support (POS)**	**Strategic Leadership (SL)**	**Sustainable Managerial Performance (SMP)**
Digital Leadership Capability (DLC)		0.225	0.307			0.029
Manager Well-Being (MWB)						0.261
Managerial Engagement (ME)						0.094
Perceived Organizational Support (POS)		0.159	0.203			0.014
Strategic Leadership (SL)		0.198	0.107			0.037
Sustainable Managerial Performance (SMP)						
Q Square						
				Q^2predict	RMSE	MAE
Manager Well-Being (MWB				0.434	0.757	0.571
Managerial Engagement (ME)				0.444	0.750	0.588
Sustainable Managerial Performance (SMP)				0.464	0.736	0.587
Model Fit						
					Saturated model	**Estimated model**
SRMR					0.035	0.036
d_ULS					0.804	0.879
d_G					0.471	0.468
Chi-square					959.248	944.674
NFI					0.921	0.922

Source : Data Processed SmartPLS 4, 2026

Table 4. Hypothesis

Hypothesis	Relationship	Original Sample	Standard Deviation	T Statistics	P Values	Result
H1	Strategic Leadership (SL) affects Manager Well-Being (MWB)	0.341	0.044	7.679	0.000	Accepted
H2	Strategic Leadership (SL) affects Managerial Engagement (ME)	0.249	0.041	6.025	0.000	Accepted
H3	Strategic Leadership (SL) affects Sustainable Managerial Performance (SMP)	0.137	0.043	3.210	0.001	Accepted
H4	Digital Leadership Capability (DLC) affects Manager Well-Being (MWB)	0.365	0.043	8.414	0.000	Accepted
H5	Digital Leadership Capability (DLC) affects Managerial Engagement (ME)	0.423	0.041	10.412	0.000	Accepted
H6	Digital Leadership Capability (DLC) affects Sustainable Managerial Performance (SMP)	0.131	0.046	2.810	0.005	Accepted
H7	Perceived Organizational Support (POS) affects Manager Well-Being (MWB)	0.300	0.045	6.712	0.000	Accepted
H8	Perceived Organizational Support (POS) affects Managerial Engagement (ME)	0.336	0.043	7.751	0.000	Accepted
H9	Perceived Organizational Support (POS) affects Sustainable Managerial Performance (SMP)	0.085	0.042	2.029	0.042	Accepted
H10	Manager Well-Being (MWB) affects Sustainable Managerial Performance (SMP)	0.424	0.049	8.617	0.000	Accepted
H11	Manager Well-Being (MWB) mediates Strategic Leadership (SL) and Sustainable Managerial Performance (SMP)	0.145	0.025	5.734	0.000	Accepted
H12	Manager Well-Being (MWB) mediates Digital Leadership Capability (DLC) and Sustainable Managerial Performance (SMP)	0.155	0.028	5.527	0.000	Accepted
H13	Manager Well-Being (MWB) mediates Perceived Organizational Support (POS) and Sustainable Managerial Performance (SMP)	0.127	0.025	5.114	0.000	Accepted
H14	Managerial Engagement (ME) affects Sustainable Managerial Performance (SMP)	0.256	0.050	5.089	0.000	Accepted
H15	Managerial Engagement (ME) mediates Strategic Leadership (SL) and Sustainable Managerial Performance (SMP)	0.064	0.016	3.920	0.000	Accepted
H16	Managerial Engagement (ME) mediates Digital Leadership Capability (DLC) and Sustainable Managerial Performance (SMP)	0.108	0.025	4.349	0.000	Accepted
H17	Managerial Engagement (ME) mediates Perceived Organizational Support (POS) and Sustainable Managerial Performance (SMP)	0.086	0.021	4.115	0.000	Accepted

Source : Data Processed SmartPLS 4, 2026

The Fornell-Larcker criteria and HTMT were used to evaluate the constructs' discriminant validity. Each construct is shown to be empirically different from the others by the HTMT findings, which show that all values fall below the suggested cutoff of 0.85 (see table 2). Furthermore, since each construct's square root of the AVE is higher than its correlations with other constructs, the Fornell–Larcker criteria validates discriminant validity. The constructs used in this work measure conceptually distinct phenomena and are suitable for further structural model analysis, according to these results, which provide compelling evidence that the measurement model meets criteria.

