

BUILDING HUMAN CAPITAL AND DYNAMIC MANAGERIAL CAPABILITY TO ELEVATE ORGANIZATIONAL AGILITY AND PERFORMANCE: A STRATEGIC FOR SME RESILIENCE

Ida Ketut KUSUMAWIJAYA ¹, Partiwī Dwi ASTUTI ², I Made Hedy WARTANA ³,
I Ketut Yudana ADI ⁴

^{1,3}Management Department, Triatma Mulya University, Bali, Indonesia

²Accounting Department, Warmadewa University, Bali, Indonesia

⁴Accounting Department, Triatma Mulya University, Bali, Indonesia

Article History:

- received 19 June 2025
- accepted 12 December 2025

Abstract. *Purpose* – This study explores the strategic role of human capital, dynamic managerial capability, and organizational agility in driving organizational performance within SMEs in Bali, Indonesia.

Research methodology – Investigates the direct and indirect effects of human capital and dynamic managerial capability on organizational performance, mediated by organizational agility. A quantitative survey was conducted with 396 SMEs, using PLS-SEM for data analysis.

Findings – Human capital enhances organizational agility but does not directly impact performance, while dynamic managerial capability positively influences both agility and performance. Organizational agility is found to significantly improve performance and partially mediates the relationship between human capital, dynamic managerial capability, and organizational performance. This research contributes to the critical role of organizational agility in transforming internal competencies into tangible performance outcomes, especially under volatile market conditions.

Research limitations – Research is limited by its geographic scope, cross-sectional design, and reliance on self-reported data. Future studies could explore the dynamic interplay of these factors across different regions and over time.

Practical implications – SME managers should prioritize developing agile capabilities and enhancing dynamic managerial competencies to effectively convert human capital into improved organizational performance under volatile conditions.

Originality/Value – Organizational agility as a crucial mechanism that translates internal competencies into tangible performance outcomes, especially under conditions of environmental turbulence.

Keywords: human capital, dynamic managerial capability, organizational agility, organizational performance, SME.

JEL Classification: J24, M10, L23, L25, L26.

[✉]Corresponding author. E-mail: ik.kusumawijaya@triatmamulya.ac.id

1. Introduction

Human capital serves as a vital asset enabling firms to innovate and adapt to changing environments, yet its development remains constrained by disparities in education and resource access (Ndofirepi, 2024). Dynamic managerial capability enhances the ability of organizations to seize market opportunities and adapt through innovation, although inconsistencies in managerial competencies across SMEs pose a significant challenge (Freixanet & Renart,

2020). Organizational agility empowers firms to respond swiftly to market shifts, but it faces hurdles such as organizational rigidity and limited learning capabilities (Zhang et al., 2024). Finally, organizational performance, often linked with innovation and adaptability, is crucial for sustained growth yet is frequently threatened by resource limitations and market turbulence (Amoa-Gyarteng & Dhliwayo, 2024).

The sustainability and competitiveness of SMEs depend critically on robust human capital, which directly drives innovation and organizational learning (Zhang et al., 2023). Dynamic managerial capability enables SME leaders to navigate uncertainties and rapidly changing market dynamics, thus fostering resilience (John William et al., 2024). Organizational agility is essential for SMEs to adapt quickly to external shocks, ensuring operational continuity and strategic alignment (De la cruz Maldonado et al., 2022). Finally, improving organizational performance remains a cornerstone for SME survival and growth, especially amidst global competitive pressures (Mukherjee et al., 2024).

Organizational agility is posited as a mediator because it transforms the latent capabilities embedded in human capital and dynamic managerial competencies into tangible organizational performance outcomes (Zhang et al., 2024). It acts as the dynamic conduit through which internal resources are translated into external competitiveness by facilitating rapid decision-making, responsiveness, and flexibility (De la cruz Maldonado et al., 2022). Without organizational agility, the potential advantages conferred by human capital and managerial capabilities would remain dormant, failing to significantly impact performance metrics in volatile environments.

Despite substantial research on human capital, dynamic managerial capability, organizational agility, and performance, integration among these constructs in SMEs remains under-explored (Ndofirepi, 2024). Previous studies have mainly treated these variables in isolation rather than examining their interplay within SME contexts, especially under turbulent market conditions (AlHammadi & Abu Elanain, 2024). Furthermore, the mediating role of organizational agility in bridging human capital and dynamic capabilities towards enhancing organizational performance has not been sufficiently elucidated (Ludviga & Kalvina, 2024). Thus, there is a critical need for empirical studies that integrate these constructs to offer a more comprehensive understanding of their synergistic impacts on SME performance.

This study offers a novel contribution by empirically investigating the mediating role of organizational agility in linking human capital and dynamic managerial capability to organizational performance within SMEs, a relationship largely neglected in existing literature (Timothy, 2022). Unlike prior studies that addressed these constructs independently (Freixanet & Renart, 2020; Ludviga & Kalvina, 2024), this research provides an integrated framework demonstrating their interdependent effects. Furthermore, it highlights the pivotal function of agility as a transformative mechanism, advancing the strategic management discourse in SME settings under dynamic market conditions.

Furthermore, it highlights the pivotal function of agility as a transformative mechanism, advancing the strategic management discourse in SME settings under dynamic market conditions, which is crucial in adapting to rapid changes and fostering sustainable performance (Clauß et al., 2021; Rawashdeh et al., 2024). Centered on SMEs in Bali, this study responds to the need for contextual specificity by exploring how deeply embedded cultural values – such

as Tri Hita Karana (Astuti et al., 2021) and communal-based entrepreneurship – shape capability development and strategic adaptability, emphasizing the intersection of local practices and global business dynamics to enhance strategic agility in emerging markets (Zahoor et al., 2023). Bali offers a rich empirical setting where global market pressures intersect with distinct cultural logics, making it uniquely positioned to reveal nuanced insights into SME resilience and strategic agility, particularly in contexts requiring a blend of local knowledge with global competitive strategies (Gong & Ribière, 2023).

The purpose of this research is to examine the influence of human capital and dynamic managerial capability on organizational performance through the mediating role of organizational agility within SMEs. Specifically, the study aims to establish how the strategic interplay among these variables enhances SMEs' adaptive capabilities and performance outcomes in increasingly volatile markets. By empirically validating these relationships, the research seeks to provide actionable insights for SME leaders aiming to leverage internal capabilities for sustained competitive advantage.

