

# Innovation Capability and Business Performance: The Mediating Roles of Product Competitiveness and Partnership Relationship Quality

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**Abstract**—This study examines the influence of innovation capability on the business performance of micro, small, and medium enterprises (MSMEs) in the food and beverage sector in West Kalimantan, Indonesia, by investigating the mediating roles of product competitiveness and partnership relationship quality. The research was conducted within a distinctive structural context characterized by geographic isolation, limited infrastructure, and constrained access to resources. A cross-sectional design was employed, with data collected through self-reported questionnaires from 168 F&B MSME owners and managers ( $n = 168$ ). The hypothesized relationships were tested using Structural Equation Modeling (SEM). The findings reveal that innovation capability has no significant direct effect on business performance ( $H3: \beta = -0.948; p = .255$ ); instead, its contribution to business performance is transmitted through indirect mechanisms, as indicated by a significant total indirect effect ( $H8: \beta = 2.177; p = 0.042$ ). Partnership relationship quality emerged as the primary mediating pathway ( $H7: \beta = 1.570; p = .021$ ), whereas product competitiveness, despite being strongly predicted by innovation capability ( $H1: \beta = 1.308; p < .001$ ), did not significantly mediate the relationship with business performance ( $H6: \beta = 0.607; p = .211$ , not significant). These findings suggest that, within the context of resource-constrained MSMEs, innovation capability contributes to business performance primarily through the quality of relationships with strategic partners rather than through a direct pathway or through product competitiveness alone. The results highlight the potential importance of a partner-centric, relationship-oriented approach emphasizing trust, commitment, satisfaction, and effective communication to help translate innovation capability into improved business outcomes. Future research should employ longitudinal designs and multi-contextual sampling to examine the temporal and contextual robustness of these relationships and enhance the external validity of the findings

**Keywords:** Innovation Capability; Business Performance; Partnership Relationship Quality; Product Competitiveness

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## 1. INTRODUCTION

The global economic landscape has undergone profound transformation over recent decades, characterised by accelerating technological innovation, deepening digitalisation, and the increasing integration of markets across national boundaries. These structural shifts have fundamentally altered the competitive dynamics facing firms of all sizes, yet their implications are particularly consequential for micro, small, and medium enterprises (MSMEs), which operate with considerably more constrained resources than their large-scale counterparts. Within this increasingly competitive environment, MSMEs have nonetheless emerged as indispensable strategic pillars of national economies, particularly in developing countries across Asia, Africa, and Latin America. In the Indonesian context, MSMEs occupy a position of extraordinary economic significance that extends well beyond their conventional role as small-scale economic units. They function as fundamental engines of employment creation, drivers of grassroots economic empowerment, and critical mechanisms for inclusive wealth distribution across urban and rural communities alike.

The scale of MSME contribution to the Indonesian economy is remarkable by any measure. Data from Coordinating Ministry for Economic Affairs confirms that Indonesian MSMEs absorb 96.9 percent of the national workforce, contribute 60.5 percent to gross domestic product (GDP), account for 15.6 percent of total non-oil exports, and represent 60.0 percent of total national investment (Kemenko Perekonomian, 2025). With over 64.2 million registered MSME units across the country of which 98.6 percent are classified as micro enterprises Indonesia possesses one of the most expansive MSME ecosystems in the world. These figures position Indonesia among the leading ASEAN nations in terms of MSME contribution to the national economy, surpassing comparable metrics from Singapore, Thailand, and Vietnam, and even exceeding the relative contributions recorded in developed economies such as Germany and Japan (Kemenko Perekonomian, 2025). The sheer scale and diversity of this sector, spanning trade, agriculture, culinary arts, and the creative industries, affirms that the advancement of Indonesia's national economy is not driven solely by large corporations but is fundamentally sustained by millions of small enterprises distributed across the archipelago.