Structural Model

In order to analyze the suggested study framework's predictive power and investigate the predicted links between the constructs, the structural model is examined (Hair et al., 2022). In order to ascertain the extent to which exogenous constructs impact endogenous variables, this evaluation comprises the calculation of effect size (f2) and predictive relevance (Q2), which evaluate the model's capacity to forecast observed values (Kline, 2023). To make sure the suggested model accurately depicts the underlying data structure, the overall model fit is also evaluated (see Figure 2). While the particular indirect impacts are examined concurrently to evaluate the mediating roles of management engagement and Manager Well-Being, hypothesis testing is carried out by looking at route coefficients to determine the direction and intensity of the direct associations. To make sure the suggested model is both theoretically sound and experimentally testable,

this systematic review adheres to accepted structural equation modeling methodologies (Chua, 2023).

The structural model evaluation indicates that the final model meets the recommended assessment criteria. The R-square values show that the model explains 0.448 of the variance in Manager Well-Being, 0.457 in managerial engagement, and 0.625 in sustainable managerial performance, indicating moderate to substantial explanatory power for the endogenous constructs. The effect size results (f-square) suggest small to moderate contributions of the exogenous variables, with all reported effects exceeding the minimum threshold of 0.02, indicating meaningful contributions to the explained variance. Predictive relevance is supported by Q^2predict values greater than zero for Manager Well-Being (0.434), managerial engagement (0.444), and sustainable managerial performance (0.464), demonstrating adequate out-of-sample predictive capability. Model fit indices further support the adequacy of the model, with SRMR values of 0.035 for the saturated model and 0.036 for the estimated model, both below the recommended cut-off of 0.08, and NFI values of 0.921 and 0.922, exceeding the 0.90 threshold. Overall, the structural model satisfies established evaluation criteria and is appropriate for interpreting the hypothesized relationships (see table 3).

The results of the hypothesis testing in Table 4 indicate that all proposed direct and indirect relationships are statistically supported; however, the magnitude of the effects shows significant differences among the various predictors. Based on the F-squared effect sizes on sustainable managerial performance, strategic leadership exerts the strongest direct influence on SMP (F^2 = 0.037), followed by digital leadership competence (F^2 = 0.029), while perceived organizational support exhibits a smaller direct effect (F^2 = 0.014). Although these effects fall within a small range, they remain practically relevant because SMP has a relatively high explained variance (R^2 = 0.625), indicating that even small contributions can be influential when combined within an integrative model. Furthermore, the mediating variables contribute to SMP, with Managerial Well-being showing a larger effect on SMP (f^2 = 0.261) than managerial engagement (f^2 = 0.094), suggesting that strengthening managers' psychological capacity is a more influential pathway for sustaining performance than engagement alone.From a practical relevance perspective, the magnitude pattern implies clear priorities. First, organizations should prioritize interventions that improve Manager Well-Being because it is the most influential predictor of SMP in this model, and it also serves as a key channel through which leadership and support translate into sustained outcomes. Second, among the exogenous drivers, strategic leadership should be emphasized slightly more than digital leadership capability, as it shows the largest direct contribution to SMP and also contributes to both well-being (f^2 = 0.198) and engagement (f^2 = 0.107). Third, digital leadership capability should be developed as a complementary lever because it has the strongest effect on managerial engagement (f^2 = 0.307) and a moderate effect on well-being (f^2 = 0.225), which helps sustain performance in technology-enabled work environments. Finally, perceived organizational support remains important primarily as an enabling context that strengthens well-being (f^2 = 0.159) and engagement (f^2 = 0.203), even though its direct effect on SMP is comparatively small, indicating that support mechanisms may create value largely through these human-centered pathways rather than through an immediate direct impact on performance sustainability.

In addition, the relative effect sizes clarify which pathways are practically strongest and where organizations may gain the greatest leverage. Digital leadership capability contributes more strongly to managerial engagement than strategic leadership, as reflected in a larger effect on ME (DLC → ME: f^2 = 0.307) compared with SL → ME (f^2 = 0.107), indicating that managers' active involvement and sustained effort are particularly strengthened by digital readiness, digital literacy support, and technology-enabled leadership practices. Likewise, Manager Well-Being is a more influential driver of sustainable managerial performance than managerial engagement (EWB → SMP: f^2 = 0.261 versus ME → SMP: f^2 = 0.094), suggesting that sustained performance depends more on maintaining psychological capacity, recovery, and resilience than on motivation alone. Practically, this pattern implies that organizations should treat digital leadership capability as a primary lever to energize engagement, while simultaneously prioritizing well-being-focused interventions as the most direct and impactful route to sustaining managerial performance over time.