2. Literature review and hypothesis development

2.1. Human capital

Despite human capital's critical role in fostering innovation and firm internationalization, its impact is frequently constrained by institutional barriers and uneven skill development (Ndofirepi, 2024). Criticisms highlight that human capital alone does not guarantee enhanced SME growth without considering absorptive capacities and contextual institutional factors (Timothy, 2022). Ndofirepi (2024) suggest that investing in continuous education and training initiatives can moderate these limitations and optimize firm outcomes. However, the overemphasis on formal qualifications without integrating practical competencies can prove counterproductive, leading to skill mismatch and inefficiencies (Zhang et al., 2023). Human capital not merely as a standalone asset but as a synergistic force contingent on dynamic environments and institutional adaptability. Moreover, recent studies emphasize that cultural and religious uniqueness significantly shape organizational behavior and learning processes within diverse corporate settings (M. A. Khan et al., 2020). Integrating these dimensions deepens the contextual understanding of human capital's role within SMEs, particularly in diverse and institutionally complex business environments (White et al., 2021).

2.2. Dynamic managerial capability

Dynamic Managerial Capability (DMC) is acknowledged for empowering firms to reconfigure resources and sustain competitive advantage, yet its realization faces challenges from insufficient managerial competencies and cognitive biases (Freixanet & Renart, 2020). Critics contend that DMC development is often uneven across SMEs, leading to variability in performance outcomes (Ben Ghrbeia & Alzubi, 2024). In response, counterarguments highlight that targeted managerial training and experiential learning can enhance DMC even in resource-constrained environments (AlHammedi & Abu Elanain, 2024). However, overreliance on dynamic capabilities without considering market limitations and organizational culture can

lead to strategic misalignments (Sebuwufu & Timilsina, 2024). DMC offers significant potential in enhancing organizational flexibility and innovation, particularly within high-tech firms where continuous strategic adjustments are necessary. Moreover, recent studies underscore how cultural and religious contexts intricately shape managerial cognition and capability development within SMEs (Ibidunni et al., 2020). Integrating such socio-cultural dimensions refines our understanding of DMC as contextually contingent rather than universally prescriptive (Momeni et al., 2024).

2.3. Organizational agility

Organizational agility is pivotal for dynamic market adaptation, yet its practical realization is often constrained by entrenched hierarchies and slow decision-making processes (Zhang et al., 2024). Critics assert that agility initiatives sometimes result in superficial changes without embedding true adaptive capabilities (Ko et al., 2022). Counterarguments propose that building agile cultures through leadership commitment and digital transformation initiatives can effectively bridge these gaps (Shaik et al., 2024). Nonetheless, when agility is pursued without coherent strategic focus, it risks organizational fragmentation and diluted performance (Wilson et al., 2024). Organizational agility as a vital mediating construct that operationalizes the potential of human capital and managerial capabilities into tangible performance gains. Emerging scholarship emphasizes that cultural and religious values critically inform how agility is interpreted and enacted across organizational contexts (Gonçalves et al., 2020; Xie et al., 2022). Accounting for these dimensions deepens the agility construct beyond structural change, embedding it within the lived realities of diverse business environments (Porkodi, 2024).

2.4. Organizational performance

The concept of organizational performance is multidimensional, encompassing financial, operational, and strategic outcomes (Wang & Na-Nan, 2024). However, its measurement remains contested, as the balance between short-term profits and long-term sustainability is often difficult to quantify (Amoa-Gyarteng & Dhliwayo, 2024). Critics argue that traditional performance metrics are inadequate for capturing the complex nature of contemporary organizational environments, where intangible assets like knowledge and culture play a pivotal role (Mukherjee et al., 2024). Despite these criticisms, improving organizational performance through investments in technology and human capital remains a critical focus, particularly in SMEs aiming to expand their market reach (Zhang et al., 2023). Recent contributions highlight that performance imperatives in SMEs are deeply intertwined with cultural norms and religious ethics that shape strategic intent and stakeholder expectations (Cai et al., 2021). Incorporating these contextual layers enriches performance assessment beyond conventional indicators, capturing values-driven organizational outcomes (Stawicka, 2021).

2.5. The impact of human capital on organizational agility and organizational performance

Although human capital is a key driver for enhancing firm adaptability and resilience, its direct influence on organizational agility remains contested due to contextual constraints

such as institutional weaknesses and skill mismatch (Timothy, 2022). Critics argue that while human capital provides cognitive flexibility, it does not automatically translate into organizational-level agility without supportive structures and learning orientation (Au, 2024). Counterarguments suggest that investment in experiential learning and leadership development can strengthen the human capital-agility link (Zhao et al., 2022). However, overemphasizing human capital without organizational alignment risks strategic incoherence and fragmented adaptability (Zhang et al., 2023).

Human capital is traditionally associated with improved firm performance; however, evidence reveals inconsistent effects across SMEs due to varying absorptive capacities and contextual factors (Ndofirepi, 2024). Critics note that without the integration of skills into operational strategies, human capital remains an underutilized resource, limiting performance outcomes (Au, 2024). Counterarguments posit that knowledge management systems and innovation-friendly climates can potentiate the impact of human capital on performance (Timothy, 2022). Nevertheless, disproportionate reliance on formal education without fostering practical, situational expertise could yield counterproductive effects (Agostini & Nosella, 2023). Therefore, this study Hypotheses:

H1: *human capital influences organizational agility.*

H2: *human capital influences organizational performance.*

2.6. The impact of dynamic managerial capability on organizational agility and organizational performance

Dynamic managerial capability is critical for enabling swift organizational adjustments to market turbulence, yet its efficacy is often restricted by leadership rigidity and resistance to change (John William et al., 2024). Critics highlight that not all dynamic capabilities result in tangible agility improvements due to cognitive biases and deficient resource orchestration (Rupeika-Apoga et al., 2022). In contrast, proponents argue that structured learning programs and strategic flexibility enhance the agility outcomes of dynamic managerial capabilities (Freixanet & Renart, 2020). Nonetheless, managerial overreach without shared vision can derail agility initiatives, resulting in organizational disarray (AlHammadi & Abu Elanain, 2024).

Dynamic managerial capabilities are widely celebrated for promoting SME survival and competitiveness; however, empirical evidence shows that their impact on performance is often moderated by market turbulence and internal resource gaps (Freixanet & Renart, 2020). Critics argue that managerial dynamism alone is insufficient without a strong operational backbone and collaborative culture (AlHammadi & Abu Elanain, 2024). Leveraging strategic alliances and continuous managerial development programs can bridge capability-performance gaps. However, over-prioritization of dynamic maneuvers may inadvertently divert resources from core operational excellence, leading to counterproductive volatility (Sebuwufu & Timilsina, 2024). Therefore, the following Hypotheses were developed:

H3: *Dynamic managerial capability influences the organizational agility.*

H4: *Dynamic managerial capability influences organizational performance.*

2.7. The impact of organizational agility on organizational performance

Organizational agility is a well-acknowledged enabler of superior firm performance; yet, empirical findings caution against assuming a straightforward relationship, as agility initiatives often suffer from execution inconsistencies (Ludviga & Kalvina, 2024). Critics point out that in the absence of strategic clarity, agility can manifest as reactive, fragmented actions rather than strategic adaptability (Zhang et al., 2024). Nonetheless, fostering leadership responsiveness and decentralized decision-making structures can amplify agility's impact on performance. However, misaligned agility practices may backfire, eroding organizational coherence and harming long-term performance (De la cruz Maldonado et al., 2022). The Hypothesis proposed as follows:

H5: *organizational agility effect organizational performance.*

2.8. The mediation of organizational agility on the impact of human capital and dynamic managerial capability on organizational performance

The potential of human capital to enhance organizational performance is often mediated by organizational agility, transforming latent knowledge into actionable competencies (Ndo-firepi, 2024). Critics argue that human capital without agile frameworks leads to knowledge inertia and innovation stagnation (Au, 2024). However, counterarguments posit that agility can operationalize human capabilities, creating dynamic value streams responsive to market needs (Zhao et al., 2022). Nevertheless, when agility processes are poorly designed or misaligned with human capital development, the mediation effect can become counterproductive, introducing organizational confusion and inefficiencies (Timothy, 2022).

