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Connecting the Dots: How Business Model Innovation Bridges Innovation Capability and MSMEs' Performance?

Baziedy Aditya Darmawan[1*]
[1]Universitas Islam Indonesia, Indonesia

*Corresponding Author: baziedy@uii.ac.id

ABSTRACT

Micro, small, and medium enterprises (MSMEs) significantly underpin Indonesia's economy, yet sustaining their business performance remains a critical challenge. While extensive literature emphasizes the strategic role of innovation capability in enhancing SMEs' performance, many studies have concentrated on narrow, industry-specific contexts, limiting their generalizability. Moreover, the mechanisms through which innovation capability translates into tangible performance gains remain insufficiently explored, particularly the mediating role of business model innovation. Addressing this gap, this study explores the relationships among innovation capability, business model innovation, and MSMEs' performance. Structured questionnaires were disseminated among MSME owners and managers engaged in business model innovation. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). Findings reveal that innovation capability significantly improves MSMEs' performance, with business model innovation acting as a crucial pathway in this relationship. Theoretically, the current study enriches the dynamic capabilities framework by clarifying how business model innovation serves as a mediating mechanism in the innovation–performance relationship. Practically, the insights offer MSME owners and managers actionable strategies to leverage innovation capability and business model innovation to sustain growth in dynamic markets. In light of prior studies, this study is among the first empirical studies exploring the mediating role of business model innovation in the link between innovation capability and performance within MSMEs context. This contribution also resonates with Sustainable Development Goals (SDGs), which emphasizes fostering inclusive and sustainable SME growth in emerging economies.

Keywords: Innovation capability; Business model innovation; Business performance; Micro, small, and medium enterprises; Dynamic capabilities

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INTRODUCTION

The World Bank highlights the critical role that small and medium-sized enterprises (SMEs) play in driving economic growth, particularly within developing economies (World Bank, 2019). In Indonesia, the Coordinating Ministry for Economic Affairs reported that micro, small, and medium enterprises (MSMEs) contribute over 60% to the national Gross Domestic Product (GDP) and absorb nearly 97% of the

total workforce (Limanseto, 2025). These figures strongly signal the government's expectations for MSMEs to serve as a key driver in achieving national economic growth targets. However, despite their considerable contribution, MSMEs in Indonesia are currently facing mounting challenges in maintaining their performance. According to the Ministry of Cooperatives and Small and Medium Enterprises indicated a decline in MSMEs' business performance (Hamidah et al., 2024), a trend further confirmed by the BRI Micro & SME Index (BMSI), which reported a decrease from 109 to 102 in the final quarter of 2024 (CNN Indonesia, 2024). This downturn was characterized by declines in turnover, sales volume, workforce utilization, and MSMEs' spending behavior (CNN Indonesia, 2024). Notably, turnover reductions among MSMEs ranged between 40% and 60% (Simanjuntak, 2024). Entering early 2025, this sluggish trend persisted, as evidenced by the decelerating growth of MSME credit reported by Bank Indonesia (Octaviano, 2025). Collectively, these conditions underline the growing difficulty MSMEs face in sustaining their business performance.

Extensive literature has consistently underscored the strategic importance of innovation in organizational management, framing it as a critical process for problem-solving (Cohen & Caner, 2016). Within the SME context, innovation capability has emerged as a pivotal factor enabling firms to navigate challenges and improve performance. A robust body of recent empirical studies has further confirmed the significant role of innovation capability in enhancing business performance (Bekata & Kero, 2025; Fahmi et al., 2025; Muchtar et al., 2024; Nuryakin, 2024; Otache, 2024; Quintero Sepúlveda & Zúñiga Collazos, 2025).

Nevertheless, there remain critical gaps of previous study in investigating the relationship between innovation capability and business performance. Firstly, many prior studies were conducted within narrow industry-specific contexts, such as food production (Fahmi et al., 2025; Kamalrulzaman et al., 2021), creative industries (Muchtar et al., 2024), information and communication technology sector (Siahaan & Tan, 2020), batik (Rumanti et al., 2022), agriculture (Kamalrulzaman et al., 2021), textiles (Arshad et al., 2023), and micro-handicraft firms (Shafi, 2021). While insightful, findings from such sector-specific studies often suffer from limited generalizability (Stremersch et al., 2023), as operational practices, resource utilization, and market dynamics can differ significantly across industries. In addition, several prior studies focusing on the innovation capability-performance link have been constrained by context-specific limitations. For instance, Otache & Usang (2022) explored this relationship during periods of economic crisis, while (Quintero Sepúlveda & Zúñiga Collazos, 2025) restricted their analysis solely to financial performance indicators. Additionally, other studies, entered primarily on export-oriented SMEs (Nuryakin, 2024; Alegre et al., 2022; Kolbe et al., 2022). Although these studies are meaningful to specific context, yet limiting the broader applicability of their findings.