Despite this remarkable quantitative contribution, MSMEs face a persistent and deeply concerning paradox. The same sector that underpins national economic resilience simultaneously exhibits alarming vulnerability in terms of enterprise survival. Research by Mardanugraha & Akhmad, (2023) found that 19 percent of Indonesian MSMEs fail to survive during periods of economic recession, a statistic that carries profound implications for both livelihoods and regional economic stability. Globally, evidence from high-income economies reinforces the severity of this challenge. In the United States, the ten-year business survival rate consistently hovers between 34 and 35 percent, with sharp attrition observed from the first year of operation onwards (<https://www.bls.gov/>, 2024). Similar patterns have been documented in Canada, the United Kingdom, and across the European Union, where survival rates, despite relatively supportive policy

environments, remain substantially below majority thresholds. In developing economies, survival rates are generally even lower, driven by constrained access to formal financing, high levels of informality, underdeveloped market infrastructure, and pronounced dependence on localised demand. Across India, Indonesia, Brazil, and Kenya, structural vulnerabilities including credit gaps, pandemic-induced contractions, and inadequate institutional support continue to suppress MSME sustainability at rates that have shown little improvement over the past decade (SIDBI, 2025).

This structural vulnerability becomes particularly pronounced when examined through the lens of innovation and product competitiveness. Despite the dominant share of Indonesian MSMEs in GDP, their contribution to national exports remains disproportionately low at only 15.6 percent (Kemenko Perekonomian, (2025), revealing significant gaps in product quality, global market access, and technological adoption. This discrepancy reflects a broader pattern in which the majority of MSMEs continue to operate within domestically oriented, low-value production models that have yet to achieve the standards required for meaningful participation in regional or global value chains. Bridging this competitiveness gap necessitates a fundamental reconsideration of how innovation capability is cultivated, deployed, and ultimately transformed into measurable business outcomes.

The paradox described above is rendered particularly acute in the context of West Kalimantan, a province that hosts 172,521 MSME units distributed across its regencies and cities, with the highest concentrations recorded in Sambas (35,134 units), Kubu Raya (25,079 units), Singkawang (15,066 units), and Pontianak (4,121 units) (PPID, 2024). With a regional economic growth rate averaging 4.9 percent per year between 2020 and 2024 (BPS Provinsi Kalimantan Barat, 2025), West Kalimantan presents a context of considerable economic dynamism. Yet when the national MSME failure rate identified by Mardanugraha & Akhmad, (2023) is applied to this provincial setting, approximately 32,779 enterprises would be at risk of collapse under recessionary conditions, threatening not only regional economic stability but also the livelihoods of hundreds of thousands of households. This projection underscores a troubling reality: quantitative growth in MSME numbers does not automatically translate into qualitative improvements in enterprise resilience and sustainability.

West Kalimantan possesses structural advantages that, in principle, ought to support robust MSME competitiveness. Its strategic geographic position on the western coast of Borneo provides natural access to international trade routes, proximity to Malaysia, and connections to broader ASEAN markets. Its demographically diverse population, comprising Malay, Chinese, Dayak, and Javanese communities, generates varied consumer preferences that can serve as a basis for differentiated product development. Furthermore, the province's digital penetration rate of 79.37 percent, relatively high by Indonesian outer-island standards, opens meaningful opportunities for technology-enabled innovation (APJII, 2025). Government initiatives such as the "Kalbar Smart Province 2025" programme further signal an institutional commitment to MSME digitalisation and development (Site Pontianak, 2025). Yet despite these favourable conditions, the comparative advantages of West Kalimantan have not been systematically translated into sustainable competitive advantage for its MSME sector. This disconnect between structural potential and actual enterprise performance constitutes the central empirical puzzle motivating the present study.

Central to understanding this puzzle is the concept of innovation capability, which refers to a firm's capacity to develop, integrate, and implement new ideas, products, processes, and business models to create value and sustain competitive advantage. From a strategic management perspective, this capability can be understood through the resource-based view, which argues that firms can achieve sustained competitive advantage by developing and deploying valuable and difficult-to-imitate resources and capabilities (Barney, 1991). Porter, (1985) framework further emphasises that competitive advantage is derived from a firm's ability to achieve superior value through cost efficiency or differentiation, both of which may be supported by continuous innovation. Empirical research provides substantial evidence that innovation capability contributes to firm and business performance. Recent studies have demonstrated positive relationships between innovation capability and firm performance across different organisational contexts (Alaskar, 2023; Garrido-Moreno et al., 2024; Otache, 2024). In the context of SMEs, innovation capability has likewise been associated with improved organisational performance and competitive advantage, highlighting its importance for firms operating under resource constraints (Otache, 2024). More recent evidence from Indonesia further indicates that innovation capability is relevant to MSME performance, particularly through firms' ability to develop new products, improve processes, adapt to market changes, and exploit emerging opportunities (Jiwa & Andika, 2025; Siregar et al., 2025). Thus, firms possessing stronger innovation capabilities are better positioned to translate knowledge, resources, and market opportunities into innovations that enhance competitiveness and business performance.