Organizational agility plays a crucial mediating role in translating dynamic managerial capabilities into performance enhancements by enabling rapid resource reconfigurations (John William et al., 2024). Critics contend that dynamic managerial competencies without agile operational support result in strategic paralysis and delayed responses (Sebuwufu & Timilsina, 2024). Conversely, agility fosters a conducive environment for managerial dynamism to yield measurable performance gains (Freixanet & Renart, 2020). Yet, if agility practices are fragmented or poorly institutionalized, they can neutralize the potential of managerial capabilities, leading to strategic misalignment and decreased performance. The Hypotheses proposed as follows:

H6: *organizational agility can mediate the effect of human capital on organizational performance.*

H7: *organizational agility can mediate the effect of dynamic managerial capability on organizational performance.*

3. Methods

This research was conducted on 36,387 SME in the Province of Bali, Indonesia. The sampling frame was derived from the Bali, Province, Small & Medium Enterprise Cooperative Service (2025), with invitations sent via email and follow-up reminders issued to non-respondents. The sample size was determined using the Slovin formula, assuming a sampling error of 5%,

the sample size of this study was 396. Key firm traits were analyzed to compare respondents with the population, and a sensitivity test using a Heckman selection model was conducted to control for potential biases. Data were collected from managers representing SME as research respondents. This research was conducted using an online questionnaire with the Google Forms application. 396 questionnaire links were sent to respondents via email, 144 responses were returned, yielding a response rate of 36.36%. These responses were verified as valid, providing the data for the analysis. The use of variance-based SEM with a Partial Least Squares approach (PLS-SEM) in this study is scientifically justified due to its robustness in predictive modeling and suitability for small to medium sample sizes, such as the 144 valid responses obtained. PLS-SEM effectively handles complex models and formative constructs while imposing minimal assumptions on data distribution (Hair et al., 2017) and is especially advantageous when the research objective emphasizes theory development and variance explanation (Kock, 2020). This aligns with the study's intent to investigate causal relationships among latent constructs in a dynamic SME context. The variables were measured using items developed and employed in previous studies to ensure the study's validity and reliability. Multiple items were used to test each construct, and each item was evaluated using a five-point Likert scale that ranged from 1 (strongly disagree) to 5 (strongly agree).

Human capital was measured using eight items adapted from Andersén (2021): 1. The employees in our organization have skills that are not widely available in the labor market; 2. The employees in our organization have skills that would be very difficult to replace; 3. The employees in our organization have skills that are not available to our competitors; 4. The employees in our organization have skills that are widely considered the best in our industry; 5. The employees in our organization have skills that are developed through on the job experiences; 6. The employees in our organization have skills that are difficult for our competitors to buy away from us; 7. The employees in our organization have skills that are unique to our organization; 8. The employees in our organization have skills that are difficult for our competitors to imitate or duplicate. Dynamic managerial capability was measured using eight items adapted from Mostafiz et al. (2019): 1. Prior entrepreneurial experiences; 2. Prior managerial experiences; 3. Academic qualification; 4. Prior training experiences; 5. I have connections with top managers at buyer firms; 6. I have connections with top manager at supplier firms; 7. I have connections with top manager at competitor firms; 8. I have high preference of rapid internationalization.

Organizational agility was measured using eight items adapted from Sharifi and Zhang (2001): 1. The speed of providing customer service; 2. Duration of performance processes; 3. Increase of employee skills; 4. Cooperation and integration of different units; 5. Improvement of processes; 6. Average response time; 7. Applying changes (instructions); 8. Flexibility in providing a variety of services. Organization performance was measured using eight items adapted from research (Abbas et al., 2019): 1. Our firm's profit goals have been achieved; 2. Our firm's sales goals have been achieved; 3. Our firm's return on investment goals have been achieved; 4. Our products are of a higher quality than those of our competitors; 5. We have a higher customer retention rate than our competitors; 6. We have a better reputation among major customer segments than our competitors; 7. We have a lower employee turnover rate than that of our competitors; 8. We have been more effective in new product development than our competitors.

Table 1. Descriptive statistics of respondent profile (source: the authors, 2025)

		Frequency	Percent
Gender	Female	35	24.3
	Male	109	75.7
	Total	144	100.0
Age	20–30 years	38	26.4
	31–40 years	41	28.5
	41 and above	65	45.1
	Total	144	100.0
Education	Undergraduate	119	82.6
	Postgraduate	25	17.4
	Total	144	100.0
Work experience	1–5 years	88	61.1
	5 and above	56	38.9
	Total	144	100.0

Table 1 illustrates a respondent profile marked by male predominance (75.7%), indicating potential gender-based perspectives that may shape organizational agility and managerial dynamics. The age majority (45.1% above 41 years) reflects a seasoned workforce, potentially enhancing strategic decision-making and human capital development. However, the concentration of undergraduate education (82.6%) exposes a limitation in advanced innovation competencies crucial for navigating complex environments. Notably, the high proportion of respondents with 1–5 years' experience (61.1%) signals a critical phase requiring accelerated cultivation of dynamic managerial capabilities. Collectively, the demographic structure underscores the strategic urgency for targeted capacity-building initiatives to reinforce agility, elevate human capital quality, and sustain SME resilience amid volatility.

Table 2. Descriptive statistics of variables studied (source: the authors, 2025)

	Theoretical score		Actual score		Mean	SD
	Min	Max	Min	Max		
Human capital	1	5	3.125	4.875	4.194	0.521
Dynamic managerial capability	1	5	3.125	4.750	4.108	0.507
Organizational agility	1	5	3.125	4.875	4.102	0.494
Organizational performance	1	5	3.125	4.875	4.108	0.518

The descriptive statistics (Table 2) reveal a consistently elevated perception across all key constructs, with human capital registering the highest mean (4.194), reaffirming its pivotal role in sustaining SME competitiveness through talent distinctiveness. Dynamic managerial capability (4.108) and organizational agility (4.102) both demonstrate strong mean values, emphasizing the strategic importance of responsive leadership and structural adaptability

in volatile contexts. Organizational performance (4.108) aligns closely, reflecting the compounded effect of these internal capacities. Narrow standard deviations (<0.53) across variables suggest a uniformly shared recognition among respondents, reinforcing the urgency for coherent strategic investments in these areas. These findings critically affirm that human capital, dynamic capability, and agility are not peripheral but central to resilience and enduring performance under dynamic market conditions.