More critically, despite their contributions, many prior studies have not sufficiently elucidated the underlying mechanisms by which innovation capability influences SMEs' performance. Even recent studies have often overlooked this aspect (Bekata & Kero, 2025; Quintero Sepúlveda & Zúñiga Collazos, 2025; Borah et al., 2022; Kamalrulzaman et al., 2021; Le et al., 2020; Nuryakin, 2024; Rumanti et al., 2022; Sari et al., 2023; Bahta et al., 2021). As a result, the causal pathways linking innovation capability to organizational performance remain insufficiently understood (Otache, 2024). Nonetheless, emerging studies has begun to uncover potential mediators in this relationship. Jalil et al. (2022) identified technology adoption as a key mechanism explaining how innovation capability drives performance improvement. Similarly, Otache (2024) provided empirical evidence that competitive advantage acts as an important mediator linking innovation capability to enhanced business outcomes. These previous findings have clearly and explicitly provided a theoretical insight that the relationship between innovation capability and business performance is not solely direct, but also operates indirectly through the presence of a mediating mechanism (Otache, 2024; Jalil et al., 2022).

With respect to the pathways linking innovation capability to business performance, this study argues that business model innovation merits greater scholarly attention as a promising mediating mechanism. This is relevant, since business model innovation, empowers firms to reconfigure processes,

redesign structures, and achieve cost efficiencies, enhanced value creation, and sustained performance growth (Balboni et al., 2019). In line with this, SMEs can leverage business model innovation to adapt their strategies and business models to better respond to market opportunities and improve value creation (Aspara et al., 2010). Moreover, a recent study by Bashir (2023) has demonstrated the mediating role of business model innovation between strategic flexibility and SMEs' performance. Given that both strategic flexibility and innovation capability are considered dimensions of dynamic capabilities (Otache, 2024), it is reasonable to expect that business model innovation may similarly mediate the relationship between innovation capability and performance.

However, although a substantial body of studies has consistently confirmed the significance of innovation capability in driving SMEs' performance, the explanatory mechanism through which innovation capability translates into performance outcomes, particularly through business model innovation, has been largely underexplored. Given this notable gap, and supported by existing literature, indicating that business model innovation is a promising mechanism in this relationship (Bashir, 2023; Otache, 2024; Aspara et al., 2010; Balboni et al., 2019), the present study aims to empirically explore the mediating role of business model innovation in the link between innovation capability and business performance in the context of MSMEs in emerging countries.

By doing so, the current study contributes both theoretically, by clarifying the mediating function of business model innovation within the dynamic capabilities framework, and in terms of practical relevance, by providing evidence relevant to MSMEs operating in emerging economies, particularly in Indonesia, where the challenges of sustaining business performance are pronounced (CNN Indonesia, 2024; Hamidah et al., 2024; Octaviano, 2025; Simanjuntak, 2024). In such a turbulent environment, business model innovation is expected to act as a vehicle through which innovation capability translates into superior and sustainable performance. Furthermore, by focusing on Indonesian MSMEs struggling to sustain performance, this present study provides contextual evidence aligned with one of SDGs targets, namely, to promote inclusive entrepreneurship, innovation, and MSMEs' growth (Sobir, 2020). Hence, grounded in the identified research problem and gap, this study aims to fill this void by empirically explores the proposed mediation model in the relationship between innovation capability and business performance among MSMEs in Indonesia. Accordingly, the current study is guided by the following research questions:

RQ1: How do innovation capability and business model innovation influence MSMEs' performance?

RQ2: How does business model innovation mediates the relationship between innovation capability and MSMEs' performance?

LITERATURE REVIEW

Dynamic Capabilities Theory

Dynamic capabilities theory serves as the theoretical underpinning for this study. According to Teece et al. (1997), dynamic capabilities represent the firm's ability to integrate, build, and reconfigure both internal and external competencies, enabling effective responses to rapid environmental changes. Previous literature has recognized innovation capability as a key dimension of higher-order dynamic capabilities that plays a vital role in enhancing organizational performance (Cheng & Chen, 2013; Fainshmidt et al., 2016). Previous literature also consistently highlights innovation capability as pivotal in improving firm performance (Bekata & Kero, 2025; Borah et al., 2022; Le et al., 2020; Sari et al., 2023; Bahta et al., 2021). Such findings indicate that innovation capability is fundamentally tied to dynamic capabilities, empowering firms to achieve enhanced performance outcomes (Otache, 2024). Further, innovation capability is characterized as a dynamic organizational resource capable of driving superior performance even amidst highly volatile business conditions (Otache, 2024).

Additionally, business model innovation also aligns with dynamic capabilities theory, as changes to a firm's business model may result from its dynamic capabilities practices. Bashir et al. (2022) suggest that companies can more effectively align resources, including their business models, with evolving customer needs through dynamic capabilities. Moreover, firms that embrace dynamic capabilities can swiftly and effectively adapt their business models to meet changing market demands (Bashir et al., 2022). Hence, the application of dynamic capabilities theory in this study emphasizes innovation capability as a strategic asset crucial for MSMEs to adapt, compete, and succeed in rapidly evolving market environments. By harnessing innovation as a dynamic capability, MSMEs can sustain and continuously refine their business models, thereby securing robust performance despite market uncertainties.