However, a critical and often underappreciated dimension of the innovation-performance relationship is that it is rarely direct, linear, or automatic. Recent research suggests that the contribution of innovation capability to firm performance depends on how effectively innovation-related resources and capabilities are configured, integrated, and translated into competitive outcomes (Agazu & Kero, 2024; Kohnová & Salajová, 2023; Otache, 2024). This issue is particularly important for resource constrained MSMEs, which have limited capacity to absorb the costs associated with innovation initiatives that fail to generate tangible market outcomes. Innovation that is developed without sufficient understanding of customer needs and market conditions may therefore fail to create the expected competitive value. This challenge is particularly evident in new product development, where technically or technologically advanced products do not necessarily achieve commercial success when they are poorly aligned with market demand. Research on innovation failure indicates that substantial proportions of new product initiatives may fail to achieve their intended market or financial outcomes, although reported failure rates vary considerably across industries and depend on how product failure is defined and measured (Chatterjee et al., 2023; Rutkowski, 2022). Rutkowski, (2022) in particular, cautions against the

widespread assumption that 80–90 percent of new products fail, arguing that such figures are not consistently supported by empirical evidence. His review of empirical studies reports considerable variation in observed failure rates across industries and highlights the importance of distinguishing among different forms of failure, including market failure, failure to meet sales objectives, and technical or developmental failure. These findings challenge the assumption that innovation capability automatically produces superior performance and instead direct attention toward the mechanisms through which innovative capacity is translated into market-relevant outcomes and, ultimately, business performance.

The first pathway examined in this study is product competitiveness, defined as the extent to which a firm's products compete effectively through quality, price, differentiation, and customer-perceived value. Product competitiveness can serve as an important pathway through which innovation capability contributes to business performance, as innovation enables firms to develop offerings that respond to market needs. Empirical evidence shows that technological innovation capabilities enhance product competitiveness by strengthening firms' ability to develop new products and convert technological resources into competitive offerings Liu & Jiang, (2016). In the SME context, product innovation capability has also been found to positively contribute to competitive advantage (Siregar et al., 2025). However, innovation does not automatically generate market success, as innovative products must remain aligned with customer needs and market conditions (Otache, 2024; Rutkowski, 2022). Thus, product competitiveness can be conceptualised as an intermediate pathway through which innovation capability may translate into improved business performance.

The second pathway examined in this study is partnership relationship quality, conceptualized as the overall quality of the relationship between MSMEs and their key business and marketing partners. It is reflected in four key dimensions: trust, commitment, satisfaction, and effective communication. This conceptualization is grounded in relationship marketing theory, which positions trust and commitment as central mechanisms for sustaining long-term exchange relationships Morgan & Hunt, (1994) In buyer–seller contexts, relationship quality has been closely associated with trust and satisfaction and has been shown to foster stronger customer loyalty (Crosby et al., 1990; De Wulf et al., 2001). Recent evidence from Indonesian MSMEs further indicates that customer experience and relational activities can strengthen relationship quality Dananjoyo et al., (2024), while studies in other developing-country contexts have demonstrated that relationship quality can mediate the link between organizational capabilities and SME performance (Rotich et al., 2025). In the context of West Kalimantan, where food and beverage MSMEs operate within a culturally diverse environment involving Malay, Chinese, and Dayak communities, examining the quality of relationships with distribution and marketing partners is particularly relevant for understanding how relational mechanisms contribute to business performance.

The concept of partnership relationship quality examined in this study is also consistent with the broader principles of customer relationship management, through which firms seek to develop and maintain mutually valuable relationships with customers. From the perspective of creating shared value, Porter & Kramer, (2011) argue that firms can strengthen their competitive position by addressing customer and market needs while creating value for the firm and its stakeholders. In the MSME context, strong partnership relationship quality can extend beyond transactional satisfaction by fostering trust, personalised engagement, reciprocity, and loyalty. Recent evidence shows that relationship quality and its relational dimensions contribute to customer value and loyalty Tegambwage & Kasoga, (2025) while social customer relationship management has been found to contribute to SME performance (Mohammed et al., 2024). More directly, Rotich et al., (2025) demonstrate that relationship quality mediates the relationship between electronic customer relationship management and SME performance. These findings suggest that maintaining and deepening existing partnership relationship quality can constitute an important pathway through which MSMEs strengthen customer engagement, retention, and loyalty and ultimately improve business performance.