4. Results

Table 3 demonstrates a robust model fit (Hair et al., 2017), with a significant Average Path Coefficient (APC = 0.388, $p < 0.001$), supporting strong causal relationships essential for driving organizational agility through integrated human capital and managerial capabilities.

Table 3. Results of goodness of fit research model

Evaluation	Value	Criterion
Average Path Coefficient (APC)	0.388*	significant if < 0.05
Average R-squared (ARS)	0.903*	significant if < 0.05
Average block VIF (AVIF)	2.210	acceptable if ≤ 5

Note: *All significant at $p < 0.001$.

The Average R-squared (ARS = 0.903, $p < 0.001$) reflects an extraordinary explanatory capacity, while the Average Block VIF (AVIF = 2.210) confirms low multicollinearity, indicating structural soundness across constructs (Andersén, 2021). As a precautionary measure to address potential Common Method Bias (CMB), procedural remedies, such as item separation and anonymity, as well as a statistical check (e.g., Harman's single-factor test) were implemented, ensuring model robustness. These indicators collectively validate the model's empirical strength, guiding interventions for human capital development, leadership, and agile transformation to secure long-term organizational performance under turbulent conditions.

Table 4 presents the validity and reliability tests for multiple constructs in the model. Key statistics demonstrate the psychometric rigor of the model. The Average Variance Extracted (AVE) values exceed 0.70, indicating strong convergent validity across all constructs. Composite Reliability (CR) and Cronbach's alpha values also meet the recommended thresholds, reinforcing internal consistency reliability. Notably, the Human Capital (HC) construct demonstrates a CR of 0.888 and an AVE of 0.700, supporting its robustness as a measure for employee competencies. The Dynamic Managerial Capability (DMC) construct, with a CR of 0.868 and AVE of 0.756, further supports the model's structural integrity in volatile environments. Organizational Agility (OA) and Organizational Performance (OP) constructs both show high internal consistency, with CR values exceeding 0.90. These results collectively affirm the model's validity, internal reliability, and the accurate operationalization of strategic constructs critical to SME resilience.

Table 4. Validity and reliability test results

Variables		Factor loading	AVE > 0,5	Q-square > 0	Composite reliability > 0.7	Cronbach's alpha > 0.7
Human capital	Hc1	0.797	0.700		0.888	0.855
	Hc2	0.746				
	Hc3	0.712				
	Hc4	0.782				
	Hc5	0.799				
	Hc6	0.774				
	Hc7	0.796				
	Hc8	0.727				
Dynamic managerial capability	Dmc1	0.704	0.756		0.868	0.825
	Dmc2	0.760				
	Dmc3	0.739				
	Dmc4	0.776				
	Dmc5	0.727				
	Dmc6	0.700				
	Dmc7	0.770				
	Dmc8	0.779				
Organizational agility	Oa1	0.780	0.734	0.907	0.856	0.806
	Oa2	0.721				
	Oa3	0.709				
	Oa4	0.766				
	Oa5	0.720				
	Oa6	0.791				
	Oa7	0.759				
	Oa8	0.740				
Organizational performance	Op1	0.745	0.777	0.893	0.877	0.838
	Op2	0.779				
	Op3	0.782				
	Op4	0.722				
	Op5	0.740				
	Op6	0.739				
	Op7	0.784				
	Op8	0.775				

Note: *All significant at $p < 0.001$.

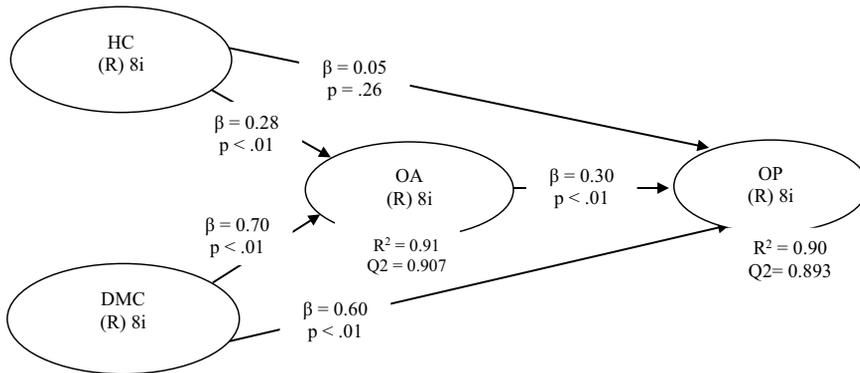


Figure 1. PLS results

Table 5. Path coefficient

Variables	Human capital	Dynamic managerial capability	Organizational agility
Organizational agility	0.282*	0.696*	
Organizational performance	0.053 (p = 0.260)	0.605*	0.304*

Note: *significant at $p < 0.001$.

The path analysis (Figure 1) and (Table 5) reveals that human capital significantly impacts organizational agility ($\beta = 0.282$, $p < 0.001$), indicating that investing in unique employee competencies is crucial for fostering agile behavior. To leverage this, organizations should prioritize initiatives focused on employee skill development, such as tailored training programs that enhance adaptability in the context of Bali's local business environment, where flexibility is key. Dynamic managerial capability has an even stronger influence on organizational agility ($\beta = 0.696$, $p < 0.001$), underlining the need for adaptive leadership in ensuring strategic responsiveness. Managers in Bali can implement routines that emphasize decision-making autonomy and continuous learning to align with the island's fast-paced market dynamics. While human capital's direct impact on performance is non-significant ($\beta = 0.053$, $p = 0.260$), dynamic managerial capability plays a pivotal role in driving competitive performance ($\beta = 0.605$, $p < 0.001$), especially in navigating Bali's volatile tourism sector. Thus, agility must be embedded into performance KPIs, ensuring that businesses can swiftly adapt to changing market conditions. Additionally, organizational agility significantly influences performance ($\beta = 0.304$, $p < 0.001$), suggesting that enhancing agility routines should be a primary objective to strengthen SME resilience and market responsiveness in Bali's unique operational landscape.