Innovation Capability and Business Model Innovation

Innovation capability has been explored through various lenses within academic literature. Tajvidi & Karami (2015) define it as a firm's ongoing capacity to enhance resources and capabilities, uncovering opportunities for novel products and processes. Complementing this perspective, Ilmudeen et al. (2021) underscore innovation capability as the firm's proficiency in responding rapidly to market demands and environmental shifts, emphasizing its adaptive qualities. Lawson & Samson (2001) broaden the concept further, depicting innovation capability as an ongoing transformation of knowledge and ideas into tangible products, processes, and systems beneficial to both the firm and its stakeholders. Similarly, Olsson et al. (2010) frame innovation capability as a continuous process of generating innovations in reaction to environmental dynamics. Hogan et al. (2011) adopting a competitive stance, describe it as the firm's ability to effectively utilize collective knowledge, skills, and resources to innovate across products, services, and systems, thereby creating added value. Integrating these diverse viewpoints, this study conceptualizes innovation capability as a firm's sustained effort to transform internal and external knowledge into new or improved products, processes, and systems, facilitating adaptability to environmental changes and generating long-term value for stakeholders.

Business model innovation has garnered significant scholarly and practitioner attention in recent years. Foss & Saebi (2017) describe business model innovation as deliberate, innovative, and substantial modifications to core elements of a business model or the structural relationships connecting these elements. It entails innovations in value creation, delivery, and capture, ultimately enhancing customer attraction and profitability (Teece, 2010). Scholars like Ritter & Lettl (2018) regard business model innovation as the refinement or alteration of any business model dimension, while Gambardella & McGahan (2010) emphasize exploring new avenues in value creation and capture, including supplier and partnership networks. Firms frequently undertake business model innovation to accommodate environmental pressures (Colovic, 2022). Importantly, a shift in one business model dimension typically triggers adjustments across other dimensions (Demil & Lecocq, 2010), reinforcing that alterations to one element can transform the overall business model (Futterer et al., 2018).

Teece (2018) contends that the design and execution of business models are intrinsically shaped by a firm's underlying capabilities. Within this framework, business model innovation is viewed as an output of higher-order dynamic capabilities (Teece, 2018). In the present study, innovation capability is conceptualized as this higher-order dynamic capability, consistent with the assertions of Cheng & Chen (2013) as well as Fainshmidt et al. (2016). Extensive studies underscore innovation capability as a critical organizational resource enabling firms to explore new opportunities and consistently respond to environmental shifts (Tajvidi & Karami, 2015; Ilmudeen et al., 2021; Lawson & Samson, 2001; Olsson et al., 2010; Hogan et al., 2011). Consequently, innovation capability strengthens a firm's proactive response to dynamic market conditions through the transformation of knowledge, skills, and internal processes. Concurrently, business model innovation emerges as a strategic tool through which firms revitalize their approaches to value creation, delivery, and capture in reaction to evolving competitive environments (Foss & Saebi, 2017; Teece, 2010). While external drivers like customer demands (Colovic, 2022) and

technological advancements (Gambardella & McGahan, 2010) have been widely studied, the influence of internal capabilities, particularly innovation capability on business model innovation remains relatively underexplored. Drawing on dynamic capabilities theory (Teece, 2010; Lawson & Samson, 2001), firms possessing robust innovation capabilities should logically be more adept at initiating, designing, and implementing innovative business models. In other words, innovation capability enables the exploration of novel business models (Foss & Saebi, 2017; Teece, 2010). Hence, this study posits:

H_1: *Innovation capability positively influences MSMEs' business model innovation.*

Innovation Capability and Business Performance

Effective performance management is essential for decision-makers, including MSME owners and managers, in order to ensure the sustainable business continuity. Hussaini & Muhammed (2018) define firm performance as a business's capability to survive, grow, and operate profitably and efficiently. Similarly, firm performance reflects the degree to which organizational goals are achieved (Abeysekara et al., 2019). Innovation capability has been argued to enhance firm profitability by reducing costs and increasing revenue streams (Ilmudeen et al., 2021; Shafi, 2021). Within dynamic capabilities theory, this study positions innovation capability as a core dynamic resource enhancing MSMEs' performance, consistent with empirical findings in SME contexts (Bekata & Kero, 2025; Borah et al., 2022; Le et al., 2020; Sari et al., 2023; Bahta et al., 2021). Therefore, this study proposes:

H_2: *Innovation capability positively influences MSMEs' business performance.*

Business Model Innovation and Business Performance

A prior study emphasizes that business model innovation is a catalyst for creating value, gaining competitive advantages, and enhancing overall business performance (Heikkilä et al., 2018). In this context, firms aiming to improve their performance must thus innovate their business models (Bashir et al., 2023). Moreover, Keiningham et al. (2020) assert that firms enhancing their performance strategically focus on business model innovation, including improvements in products, services, or customer value propositions. Furthermore, previous empirical studies consistently demonstrates that business model innovation is significantly enhances firm performance (Bashir, 2023; Bashir et al., 2022, 2023; Foss & Saebi, 2017). Therefore, this study hypothesizes:

H_3: *Business model innovation positively influences MSMEs' business performance.*

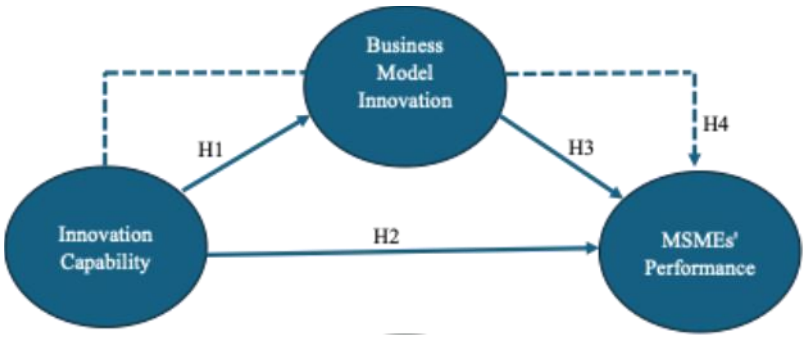

Figure 1. Research Framework

Innovation Capability, Business Model Innovation, and Business Performance

Firms possessing robust innovation capabilities are generally better positioned to initiate transformative changes, including modifications to their business models (Lawson & Samson, 2001; Teece, 2010). Additionally, Foss & Saebi (2017) argue that high levels of innovation capability facilitate substantial redesigns in business model value creation and capture, thereby fueling internal dynamism and driving

business model innovation. However, firms with strong innovation capability may still fail to achieve superior performance if they cannot translate their innovations into market-accepted value propositions (Teece, 2010). Business model innovation thus serves as a crucial reconfiguration mechanism through which innovation capabilities are operationalized into sustainable performance outcomes (Foss & Saebi, 2017). Within the dynamic capabilities perspective, business model innovation acts as a transformational bridge that connects a firm's ability to sense and seize opportunities (enabled by innovation capability) with its capacity to realize superior performance (Foss & Saebi, 2017; Teece, 2007).

Furthermore, recent empirical evidence by Bashir (2023) demonstrates that business model innovation effectively mediates the link between strategic flexibility and SMEs' performance. Considering that both strategic flexibility and innovation capability are theorized as dimensions of dynamic capabilities (Otache, 2024), it is theoretically plausible that business model innovation would similarly mediate the relationship between innovation capability and business performance. As business model innovation helps SMEs align their value propositions with evolving consumer expectations and market opportunities (Latifi et al., 2021), this study proposes the following hypothesis:

H_4: *Business model innovation mediates the relationship between innovation capability and MSMEs' performance.*

METHOD

Sample

A quantitative research design was adopted for this study, employing a survey strategy to gather data and test the proposed hypotheses in line with the study's objectives. The sample of this study involving MSMEs engaged in business model innovation located on the island of Java, Indonesia. A non-probability sampling technique, specifically purposive sampling, was utilized to identify respondents who met defined eligibility criteria and were therefore considered capable of providing relevant and accurate information (Sekaran & Bougie, 2016). The first eligibility criterion required that the participating MSMEs had been in operation for a minimum of five years, thereby ensuring they had sufficient time to develop and implement innovation activities, including business model innovation. The second criterion stipulated that the MSMEs had undertaken innovations in their business models, particularly related to the core business model components such as customer targeting, products or services offered, delivery mechanisms, revenue and cost structures, value creation, activities, resources, and partnerships. Business model innovation in this context was also considered a reflection of the innovation capability of the target respondents. It is important to note that changes in a single dimension of the business model frequently trigger adjustments across other dimensions, reinforcing the notion that modifying one element can transform the entire business model (Futterer et al., 2018; Demil & Lecocq, 2010).

These two eligibility criteria were operationalized through screening questions at the beginning of the questionnaire, asking whether the respondent-managed MSME had been in existence for at least five years and whether it had ever engaged in business model innovation. Any potential respondents who answered "no" to either screening question were automatically excluded from completing the remainder of the survey. This screening procedure was essential to ensure the alignment of the respondent pool with the study's aim of collecting valid and relevant data as suggested by Hair et al. (2022). The determination of the minimum sample size was guided by statistical power considerations relevant to the analytical technique employed, namely Partial Least Squares Structural Equation Modeling (PLS-SEM). Referring to statistical power thresholds ranging from 0.11 to 0.2 at a five percent significance level, the minimum required sample size for this study was established at 155 respondents (Hair et al., 2022).