Interpretation of Key Findings

The results indicate that the proposed direct and indirect relationships are statistically supported, with meaningful differences in magnitude across paths. Strategic leadership, digital leadership capability, and perceived organizational support are positively associated with Manager Well-Being, managerial engagement, and sustainable managerial performance. Beyond confirming these associations, the mediation results suggest a stronger theoretical implication. Manager Well-Being and managerial engagement operate as parallel mediators because they represent two distinct but simultaneous human-centered processes. Well-being reflects the psychological condition that enables sustainability, such as reduced strain, recovery capacity, and resilience that help managers remain effective over time. Managerial engagement reflects the motivational and behavioral investment reflected in sustained effort, persistence, and proactive role fulfillment. These mechanisms can operate concurrently because leadership and support may be linked to well-being and engagement at the same time rather than through a fixed sequential order. This pattern extends sustainable performance theory by indicating that sustained effectiveness is explained not by a single pathway, but by the combined role of psychological capacity and sustained involvement under ongoing demands.

The significant relationships between Manager Well-Being, managerial engagement, and sustainable managerial performance further clarify the human-centered nature of long-term managerial outcomes. Manager Well-Being represents managers' capacity to remain psychologically and socially resilient, which is consistent with sustained focus, motivation, and decision quality. Managerial engagement represents sustained behavioral investment, reflected in persistence, dedication, and proactive involvement in strategic and operational priorities. The mediation results indicate that leadership and organizational support are linked to sustainable managerial performance not only directly but also indirectly through these psychological and behavioral mechanisms, highlighting that well-being and engagement are central pathways through which contextual and leadership resources are reflected in long-term managerial effectiveness.

In addition to statistical support, the pattern of effect sizes points to three takeaway mechanisms. First, digital leadership capability is more strongly linked to managerial engagement than strategic leadership, suggesting that managers' day-to-day involvement is particularly reinforced when leaders provide digital direction, reduce uncertainty around technology use, and enable learning and tool adoption in technology-enabled workflows. Second, Manager Well-Being is more strongly linked to sustainable managerial performance than managerial engagement, indicating that sustained performance depends primarily on psychological capacity such as recovery, resilience, and decision quality; engagement may intensify effort, but well-being helps determine whether that effort can be maintained over time. Third, perceived organizational support appears to

matter most as an enabling context that strengthens well-being and engagement, implying that support systems create practical value largely through human-centered pathways rather than only through a direct association with performance sustainability.

To distinguish practical importance from statistical significance, the effect size results provide clearer guidance. The relationship from digital leadership capability to managerial engagement is comparatively strong (f^2 = 0.307) relative to strategic leadership to managerial engagement (f^2 = 0.107), indicating that digital leadership is a more influential lever for strengthening engagement in this sample. Similarly, Manager Well-Being shows a stronger association with sustainable managerial performance (f^2 = 0.261) than managerial engagement (f^2 = 0.094), suggesting that interventions that protect managers' well-being may yield larger practical gains in sustaining performance than engagement-focused efforts alone. Although the direct effects of the exogenous drivers on sustainable managerial performance are smaller (strategic leadership f^2 = 0.037; digital leadership capability f^2 = 0.029; perceived organizational support f^2 = 0.014), their practical relevance remains meaningful because the model explains a substantial proportion of variance in sustainable managerial performance (R^2 = 0.625) and the indirect pathways through well-being and engagement account for an important share of the overall associations observed.

Comparison with Previous Studies

The present findings are consistent with prior research showing that leadership capabilities and relational qualities play a central role in strengthening coordination, engagement, and performance outcomes. Studies have emphasized that leaders who build trust, provide clear direction, and maintain supportive relationships tend to be associated with stronger coordination and higher performance, which aligns with the current evidence that leadership-related factors are linked to sustainable managerial performance through improved well-being and engagement (Nwachukwu & Vu, 2020); (Parmar & Murari, 2025).

In the context of sustainability-oriented outcomes, the findings also align with studies suggesting that strategic leadership supports long-term performance by strengthening strategic clarity, innovation orientation, and consistency in uncertain and dynamic environments (Mohammad et al., 2024); (Walker-Schmidt, 2022). Similarly, evidence on digital leadership indicates that leaders who guide digital transformation while remaining people-oriented may reduce technostress, encourage learning, and support adaptive work practices, which is consistent with the stronger association observed between digital leadership capability and engagement in technology-intensive settings (Jankelová et al., 2021); (Phan, 2024); (Dara et al., 2025); (Patnaik et al., 2023).