The mediation analysis based on Hair et al. (2017) in Table 6 reveals that organizational agility partially mediates the effect of human capital on organizational performance (VAF = 0.618). Indirect effects were estimated using bootstrap confidence intervals, confirming the mediating role of organizational agility, despite the non-significant direct path from human capital to organizational performance ($\beta = 0.05$, $p = 0.26$). Similarly, dynamic managerial

Table 6. Mediation analysis

No VAF	Variable relationship	P → D without M	P → M	M → D	P → D with M	VAF value	Result
1	Human capital → Organizational agility → Organizational performance	0.053 (p = 0.260)	0.282*	0.304*	0.086	0.618	partially mediate
2	Dynamic managerial capability → Organizational agility → Organizational performance	0.605*	0.696*	0.304*	0.212	0.259	partially mediate

Notes: P: predictor, D: dependent, M: mediator variable; * means $p < 0.001$.

capability partially mediates the effect on performance through organizational agility (VAF = 0.259), with significant indirect effects, demonstrating the vital role of adaptive leadership. To prevent overfitting and ensure generalizability, we employed PLS-predict for out-of-sample testing, confirming the robustness of the model and the absence of overfitting in the results. These findings underscore the need for SMEs to strengthen both human capital and dynamic managerial capabilities to improve organizational agility and sustain high performance in volatile markets.

5. Discussions

5.1. The impact of human capital on organizational agility and organizational performance

Human capital significantly impacts organizational agility in Bali's SMEs, emphasizing that unique skills and competencies foster responsive organizational structures (Andersén, 2021). The role of human capital in enhancing agility aligns with broader findings that emphasize its pivotal function in building dynamic capabilities for SMEs in volatile markets (Teng et al., 2022). SME success depends on workforce adaptability, and in the Bali context, a predominantly experienced but moderately educated workforce suggests immediate intervention in human resource training to reinforce agility (Zhang et al., 2022). Strategic enhancement of human capital is thus urgent to support flexibility and innovation capacities (Kusumawijaya & Astuti, 2023; Zhang et al., 2021). Developing employee skills that are scarce and difficult to imitate will directly contribute to SME resilience amid external pressures (Nor-Aishah et al., 2020).

The non-significant direct effect of human capital on performance underscores its latent value, which becomes strategically activated through organizational agility. This supports the mediating role of agility, wherein human capital – though rich in potential – requires agile structures to translate into measurable outcomes. The significant influence of human capital on agility confirms that employee capabilities are essential drivers of adaptive responsiveness, which in turn significantly boosts performance. Thus, agility emerges as the

critical conduit linking human capital to organizational success (Doghan et al., 2022). Despite high mean scores in human capital, the non-significant path suggests that skill possession alone does not guarantee superior performance outcomes without appropriate structural and strategic interventions (Idris et al., 2023). Prior studies highlight that innovation and organizational learning are crucial pathways by which human capital translates into performance (Kusumawijaya & Astuti, 2024; McDermott et al., 2022). Bali SMEs' human capital must be operationalized through entrepreneurial orientation and agility to realize tangible organizational performance improvements (Gercans, 2021). Therefore, urgent capability-building initiatives that focus on agility and strategic execution are critical to unleashing the latent potential of human capital in achieving sustainable performance (Petráková et al., 2023).

5.2. The impact of dynamic managerial capability on organizational agility and organizational performance

Dynamic managerial capability has a strong positive effect on organizational agility in Bali's SMEs, validating its critical role in fostering rapid responsiveness and adaptability (K. U. Khan et al., 2020). The robust construct measurement emphasizes the reliability of managerial competencies in facilitating agility (Chebbi et al., 2022). These capabilities, grounded in entrepreneurial experiences and relational networks, are essential for SMEs to navigate external uncertainties (John William et al., 2024). In the dynamic environment of Bali's SMEs, fostering dynamic managerial capability is urgently needed to bolster agile responses to market shifts and sustain strategic alignment (Sebuwufu & Timilsina, 2024). Strengthening managerial learning and international experience enhances the capability to reconfigure resources swiftly, thus driving organizational agility (Matarazzo et al., 2021).

Dynamic managerial capability significantly influences organizational performance, highlighting its critical contribution to achieving superior outcomes for Bali SMEs (K. U. Khan et al., 2020). This finding aligns with the need to develop entrepreneurial, relational, and strategic competencies to navigate competitive environments effectively (Chebbi et al., 2022). Strong managerial capabilities directly bolster SMEs' strategic decision-making and adaptability, reinforcing competitiveness (John William et al., 2024). Bali SMEs, operating in tourism-driven and fluctuating markets, require urgent development programs to enhance managers' dynamic capabilities (Sebuwufu & Timilsina, 2024). Investing in such capabilities enhances resource orchestration, agility, and innovation – ultimately strengthening organizational performance (Matarazzo et al., 2021).

5.3. The impact of organizational agility on organizational performance

Organizational agility exerts a significant and positive effect on organizational performance among Bali SMEs, affirming that responsiveness and flexibility are key performance drivers (Khalil et al., 2023). Agile organizations in Bali are better equipped to adapt to market changes, meet customer demands, and leverage opportunities for growth (Ahmed et al., 2022). The strong construct reliability further strengthens the strategic importance of agility for SMEs (Gao et al., 2020). In highly volatile sectors like tourism, cultivating agility is an urgent necessity for maintaining competitiveness and achieving sustainable performance

(Mrugalska & Ahmed, 2021). Strategic investments in process improvement, technological adoption, and cross-unit collaboration are essential to reinforce agility and thus enhance performance (Mukherjee et al., 2024).

5.4. The mediation of organizational agility on the impact of human capital and dynamic managerial capability on organizational performance

Organizational agility partially mediates the relationship between human capital and organizational performance, indicating that agility transforms human capital into measurable performance outcomes for Bali SMEs (Masyhuri et al., 2024). While the direct effects of human capital are evidenced to be limited, agility enhances the strategic value of human competencies in achieving firm objectives (Andersén, 2021). This finding underscores the necessity of integrating human resource development with agility-building initiatives to maximize performance impact (Alrowwad et al., 2020). SMEs should prioritize agility-enhancing practices such as rapid decision-making, customer-centric responsiveness, and flexible process reengineering to fully leverage their human capital (Rezaei et al., 2021).

Organizational agility also partially mediates the influence of dynamic managerial capability on organizational performance, highlighting agility as a significant conduit for translating leadership capabilities into performance gains within Bali SMEs (Freixanet & Renart, 2020). The strong direct effect of dynamic managerial capability combined with partial mediation suggests that while leadership adaptability contributes to performance, its full potential is realized through organizational flexibility (Al-Tit et al., 2022). Strengthening agility mechanisms – particularly regarding customer service speed, flexibility in service offerings, and inter-unit collaboration – is essential for leveraging dynamic leadership strengths (Sebuwufu & Timilsina, 2024). SMEs must institutionalize agile mindsets to maximize the returns on managerial dynamism (Kryscynski et al., 2020).