Initially, a total of 173 respondents participated in completing the research questionnaire. However, eight respondents failed to pass the first screening question because their businesses had been operating for less than five years. For the second screening question, 165 remaining respondents

indicated that they had engaged in business model innovation. From this group of 165, seven respondents were identified as exhibiting suspicious response patterns, specifically straight-lining behavior, where identical responses were provided for every item, as evidenced by a standard deviation of zero. In accordance with the recommendations of Hair et al. (2022), these seven cases were excluded from further analysis, as their responses were judged to lack thoughtful consideration and to reflect low attentiveness (Zhang & Conrad, 2014). Consequently, 158 valid responses were retained for the final analysis. This sample size exceeds the minimum requirement of 155 respondents, as determined by the recommended statistical power criteria for analyses employing the PLS-SEM technique.

Table 1. The Respondents Profile

Characteristics	Categories	Frequencies (N = 158)	Percentage (%)
Positions	Owners	101	63.92
	Managers	57	36.08
Industries	Culinary	68	43.04
	Services	20	12.66
	Fashion	15	9.49
	Retail	11	6.96
	Pharmacy	8	5.06
	Beauty/Cosmetics	7	4.43
	Automotive	5	3.16
	Furniture	4	2.53
	Handcrafts	4	2.53
	Processing	4	2.53
	Farm and Fisheries	4	2.53
	Agribusiness	3	1.90
	Others	5	3.16
Business Age	5-7 years	107	67.72
	8-10 years	29	18.35
	11-15 years	8	5.06
	16-20 years	3	1.90
	> 20 years	11	6.96
Annual Revenues	≤ IDR 300 Million	111	70.25
	> IDR 300 Million-2.5 Billion	41	25.95
	> IDR 2.5 Billion-50 Billion	6	3.80
Number of Employees	< 5 Employees	84	53.16
	5-19 Employees	61	38.61
	20-99 Employees	13	8.23

Table 1 summarizes the characteristics of the 158 respondents participating in this study. Most respondents were business owners (63.92%), with managers accounting for 36.08%. The sample was dominated by culinary enterprises (43.04%), followed by services (12.66%), fashion (9.49%), and retail (6.96%), with other sectors represented in smaller numbers. Regarding business longevity, the majority of MSMEs had operated between five and seven years (67.72%). In terms of revenue, 70.25% reported annual earnings of less than IDR 300 million, while 25.95% earned between IDR 300 million and IDR 2.5 billion, and only 3.80% exceeded IDR 2.5 billion. For workforce size, 53.16% employed fewer than five workers, 38.61% had between 5–19 employees, and 8.23% employed 20–99 workers. In line with Indonesian Law No. 8 of 2008, which classifies MSMEs by annual revenue, 111 respondents were categorized as micro-enterprises, 41 as small enterprises, and 6 as medium enterprises. Applying the classification by the Indonesian Central Bureau of Statistics (BPS) based on number of employees, 84

respondents fell into the micro-enterprise category, 61 represented small enterprises, and 13 qualified as medium enterprises. Taken together, these results indicate that most respondents operate micro-scale businesses in both revenue and employee terms, reflecting the structural profile of MSMEs in Indonesia which dominated by micro enterprises (Haryanti, 2024).

Measurement Items, Data Collection, and Analysis

The measurement instruments applied in this study were adapted from well-established scales validated in prior studies, thereby ensuring both the reliability and validity of the observed constructs. A five-point Likert scale was employed, ranging from one (strongly disagree) to five (strongly agree). Within this framework, innovation capability (IC) was measured through five items adapted from Shafi (2021), whereas business model innovation (BMI) was evaluated using nine items drawn from Spieth & Schneider (2016). Furthermore, business performance (P) was assessed with five items adapted from Abeysekara et al. (2019). An overview of these measurement instruments is presented in Table 2.

Table 2. Overview of Measurement of Instruments

Variables	Item Code	Item Statements
Innovation Capability (Shafi, 2021)	IC1	Regularly experimenting with new ideas
	IC2	Continuously exploring new methods of operation
	IC3	Consistently demonstrating creativity in business practices
	IC4	Able to develop new products or services
	IC5	Frequently pioneering in launching new products to the market
Business Performance (Abeysekara et al., 2019)	P1	Capable of enhancing sales performance
	P2	Capable of increasing market share
	P3	Possessing products/services with a significant market presence
	P4	Able to generate profit from each sale effectively
	P5	Generally capable of achieving the targeted profit goals
Business Model Innovation (Spieth & Schneider, 2016)	BMI1	Targeting new customer segments
	BMI2	Updating the products/services offered
	BMI3	Refining market positioning
	BMI4	Enhancing core competencies and resource allocations
	BMI5	Renewing internal value-creation processes
	BMI6	Adjusting partner roles in the value-creation process
	BMI7	Revising distribution channels
	BMI8	Updating revenue generation mechanisms
	BMI9	Adjusting cost management mechanisms

Data collection was processed by disseminating online questionnaires directly to MSME owners and managers both, through diverse digital platforms, such as social media and e-commerce channels and offline as well as through offline methods by meeting respondents in person. These approaches enabled the study to efficiently and cost-effectively reach a broad spectrum of respondents across different geographic areas. The data collected were then analyzed using the PLS-SEM technique, which included evaluation of both the outer model and the inner model, following the recommendations of Hair et al. (2022). This method was selected to ensure a rigorous assessment of construct validity, measurement reliability, and the hypothesized relationships within the proposed model, including examination of both direct and indirect relationships.