Notwithstanding the theoretical importance of both product competitiveness and partnership relationship quality, significant gaps remain in the existing literature that this study is specifically designed to address. First, prior research has predominantly examined single mediating variables in the innovation-performance relationship, thereby failing to capture the complexity of simultaneous dual-pathway dynamics and the relative dominance of competing mediation mechanisms (Alaskar, 2023; Aslam et al., 2023). Second, the substantial majority of MSME studies conducted within Indonesia have focused on Java-based enterprises Farida & Setiawan, (2022) significantly limiting the generalisability of findings to regions with distinctive geographic isolation, limited infrastructure, and unique cultural and institutional characteristics such as West Kalimantan. The assumption that insights derived from the relatively advanced economic ecosystems of Java can be straightforwardly transposed to outer-island contexts warrants critical scrutiny. Third, existing discussions of partnership relationship quality within the Indonesian MSME literature have concentrated disproportionately on raw supply side dimensions, leaving the downstream marketing and collaborative partnership quality between MSMEs and their market-access partners a potentially dominant source of competitive advantage in consumer-facing sectors substantially underexplored.

This study addresses these three gaps by investigating the dual mediating roles of product competitiveness and partnership relationship quality in the relationship between innovation capability and business performance among food and beverage MSMEs in selected areas of West Kalimantan, specifically Pontianak, Kubu Raya, and Singkawang. The food and beverage sector was selected because its relatively homogeneous business activities facilitate comparison across enterprises while representing an economically important and competitively dynamic MSME subsector in the region. Moreover, the sector provides a relevant context for examining both pathways, as product competitiveness is reflected in attributes such as taste, quality, differentiation, and pricing, while partnership relationship quality is reflected in trust,

personalisation, satisfaction, and loyalty. A cross-sectional research design was employed, with data collected through self-administered questionnaires from 168 MSME owners and managers. The hypothesised relationships were tested using Structural Equation Modelling (SEM), enabling the simultaneous examination of direct and indirect effects within a theoretically specified structural framework. This approach allows the study to examine how innovation capability is associated with business performance through distinct product-related and customer relational pathways.

By examining the simultaneous operation of product oriented and relationship oriented mediating pathways, this study provides an integrative framework for understanding how innovation capability is associated with business performance in resource-constrained and geographically peripheral MSME contexts. The study contributes to the literature on dynamic capabilities, the resource-based view, and relationship marketing by providing empirical evidence from food and beverage MSMEs in West Kalimantan, a regional context that has received comparatively limited attention in previous research. Beyond its theoretical contribution, the study provides practical insights for MSME owners and managers, policymakers, supporting institutions, and financial organisations seeking to strengthen enterprise competitiveness, resilience, and sustainable performance. The findings may also provide a useful reference for understanding innovation and performance mechanisms in other regional MSME contexts across Indonesia and comparable developing economies.

## 2. RESEARCH METHODS

### 2.1 Research Design

This study employs data analysis tailored to the research patterns and variables under investigation. The model used in this study is a causality model, and to test the hypotheses proposed, the analytical technique applied is Structural Equation Modelling (SEM), operated through the AMOS 23 software. SEM is a multivariate statistical technique that combines factor analysis and regression analysis (correlation), aimed at examining the relationships among variables within a model both between indicators and their constructs, as well as between constructs themselves (Singgih Santoso, 2021).

#### 2.1.1 SEM Approach and Model Specification

The quantitative method employed involves a systematic sampling approach drawn from a defined population, using structured questionnaires as the primary data collection instrument. According to Singgih Santoso, (2021) descriptive quantitative analysis is a data processing method carried out by systematically organizing data in the form of numbers or percentages regarding the condition of the object under study, thereby enabling the derivation of general conclusions. The quantitative approach is utilized to gather detailed factual information about emerging phenomena, to identify existing problems, and to obtain justification for ongoing conditions and activities.