6. Conclusions

This study confirms that while human capital enhances organizational agility, it does not directly impact performance; in contrast, dynamic managerial capability significantly influences both agility and performance. Organizational agility emerges as a pivotal mediator, translating internal capabilities into strategic outcomes for Bali's SMEs. Practically, SME leaders should invest in capability-building programs focused on agility, leadership development, and adaptive resource management. Policymakers are encouraged to promote dynamic capability cultivation and organizational learning frameworks. Theoretically, the study reinforces and extends the resource-based view and dynamic capability theory by positioning agility as a key mediating strategic capability.

This research is limited by its geographic focus on Bali, cross-sectional design, and reliance on self-reported data. It does not account for external environmental variables or moderating factors such as firm size or sector. Future research should address these limitations to deepen understanding of how internal and contextual dynamics shape agility and performance in SMEs. Future research could explore culturally grounded agility-enhancing strategies tailored

to Bali's SME ecosystem, particularly by incorporating local wisdom (*Tri Hita Karana*), community-based leadership, and tourism-driven innovation. Longitudinal and cross-regional studies remain essential, yet culturally embedded interventions – such as training rooted in Balinese communal values – may reveal deeper mechanisms of capability development. Sector-specific inquiries, especially in creative and tourism industries, could further contextualize agility's role. Integrating digital agility within Bali's unique socio-cultural fabric would also advance understanding of how strategic capabilities translate into performance amid local complexity.

Acknowledgements

We sincerely appreciate the constructive feedback from the editor and anonymous reviewers, which greatly improved this manuscript, as well as the valuable contributions and cooperation of the authors involved.

Funding

This research was conducted with the generous financial support from the Directorate of Research and Community Service; Directorate General of Research and Development; Ministry of higher Education, Science, and Technology of Indonesia, under the Master Contract dated 28 May 2025, Master Contract Number: 129/C3/DT.05.00/PL/2025, and the Derivative Contract dated 05 June 2025, Derivative Contract Number: 2166/LL8/AL.04/2025, 032/KP-LP3M/UNTRIM/VI/2025.

Author contributions

IKK and PDA were responsible for conceptualization, investigation, validation, writing – original draft preparation, writing – review and editing. IMHW was responsible for: methodology, formal analysis, resources, supervision. IKYA was responsible for software, resources, project administration. All authors have read and agreed to the published version of the manuscript.

Disclosure statement

The authors have no conflict of interest or competing financial, professional, or personal interests from other parties.

References

- Abbas, J., Raza, S., Nurunnabi, M., Minai, M. S., & Bano, S. (2019). The impact of entrepreneurial business networks on firms' performance through a mediating role of dynamic capabilities. *Sustainability*, 11(11), Article 3006. <https://doi.org/10.3390/su11113006>
- Agostini, L., & Nosella, A. (2023). Intellectual capital and resilience: Evidence from two cases of SMEs. *Knowledge Management Research and Practice*, 21(5), 929–942. <https://doi.org/10.1080/14778238.2022.2103047>
- Ahmed, A., Bhatti, S. H., Gölgeci, I., & Arslan, A. (2022). Digital platform capability and organizational agility of emerging market manufacturing SMEs: The mediating role of intellectual capital and the

- moderating role of environmental dynamism. *Technological Forecasting and Social Change*, 177, Article 121513. <https://doi.org/10.1016/j.techfore.2022.121513>
- Al-Tit, A. A., Al-Ayed, S. I., Alhammadi, A., Hunitie, M., Al-Sarayreh, A., & Albassam, W. (2022). The impact of employee development practices on human capital and social capital: The mediating contribution of knowledge management. *Journal of Open Innovation Technology Market and Complexity*, 8(4), Article 218. <https://doi.org/10.3390/joitmc8040218>
- AlHammedi, A., & Abu Elanain, H. M. (2024). Enhancing organizational citizenship behavior in a non-western context of the UAE: The role of organizational justice, leadership and psychological empowerment. *Journal of Asia Business Studies*, 18(3), 666–687. <https://doi.org/10.1108/JABS-08-2023-0310>
- Alrowwad, A., Abualoush, S. H., & Masa'deh, R. (2020). Innovation and intellectual capital as intermediary variables among transformational leadership, transactional leadership, and organizational performance. *Journal of Management Development*, 39(2), 196–222. <https://doi.org/10.1108/JMD-02-2019-0062>
- Amoa-Gyarteng, K., & Dhliwayo, S. (2024). Cultivating success: organizational culture's influence on innovation and performance in SMEs. *Cogent Business and Management*, 11(1), Article 2397070. <https://doi.org/10.1080/23311975.2024.2397070>
- Andersén, J. (2021). Resource orchestration of firm-specific human capital and firm performance – the role of collaborative human resource management and entrepreneurial orientation. *International Journal of Human Resource Management*, 32(10), 2091–2123. <https://doi.org/10.1080/09585192.2019.1579250>
- Astuti, P. D., Chariri, A., & Rohman, A. (2021). Tri hita karana's philosophy and intellectual capital: Evidence from the hotel industry in Indonesia. *Montenegrin Journal of Economics*, 17(3), 169–180. <https://doi.org/10.14254/1800-5845/2021.17-3.14>
- Au, A. (2024). How do different forms of digitalization affect income inequality? *Technological and Economic Development of Economy*, 30(3), 667–687. <https://doi.org/10.3846/tede.2024.20562>
- Ben Ghrbeia, S., & Alzubi, A. (2024). Building micro-foundations for digital transformation: A moderated mediation model of the interplay between digital literacy and digital transformation. *Sustainability*, 16(9), Article 3749. <https://doi.org/10.3390/su16093749>
- Cai, X., Gura, D., & Kurilova, A. (2021). Stakeholders' impact on the leadership potential of small and medium-sized construction enterprises. *Engineering Construction & Architectural Management*, 29(8), 2999–3022. <https://doi.org/10.1108/ECAM-04-2021-0290>
- Chebbi, H., Selma, M. B., Bouzinab, K., Papadopoulos, A., Labouze, A., & Desmarteau, R. H. (2022). Accelerated internationalization of SMEs and microfoundations of dynamic capabilities: Towards an integrated conceptual framework. *Review of International Business and Strategy*, 33(1), 35–54. <https://doi.org/10.1108/RIBS-12-2021-0174>
- Clauß, T., Abebe, M., Tangpong, C., & Hock, M. (2021). Strategic agility, business model innovation, and firm performance: An empirical investigation. *IEEE Transactions on Engineering Management*, 68(3), 767–784. <https://doi.org/10.1109/TEM.2019.2910381>
- De la cruz Maldonado, J. C., Abrego-Almazán, D., & Medina-Quintero, J. M. (2022). Effects of IT and organizational capabilities on the SMES performance. *Contaduría y Administración – Accounting and Administration*, 67(2), 187–211. <https://doi.org/10.22201/fca.24488410e.2022.3168>
- Doghan, M. A. A., Abdelwahed, N. A. A., Soomro, B. A., & Alayis, M. M. H. (2022). Organizational environmental culture, environmental sustainability and performance: The mediating role of green HRM and green innovation. *Sustainability*, 14(12), Article 7510. <https://doi.org/10.3390/su14127510>
- Freixanet, J., & Renart, G. (2020). A capabilities perspective on the joint effects of internationalization time, speed, geographic scope and managers' competencies on SME survival. *Journal of World Business*, 55(6), Article 101110. <https://doi.org/10.1016/j.jwb.2020.101110>
- Gao, P., Zhang, J., Gong, Y., & Li, H. (2020). Effects of technical IT capabilities on organizational agility. *Industrial Management & Data Systems*, 120(5), 941–961. <https://doi.org/10.1108/IMDS-08-2019-0433>
- Gercans, J. (2021). In search of high-performance workplace factors among SMEs. *Journal of Business Management*, 19, 20–38.
- Gonçalves, D., Bergquist, M., Bunk, R., & Alänge, S. (2020). Cultural aspects of organizational agility affecting digital innovation. *Journal of Entrepreneurship Management and Innovation*, 16(4), 13–46. <https://doi.org/10.7341/20201641>