In line with the PLS-SEM approach as recommended by Hair et al. (2022), this study conducted a rigorous evaluation of the measurement model to assess indicator reliability, convergent validity, and internal consistency reliability which shown in the Table 3. Regarding indicator reliability, most outer loadings

exceeded the conventional threshold of 0.7, demonstrating acceptable levels of individual indicator reliability. However, several items, such as IC5 (0.522), P4 (0.652), BMI1 (0.650), BMI6 (0.613), BMI7 (0.679), BMI8 (0.684), and BMI9 (0.651), exhibited outer loadings below 0.7. Despite these lower values, these items were retained for further analysis following Hair et al. (2022), who recommend maintaining items with loadings between 0.4 and 0.7 if the construct's convergent validity meets the minimum AVE threshold of 0.5.

Table 3. Measurement Evaluation

Item	Outer Loadings	AVE	Cronbach's Alpha	Composite Reliability
IC1	0.758			
IC2	0.755			
IC3	0.839	0.535	0.779	0.849
IC4	0.746			
IC5	0.522			
BMI1	0.650			
BMI2	0.733			
BMI3	0.788			
BMI4	0.763			
BMI5	0.808	0.505	0.876	0.901
BMI6	0.613			
BMI7	0.679			
BMI8	0.684			
BMI9	0.651			
P1	0.851			
P2	0.827			
P3	0.800	0.614	0.841	0.849
P4	0.652			
P5	0.774			

Additionally, the convergent validity was confirmed, as the average variance extracted (AVE) for all constructs met or surpassed the 0.5 benchmark (IC: 0.535; BMI: 0.505; P: 0.614), indicating adequate convergence of the indicators within each latent construct. Moreover, the decision to retain all BMI indicators with outer loadings below 0.7 was additionally justified by their strong theoretical significance in representing the domain of business model innovation. As theorized, a business model comprises nine interrelated building blocks, and omitting any of these indicators could compromise the conceptual completeness of the BMI construct. Furthermore, internal consistency reliability was deemed satisfactory for all constructs, with Cronbach's Alpha values above 0.7 (IC: 0.779; BMI: 0.876; P: 0.841) and composite reliability estimates exceeding 0.8 (IC: 0.849; BMI: 0.901; P: 0.849). These results collectively support the robustness of the measurement model and its suitability for proceeding with structural model analysis.

Table 4. The Discriminant Validity: Heterotrait-Monotrait Ratio (HTMT)

	Business Model Innovation	Business Performance	Innovation Capability
Business Model Innovation			
Business Performance	0.715		
Innovation Capability	0.727	0.532	

To establish discriminant validity within the measurement model, this study employed the Heterotrait-Monotrait Ratio of Correlations (HTMT), as recommended by Hair et al. (2022) and Henseler et al. (2015). The results, as summarized in Table 4, demonstrate that all HTMT values fall below the conservative threshold of 0.85, confirming acceptable discriminant validity across the constructs (Hair et al., 2022; Henseler et al., 2015). Specifically, the HTMT between business model innovation and business performance was 0.715, while the HTMT between business model innovation and innovation capability reached 0.727. Additionally, the HTMT value between innovation capability and business performance was observed at 0.532. These findings collectively indicate that each construct captures a unique and conceptually distinct dimension within the proposed model, thereby minimizing concerns regarding multicollinearity or conceptual overlap among latent variables. Taken together, the results of indicator reliability, convergent validity, internal consistency reliability, and discriminant validity, confirm that the measurement model demonstrates adequate levels of reliability and validity, thereby justifying its application for subsequent structural model assessment.

RESULTS

The structural model evaluation in this study encompassed the analysis of path coefficients, t-statistics, p-values, and R^2 values to empirically test the proposed hypotheses, utilizing the PLS-SEM method as recommended by Hair et al. (2022). As shown in Table 5, the path from innovation capability (IC) to business model innovation (BMI) was found to be positive and highly significant ($\beta = 0.614$, $t = 7.259$, $p < 0.001$), thereby supporting H1 and indicating that innovation capability strongly facilitates the development of business model innovation. In contrast, the direct effect of innovation capability on business performance (P) was positive yet statistically insignificant ($\beta = 0.119$, $t = 1.381$, $p = 0.168$), leading to H2 being unsupported. Conversely, the relationship between business model innovation and business performance (H3) was significant ($\beta = 0.546$, $t = 6.632$, $p < 0.001$), confirming that business model innovation positively influences MSME performance.