This quantitative approach enables the numerical measurement of variables and facilitates statistical analysis to generalize findings to a broader population. A cross-sectional design is applied in this study, whereby data are collected from respondents at a single point in time. This approach is commonly used in quantitative research aimed at evaluating relationships among variables without requiring extended observation periods (Maier et al., 2023). The primary advantage of this design lies in its efficiency in collecting large amounts of data from sizeable populations or samples in a rapid and cost-effective manner, making it well-suited for explanatory studies with broad scope.

Nevertheless, it must be acknowledged that the cross-sectional design carries several important methodological limitations. The cross-sectional design of this study also carries a limitation, as the data collected lack a temporal order among variables, making it difficult to firmly establish statements regarding temporal causality, since the absence of temporal ordering makes it hard to determine cause-and-effect relationships (Maier et al., 2023). In other words, while this design can identify associations or correlations among variables, it cannot establish the direction of causal relationships on a longitudinal basis. Furthermore, since data are collected only once, there is a potential for response bias, particularly if respondents' perceptions or attitudes shift over time.

### 2.2 Population and Sample

The research population refers to the entirety of elements whether people, events, or objects that share similar characteristics and become the focus of the researcher's attention, as they are regarded as the universe or domain of the study (Ferdinand, 2016). In alignment with this Sugiyono, (2023) defines population as a generalization domain consisting of objects or subjects that possess a certain quantity and characteristics determined by the researcher for the purpose of study, from which conclusions are subsequently drawn. In this study, the designated population comprises all micro, small, and medium enterprises (MSMEs) operating within the food and beverage (F&B) industry in West Kalimantan Province. Given that the number of such business actors is exceedingly large and difficult to enumerate precisely constituting an infinite population sampling was conducted using a non-probability sampling technique, specifically incidental sampling (accidental sampling).

Based on the recommendations of Hair et al., (2019) the suggested minimum sample size for SEM analysis ranges from 100 to 200 respondents, or ten times the number of indicators or measurement items. Given the relatively large number of indicators in this study, a larger sample size for instance, between 250 and 400 respondents would be more advisable to ensure robust and generalizable results. In this study, the author determined a total of 168 respondents, all of whom are MSME business actors in West Kalimantan.

## 2.3 Conceptual Framework

The conceptual framework illustrates the relationships among innovation capability, product competitiveness, partnership relationship quality, and business performance. Innovation capability is positioned as the independent variable, product competitiveness and partnership relationship quality as mediating variables, and business performance as the dependent variable. The model proposes that innovation capability influences business performance indirectly through these two mediators. In addition, the direct effect of innovation capability on business performance is examined to determine whether mediation is present.