- Gong, C., & Ribi re, V. (2023). Understanding the role of organizational agility in the context of digital transformation: An integrative literature review. *VINE Journal of Information and Knowledge Management Systems*, 55(2), 351–378. <https://doi.org/10.1108/VJKMS-09-2022-0312>
- Hair, J. F. J., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Sage.
- Ibidunni, A. S., Kolawole, A. I., Olokundun, A. M., & Ogbari, M. E. (2020). Knowledge transfer and innovation performance of small and medium enterprises (SMEs): An informal economy analysis. *Heliyon*, 6(8), Article e04740. <https://doi.org/10.1016/j.heliyon.2020.e04740>
- Idris, B., Saridakis, G., Georgellis, Y., Lai, Y., & Johnstone, S. (2023). Exporting is a team sport: The link between management training and performance in SMEs. *International Journal of Manpower*, 45(5), 1019–1036. <https://doi.org/10.1108/IJM-03-2023-0150>
- John William, A., Suresh, M., & Subramanian, N. (2024). Examining the causal relationships among factors influencing SMEs' competitive advantage: A TISM-neutrosophic MICMAC approach. *Benchmarking*, 31(9), 2919–2959. <https://doi.org/10.1108/BIJ-08-2022-0529>
- Khalil, M. L., Aziz, N. A., Ariffin, A. A. M., & Ngah, A. H. (2023). Big data analytics capability and firm performance in the hotel industry: The mediating role of organizational agility. *WSEAS Transactions on Business and Economics*, 20, 440–453. <https://doi.org/10.37394/23207.2023.20.40>
- Khan, K. U., Atlas, F., Ghani, U., Akhtar, S., & Khan, F. (2020). Impact of intangible resources (dominant logic) on SMEs innovation performance, the mediating role of dynamic managerial capabilities: Evidence From China. *European Journal of Innovation Management*, 24(5), 1679–1699. <https://doi.org/10.1108/EJIM-07-2020-0276>
- Khan, M. A., Ismail, F. B., Hussain, A., & Alghazali, B. (2020). The interplay of leadership styles, innovative work behavior, organizational culture, and organizational citizenship behavior. *SAGE Open*, 10(1). <https://doi.org/10.1177/2158244019898264>
- Ko, A., Mitev, A., Kov acs, T., Feh r, P., & Szab , Z. (2022). Digital agility, digital competitiveness, and innovative performance of SMEs. *Journal of Competitiveness*, 14(4), 78–96. <https://doi.org/10.7441/joc.2022.04.05>
- Kock, N. (2020). *WarpPLS user manual: Version 7.0*. ScriptWarp Systems.
- Kryscynski, D., Coff, R., & Campbell, B. A. (2020). Charting a path between firm-specific incentives and human capital-based competitive advantage. *Strategic Management Journal*, 42(2), 386–412. <https://doi.org/10.1002/smj.3226>
- Kusumawijaya, I. K., & Astuti, P. D. (2023). The effect of human capital on innovation: The mediation role of knowledge creation and knowledge sharing in small companies. *Knowledge and Performance Management*, 7(1), 64–75. [https://doi.org/10.21511/kpm.07\(1\).2023.05](https://doi.org/10.21511/kpm.07(1).2023.05)
- Kusumawijaya, I. K., & Astuti, P. D. (2024). The impact of human capital and knowledge creation on sustaining competitive advantage and innovation in medium-sized companies in Bali. *International Journal of Sustainable Development and Planning*, 19(6), 2193–2204. <https://doi.org/10.18280/ijstdp.190619>
- Ludviga, I., & Kalvina, A. (2024). Organizational agility during crisis: Do employees' perceptions of public sector organizations' strategic agility foster employees' work engagement and well-being? *Employee Responsibilities and Rights Journal*, 36(2), 209–229. <https://doi.org/10.1007/s10672-023-09442-9>
- Masyhuri, Sudiro, A., Prabandari, S. P., & Kurniawati, D. T. (2024). The effect of human capital on organizational performance in the service industry 4.0: Mediation analysis from Indonesia. *Problems and Perspectives in Management*, 22(1), 418–431. [https://doi.org/10.21511/ppm.22\(1\).2024.34](https://doi.org/10.21511/ppm.22(1).2024.34)
- Matarazzo, M., Penco, L., Profumo, G., & Quaglia, R. (2021). Digital transformation and customer value creation in Made in Italy SMEs: A dynamic capabilities perspective. *Journal of Business Research*, 123, 642–656. <https://doi.org/10.1016/j.jbusres.2020.10.033>
- McDermott, O., Antony, J., Bhat, S., Jayaraman, R., Rosa, A., Marolla, G., & Parida, R. (2022). Lean Six Sigma in healthcare: A systematic literature review on challenges, organisational readiness and critical success factors. *Processes*, 10(10), Article 1945. <https://doi.org/10.3390/pr10101945>
- Momeni, B., Martinsuo, M., & H rk l , J. (2024). Small and medium-sized manufacturers' ways of involving suppliers in digitally-enabled services. *Journal of Manufacturing Technology Management*, 36(9), 45–68. <https://doi.org/10.1108/JMTM-01-2024-0025>