The results further correspond with organizational support literature indicating that perceived organizational support can function as a critical resource that is associated with lower stress, stronger commitment, and sustained contribution, particularly for managers facing high responsibility (Caesens et al., 2017); (Saleh & Haidar, 2022); (Hossin et al., 2021); (Mahmood et al., 2024). This is reinforced by research positioning well-being as a strategic resource that supports resilience and sustained cognitive capacity, enabling performance continuity over time (Hakanen et al., 2018); (Dong & Yan, 2022); (Mehta, 2020); (Farajat & Salah, 2023); (Lu et al., 2023); (Pratiwi et al., 2025). Likewise, engagement research shows that vigor, dedication, and absorption act as behavioral engines of sustained outcomes, which supports the present evidence that managerial engagement is an important pathway to sustainable managerial performance (Nienaber, 2022); (Mantarova & Toskov, 2019); (Nienaber & Martins, 2020); (Cascioli Karivalis & Ohana, 2025); (Sophia et al., 2025).

At the same time, the relative influence of leadership, organizational support, and organizational systems may vary across contexts. In dynamic and diverse environments, leadership capability and perceived organizational support may be more strongly associated with sustained performance because they shape managers' well-being and engagement under uncertainty. This suggests that leadership–performance relationships are context-dependent across organizational scale, sector characteristics, and institutional settings.

Limitations and Cautions

This research has limitations that should be considered when interpreting the results. First, the cross-sectional design limits causal inference regarding the relationships among strategic leadership, digital leadership capability, perceived organizational support, Manager Well-Being, managerial engagement, and sustainable managerial performance. Second, although procedural controls were implemented, the use of self-reported measures may be subject to response tendencies and common method bias. Third, the single-country managerial sample may limit generalizability to organizations operating in different cultural, institutional, or industry contexts. Therefore, the findings should be interpreted as statistically supported associations within the observed Indonesian managerial context rather than conclusive causal effects across settings.

Recommendations for Future Research

Future research should employ longitudinal or multi-wave designs to strengthen causal interpretation and capture the dynamic nature of sustainable managerial performance over time. Mixed-method approaches combining interviews with survey-based SEM could also deepen understanding of how leadership practices and organizational support are linked to managerial engagement and well-being. The model may be extended by examining additional mediators or moderators such as corporate culture, psychological capital, leadership climate, or environmental uncertainty. Comparative studies across sectors, organizational structures, or countries are also recommended to test contextual differences and improve the broader applicability of the framework.

Conclusion

This study provides evidence that sustainable managerial performance, defined as managers' perceived ability to maintain consistent, resilient, and adaptive work outcomes over time, is shaped by leadership and organizational support operating through human-centered mechanisms in the Indonesian managerial context. The results indicate that Manager Well-Being is a stronger driver of sustainable managerial performance than managerial engagement, and among the exogenous predictors, strategic leadership shows the largest direct contribution to sustainable managerial performance, followed by digital leadership capability and perceived organizational support. These findings should be interpreted as statistically supported perceived relationships based on cross-sectional self-report data, rather than universal causal effects.

Theoretically, this study extends sustainable performance theory by specifying sustainable managerial performance as a distinct managerial-level outcome and by showing that sustainability is explained more comprehensively through two simultaneous human-centered mechanisms. Beyond prior leadership or support studies that often test isolated relationships or rely on a single dominant mediator, this integrative model differentiates strategic leadership from digital leadership capability and incorporates perceived

organizational support as a complementary contextual driver. The parallel mediation evidence further clarifies that sustainable managerial performance is sustained through both psychological capacity captured by well-being and motivational investment captured by engagement, thereby strengthening the theoretical explanation of how sustained effectiveness is built under ongoing change.

Practically, the findings suggest two to three actionable priorities for organizations. First, leadership development should strengthen strategic direction-setting and decision quality while building digital leadership capability so managers can lead effectively in technology-enabled work systems. Second, organizations should reinforce perceived organizational support through fair policies, access to resources, and managerial coaching that reduces unnecessary strain and supports recovery, thereby protecting manager well-being. Third, managerial engagement can be strengthened through recognition, role clarity, autonomy, and performance systems that encourage consistent effort and proactive responsibility, supporting sustained performance over time.

This study has limitations that inform future research. The cross-sectional design and self-report measures restrict causal inference and may be susceptible to common method bias, while the single-country sample limits generalizability beyond Indonesia. Future studies should employ longitudinal or multi-wave designs, incorporate multi-source or objective indicators of managerial performance, and test the model across sectors and national contexts to examine boundary conditions and further strengthen construct validity for sustainable managerial performance.

Author contributions

Cecep Yoto Haryoto was in charge of project management, supervision, validation, visualization, data curation, formal analysis, inquiry, technique development, conceptualization, and paper preparation, which included writing, reviewing, and editing. The author accepts full responsibility for the accuracy and integrity of the research and approved the final draft of the publication.

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Conflict of interest

The author affirms that the research method, data analysis, interpretation, and publishing of this work were not impacted by any financial, personal, or professional conflicts of interest.

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