Table 5. The Results of Hypotheses Testing

Hypotheses	Path Coeff.	t-stats	p-values	Results	R-Square
IC → BMI	0.614*	7.259	0.000	H1 supported	0.376
IC → P	0.119	1.381	0.168	H2 not supported	
BMI → P	0.546*	6.632	0.000	H3 supported	
IC → BMI → P	0.335*	6.546	0.000	H4 supported	0.392

Note: *denote significance level on 1%

Notably, the indirect effect of innovation capability on business performance through business model innovation was statistically significant ($\beta = 0.335$, $t = 6.546$, $p < 0.001$), supporting H4 and indicating that business model innovation fully mediates this relationship. This interpretation aligns with Hair et al. (2022), who argue that a non-significant direct path combined with a significant indirect path is consistent with a full mediation mechanism.

Consequently, this mediation pathway substantially increased the total effect of innovation capability on business performance, from a direct effect of 0.119 (in H2 testing result) to a total mediated effect of 0.454 ($t = 5.194$, $p < 0.001$), highlighting the critical role of business model innovation in translating innovation capabilities into superior MSME performance. The R^2 values for business model innovation (0.376) and business performance (0.392) indicate moderate and acceptable explanatory power within the field of management, consistent with the criteria proposed by Raithel et al. (2012), who suggest that R^2 values exceeding 0.30 are generally considered adequate. Therefore, this finding supports the robustness of the structural model in capturing the key relationships among the study's constructs.

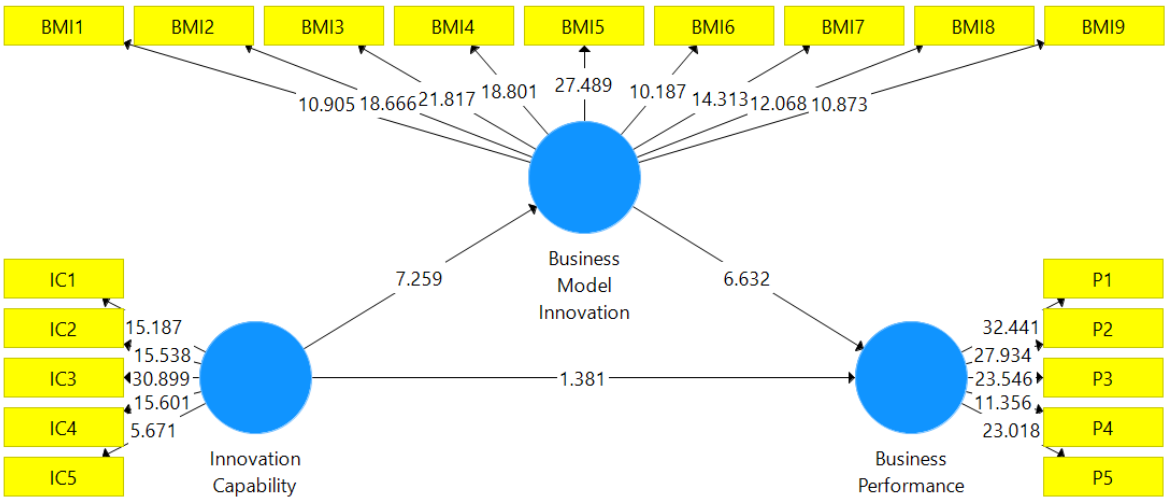

Figure 2. The Path Analysis of Inner Model

DISCUSSION

The present study set out to explore the role of business model innovation in bridging innovation capability and MSMEs' business performance. The results of hypothesis testing revealed that innovation capability significantly influences business model innovation (H1 supported), while its direct effect on business performance was not significant (H2 unsupported). However, business model innovation demonstrated a strong and positive association with business performance (H3 supported), and significantly mediated the relationship between innovation capability and performance (H4 supported). This mediation is best described as a full mediation, as indicated by Hair et al. (2022), since the direct path (H2) was not significant while the indirect path (H4) was. Through this mediation mechanism, the total effect of innovation capability on business performance substantially increased from 0.119 (direct) to 0.454 (indirect), further underscoring the central role of business model innovation as a transformative pathway within the MSME context.

These findings reinforce the conclusions of previous studies emphasizing innovation as a key enabler of MSMEs' performance (Athiyah & Darmawan, 2025; Bashir, 2023; Bashir et al., 2023; Darmawan, 2022; Khoiri & Darmawan, 2024). Beyond confirming this established link, the current study provides additional empirical support for the view that innovation-related activities often function as mediating mechanisms that translate various strategic antecedents into superior business outcomes (Bashir, 2023; Darmawan, 2022; Darmawan & Anugrahani, 2025). In this light, innovation capability is not simply a performance driver, but a foundational input that yields meaningful results only when effectively channeled through mechanisms such as business model innovation.

While prior literature commonly assumes a direct and linear relationship between innovation capability and business performance (Bekata & Kero, 2025; Quintero Sepúlveda & Zúñiga Collazos, 2025; Borah et al., 2022; Kamalrulzaman et al., 2021; Le et al., 2020; Nuryakin, 2024; Rumanti et al., 2022; Sari et al., 2023; Bahta et al., 2021), the current findings clarifies that the relationship is not necessarily straightforward. Specifically, business model innovation is revealed not merely as an outcome of innovation capability, but as a pivotal mechanism that transforms innovative potential into measurable performance gains. This insight aligns with the dynamic capabilities' framework (Teece, 2007), positioning business model innovation as a strategic bridge that connects firm's ability to sense and seize opportunities with its capacity (in this case, innovation capability) to achieve superior performance (Foss & Saebi, 2017).