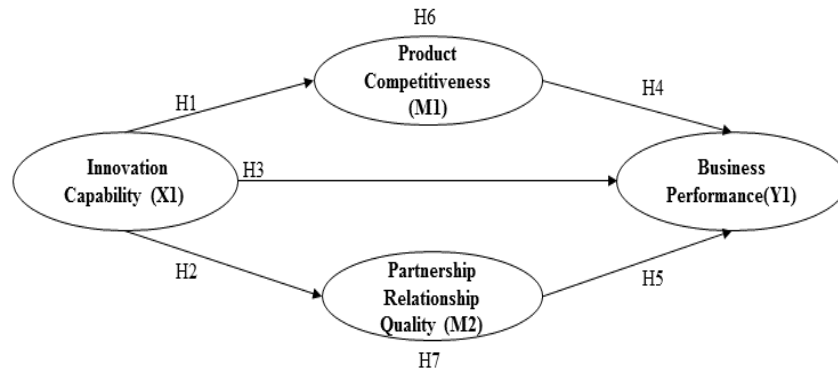


Figure 1. Conceptual Framework of the Study

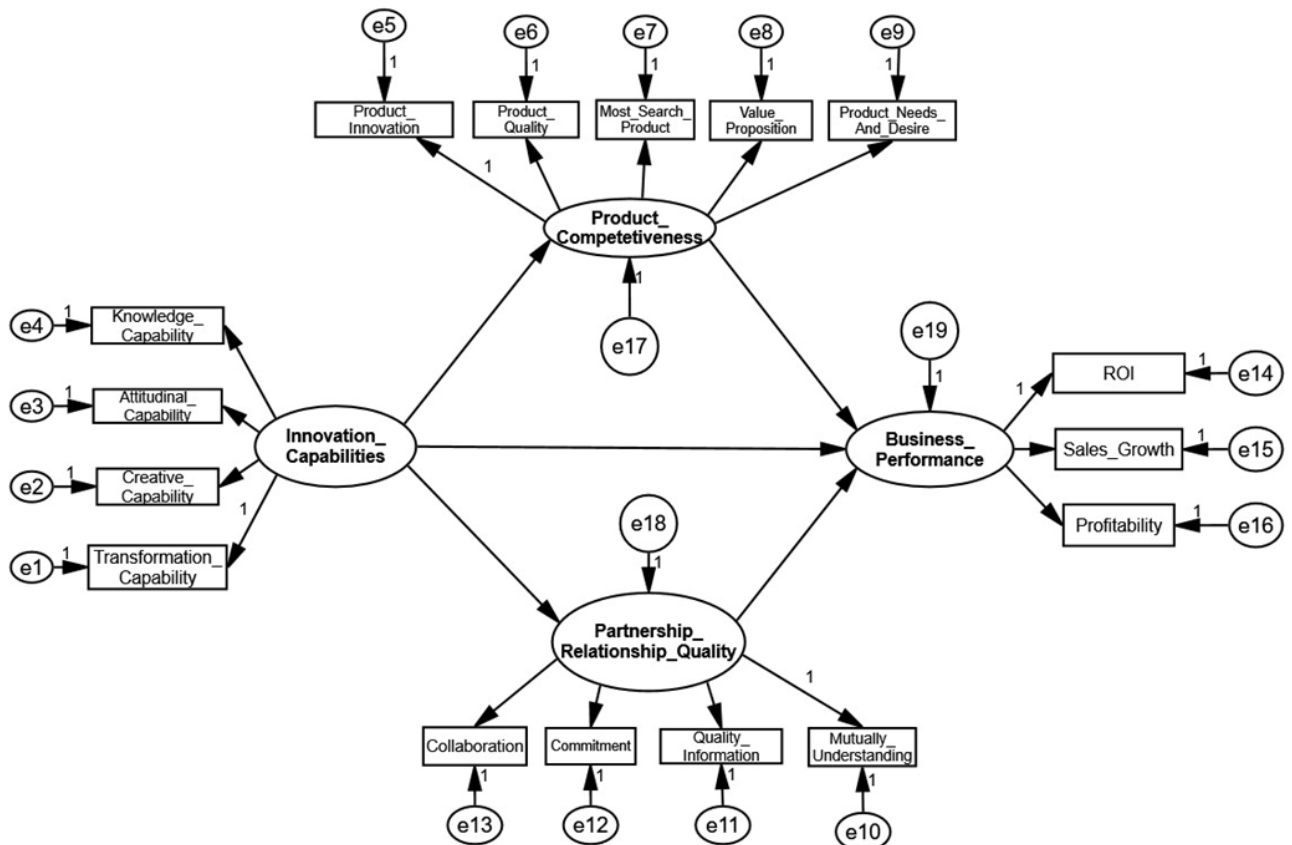


Figure 2. SEM Model with Latent Constructs and Indicators

## 2.4 Research Hypotheses

The hypotheses in this study are developed based on the conceptual framework and theoretical relationships among the variables. This study develops an integrative model examining the relationships among innovation capability, product competitiveness, partnership relationship quality, and business performance in Micro, Small, and Medium Enterprises (MSMEs). Drawing on Resource-based view (RBV), Dynamic Capabilities Theory, Relational View, and Social Exchange Theory, eight hypotheses are proposed. Innovation capability is posited as a key antecedent that enhances product competitiveness and partnership quality, both of which, along with direct effects, drive superior business performance. Product competitiveness and partnership relationship quality are proposed as mediators. The framework

provides theoretical and practical insights for MSMEs in competitive and resource-constrained environments. Based on the theoretical background, the following hypotheses are proposed:

- H1: Innovation capability has a positive and significant effect on product competitiveness in MSMEs
- H2: Innovation capability has a positive and significant effect on partnership relationship quality in MSMEs
- H3: Innovation capability has a positive and significant effect on business performance in MSMEs.
- H4: Product competitiveness has a positive and significant effect on business performance in MSMEs
- H5: Partnership relationship quality has a positive and significant effect on business performance in MSMEs
- H6: Product competitiveness mediates the effect of innovation capability on business performance in MSMEs
- H7: Partnership relationship quality mediates the effect of innovation capability on business performance in MSMEs
- H8: Innovation capability has a positive and significant total indirect effect on business performance through the mediation of product competitiveness and partnership relationship quality.