- Mostafiz, M. I., Sambasivan, M., & Goh, S. K. (2019). Impacts of dynamic managerial capability and international opportunity identification on firm performance. *Multinational Business Review*, 27(4), 339–363. <https://doi.org/10.1108/MBR-09-2018-0061>
- Mrugalska, B., & Ahmed, J. (2021). Organizational agility in industry 4.0: A systematic literature review. *Sustainability*, 13(15), Article 8272. <https://doi.org/10.3390/su13158272>
- Mukherjee, S., Baral, M. M., Chittipaka, V., Nagariya, R., & Patel, B. S. (2024). Achieving organizational performance by integrating industrial Internet of things in the SMEs: A developing country perspective. *The TQM Journal*, 36(1), 265–287. <https://doi.org/10.1108/TQM-07-2022-0221> (Retraction published 2025, *The TQM Journal*, 37(1), 288)
- Ndofirepi, T. M. (2024). Examining the influence of entrepreneurial skills, human capital, and home country institutions on firm internationalization. *Global Business and Organizational Excellence*, 43(5), 67–80. <https://doi.org/10.1002/joe.22251>
- Nor-Aishah, H., Ahmad, N. H., & Thurasamy, R. (2020). Entrepreneurial leadership and sustainable performance of manufacturing SMEs in Malaysia: The contingent role of entrepreneurial bricolage. *Sustainability*, 12(8), Article 3100. <https://doi.org/10.3390/su12083100>
- Petráková, Z., Michalíková, K. F., Štreimikis, J., & Fialová, V. (2023). Evaluation of personnel risk in the SMEs in the V4 countries. *Journal of International Studies*, 16(4), 191–204. <https://doi.org/10.14254/2071-8330.2023/16-4/13>
- Porkodi, S. (2024). The effectiveness of agile leadership in practice: A comprehensive meta-analysis of empirical studies on organizational outcomes. *Journal of Entrepreneurship, Management and Innovation*, 20(2), 117–138. <https://doi.org/10.7341/20242026>
- Rawashdeh, A., Abdallah, A. B., Al-Fawaer, M., Dweiri, M., & Al-Jaghbeer, F. (2024). The impact of strategic agility on environmental sustainability: The mediating role of digital Transformation. *Sustainability*, 16(3), Article 1338. <https://doi.org/10.3390/su16031338>
- Rezaei, F., Khalilzadeh, M., & Soleimani, P. (2021). Factors affecting knowledge management and its effect on organizational performance: Mediating the role of human capital. *Advances in Human-Computer Interaction*, 2021, Article 8857572. <https://doi.org/10.1155/2021/8857572>
- Rupeika-Apoga, R., Petrovska, K., & Bule, L. (2022). The effect of digital orientation and digital capability on digital transformation of SMEs during the COVID-19 pandemic. *Journal of Theoretical and Applied Electronic Commerce Research*, 17(2), 669–685. <https://doi.org/10.3390/jtaer17020035>
- Sebuwufu, J. A., & Timilsina, B. (2024). SME operational bid through adversity and turbulent economic environment: Resilience through dynamic capabilities. *International Journal of Innovation and Learning*, 36(1), 53–71. <https://doi.org/10.1504/IJIL.2024.139690>
- Shaik, A. S., Jain, M., Mendiratta, A., Alarifi, G., & Arrigo, E. (2024). Role of strategic knowledge management practices in enhancing strategic perspectives of an organisation to improve entrepreneurial performance. *Journal of Knowledge Management*, 28(6), 1648–1675. <https://doi.org/10.1108/JKM-04-2023-0300>
- Sharifi, H., & Zhang, Z. (2001). Agile manufacturing in practice – Application of a methodology. *International Journal of Operations and Production Management*, 21(5–6), 772–779. <https://doi.org/10.1108/01443570110390462>
- Bali, Province, Small & Medium Enterprise Cooperative Service (2025, February 29). *Data on Bali's SME Performance in 2025*. <https://diskopukm.baliprov.go.id>
- Stawicka, E. (2021). Sustainable development in the digital age of entrepreneurship. *Sustainability*, 13(8), Article 4429. <https://doi.org/10.3390/su13084429>
- Teng, X., Wu, Z., & Yang, F. (2022). Research on the relationship between digital transformation and performance of SMEs. *Sustainability*, 14(10), Article 6012. <https://doi.org/10.3390/su14106012>
- Timothy, V. L. (2022). The effect of top managers' human capital on SME productivity: The mediating role of innovation. *Heliyon*, 8(4), Article e09330. <https://doi.org/10.1016/j.heliyon.2022.e09330>
- Wang, X., & Na-Nan, K. (2024). The influence of competitive strategic management on the performance of Chinese small and medium-sized enterprises. *Journal of Modern Project Management*, 12(1), 69–81.
- White, C., Baimel, A., & Norenzayan, A. (2021). How cultural learning and cognitive biases shape religious beliefs. *Current Opinion in Psychology*, 40, 34–39. <https://doi.org/10.1016/j.copsyc.2020.07.033>

- Wilson, C. D., Balasundaram, S., & Mathew, J. (2024). A conceptual framework for agile as HR operational strategy. *Prabandhan: Indian Journal of Management*, 17(8), 23–39. <https://doi.org/10.17010/pijom/2024/v17i8/173774>
- Xie, C., Xu, X., Gong, Y., & Xiong, J. (2022). Big data analytics capability and business alignment for organizational agility. *Journal of Global Information Management*, 30(1), 1–27. <https://doi.org/10.4018/JGIM.302915>
- Zahoor, N., Khan, H., Donbesuur, F., Khan, Z., & Rajwani, T. (2023). Grand challenges and emerging market small and medium enterprises: The role of strategic agility and gender diversity. *Journal of Product Innovation Management*, 41(2), 473–500. <https://doi.org/10.1111/jpim.12661>
- Zhang, K., Liu, H., Li, Y., & Wu, X. (2024). Effects of social media usage on exploratory innovation, exploitative innovation and organizational agility: The moderating role of learning goal orientation. *Internet Research*, 34(2), 398–425. <https://doi.org/10.1108/INTR-07-2021-0503>
- Zhang, X., Xu, Y., & Ma, L. (2022). Research on successful factors and influencing mechanism of the digital transformation in SMEs. *Sustainability*, 14(5), Article 2549. <https://doi.org/10.3390/su14052549>
- Zhang, Z., Scott, J. T., Parnell, J. A., & Osborne, M. C. (2023). Does management experience matter? An empirical investigation on the effects of management experience on SME firm growth in transition economies. *Journal for International Business and Entrepreneurship Development*, 15(3), 391–413. <https://doi.org/10.1504/JIBED.2023.136757>
- Zhang, Z., Yousaf, Z., Rădulescu, M., & Yasir, M. (2021). Nexus of digital organizational culture, capabilities, organizational readiness, and innovation: Investigation of SMEs operating in the digital economy. *Sustainability*, 13(2), Article 720. <https://doi.org/10.3390/su13020720>
- Zhao, L., Harvie, C., Arjomandi, A., & Suardi, S. (2022). Entrepreneurs and China's private sector SMEs' performance. *Applied Economics*, 54(28), 3279–3295. <https://doi.org/10.1080/00036846.2021.2006135>