Furthermore, Teece (2018) argues that the design and operation of business models are contingent on the firm's internal capabilities, and that developing, refining, and transforming these

models reflects higher-order dynamic capabilities. In line with this, the present study conceptualizes innovation capability as one such higher-order capability (Cheng & Chen, 2013; Fainshmidt et al., 2016). The empirical evidence presented here thus substantiates Teece's (2018) theoretical assertions, offering a concrete demonstration of how dynamic capabilities catalyze the development and implementation of innovative business models, particularly in the MSME sector. Accordingly, this study successfully demonstrates the ways in which key facets of dynamic capabilities help to illuminate and advance the development and execution of innovative business models (Teece, 2018).

By integrating business model innovation into the innovation-performance link, this study addresses an important gap in the literature. While much of the existing studies has focused on direct effects (Bekata & Kero, 2025; Quintero Sepúlveda & Zúñiga Collazos, 2025; Borah et al., 2022; Kamalrulzaman et al., 2021; Le et al., 2020; Nuryakin, 2024; Rumanti et al., 2022; Sari et al., 2023; Bahta et al., 2021), they have largely overlooked the mediating role of business model innovation in this linkage. These findings are consistent with those of Jalil et al. (2022) and Otache (2024), who similarly identified that the influence of innovation capability on business performance is not solely direct, but also operates indirectly, in this study, specifically through business model innovation.

Furthermore, the present results reinforce the proposition advanced by (Bashir, 2023), who highlighted the mediating role of business model innovation between strategic flexibility and business performance, where both strategic flexibility and innovation capability are considered dimensions of dynamic capabilities (Otache, 2024). Accordingly, it is logical to interpret this finding as evidence that business model innovation also functions as a crucial mechanism that translates innovation capability, as a core facet of dynamic capabilities, into superior business performance outcomes. By demonstrating business model innovation's pivotal role, this study explicitly extends the conversation beyond a simple cause and effect relationship, highlighting business model innovation as the necessary connector through which innovation capability can be converted into real, measurable performance gains. Consequently, these findings enrich the theoretical understanding of how dynamic capabilities operate within MSMEs, especially under the challenging conditions faced in emerging markets, like Indonesia.

Theoretical Contribution

Building upon earlier studies, this study stands out as one of the pioneering empirical investigations that explore how business model innovation mediates the relationship between innovation capability and business performance in the context of MSMEs. Hence, this study contributes to the dynamic capabilities literature by unveiling business model innovation as a dynamic mechanism that mediates the relationship between innovation capability and MSMEs' business performance. In doing so, it extends the theory by demonstrating that business model innovation is not only an innovation outcome, but a critical mechanism that converts innovation capability into improved firm performance. Furthermore, this study advances the innovation capability literature by clarifying how such capabilities translate to value realization through business model transformation, thereby enriching the theoretical map, not only at the phenomenon level but also in its conceptual underpinnings.

Managerial Implications

From a practical standpoint, these findings send a clear message to MSME owners and managers, that possessing innovation capability alone is insufficient to guarantee superior performance. Instead, it must be strategically activated through business model innovation to achieve measurable results. MSME owners and managers should therefore continuously revisit and renew their business models to ensure that their innovation investments genuinely contribute to greater performance. Therefore, encouraging a culture of proactive business model reinvention can help MSMEs better adapt to shifting customer expectations and market changes, securing resilience and long-term success. This approach not only supports sustained performance but also aligns with one of the SDGs, which seeks to foster inclusive entrepreneurship, strengthen innovation, and accelerate the growth of MSMEs (Sobir, 2020). By adopting

a mindset of proactive business model renewal, MSMEs can better convert their innovation capabilities into competitive advantages that contribute meaningfully to broader economic development.

CONCLUSION

In summary, this study demonstrates that business model innovation fully mediates the effect of innovation capability on MSMEs' business performance, positioning business model innovation as a key transformative mechanism in this relationship. Theoretically, this work extends the dynamic capabilities framework by integrating business model innovation as a critical pathway that operationalizes innovation capability into superior performance. Practically, it highlights that MSMEs should strategically manage business model innovation alongside their innovation capabilities to maximize performance outcomes. However, the study is limited by its use of cross-sectional data, which constrains the ability to infer causality. Additionally, the sampling was limited to MSMEs in Java, which may affect the generalizability of the findings to other regions or countries. Future research could employ longitudinal designs and explore other mediating or moderating mechanisms to deepen our understanding of the relationship between innovation capability and business performance. Overall, this study offers a solid steppingstone for future scholars to further enrich and refine knowledge about how business model innovation can act as a powerful vehicle for transforming innovation capabilities into performance gains.

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