## 2.5 Research Instrument

Data were collected using a structured questionnaire developed based on indicators representing each research variable. The instrument employs a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Measurement items were adapted from prior validated studies. Prior to the main analysis, the instrument was tested for validity and reliability to ensure that all indicators accurately measure the intended constructs (Hair et al., 2019).

## 2.6 Data Analysis and Testing Techniques

Data analysis is conducted using CB-SEM with AMOS software. The analysis consists of two stages: measurement model evaluation and structural model assessment. In the measurement model, convergent validity, discriminant validity, and construct reliability are evaluated. Indicators are considered valid if standardized factor loadings exceed 0.50. Construct reliability is assessed using Composite Reliability (CR) and Average Variance Extracted (AVE) based on recommended thresholds (Hair et al., 2019) and (Kline, 2023). In the structural model, relationships among latent variables are examined using path coefficients and significance levels. Model fit is evaluated using goodness-of-fit indices, including Chi-square, CFI, TLI, RMSEA, and GFI. The structural equations are specified as follows:

$$\text{Product Competitiveness} = \beta_1 + \varepsilon_1 \quad (1)$$

$$\text{Partnership Relationship Quality} = \beta_2 + \varepsilon_2 \quad (2)$$

$$\text{Business Performance} = \beta_3 + \beta_4 + \beta_5 + \varepsilon_3 \quad (3)$$

The mediation effect is tested using the bootstrapping approach to assess the significance of indirect (Hair et al., 2019).

# 3. RESULTS AND DISCUSSION

## 3.1 Research Results

### 3.1.1 Measurement Model Evaluation (CFA)

The measurement model was evaluated using Confirmatory Factor Analysis (CFA) to assess the validity and reliability of the constructs. The results indicate that all indicators have standardized loading values above the acceptable threshold of 0.50, demonstrating adequate convergent validity. This suggests that each indicator is capable of explaining its respective latent construct effectively. In addition, construct reliability was assessed using composite reliability values, which exceeded the recommended threshold of 0.70. Furthermore, all constructs achieved Average Variance Extracted (AVE) values above 0.50, indicating that the constructs are both valid and reliable. Overall, the measurement model meets the required criteria and is suitable for further structural analysis.

### 3.1.2 Structural Model and Hypothesis Testing

**Table 1.** Results of Hypothesis Testing

| Hypothesis | Path                     | Estimate | P-value | Lower CI | Upper CI | Decision |
|------------|--------------------------|----------|---------|----------|----------|----------|
| H1         | IC → PC                  | 1.308    | <.001   | 0.738    | 3.372    | Accepted |
| H2         | IC → PRQ                 | 1.300    | 0.001   | 0.435    | 2.717    | Accepted |
| H3         | IC → BP                  | -0.948   | 0.255   | -12.554  | 0.953    | Rejected |
| H4         | PC → BP                  | 0.464    | 0.319   | -0.718   | 1.906    | Rejected |
| H5         | PRQ → BP                 | 1.208    | 0.014   | 0.297    | 10.204   | Accepted |
| H6         | IC → PC → BP             | 0.607    | 0.211   | -0.572   | 3.876    | Rejected |
| H7         | IC → PRQ → BP            | 1.570    | 0.021   | 0.213    | 14.244   | Accepted |
| H8         | IC → BP (Total Indirect) | 2.177    | 0.042   | 0.099    | 14.329   | Accepted |

\* Note: The specific indirect effects for H6 and H7 were estimated using the simplified user-defined estimands procedure in AMOS defined as the product of the corresponding direct path coefficients ( $a \times b$ ). The bootstrap results confirm the point estimates reported above.

The results of hypothesis testing reveal several important findings. Bootstrapping analysis showed a positive and significant total indirect effect of innovation capability on business performance through its combined mediators (product competitiveness and partnership relationship quality):  $\beta = 2.177$ ,  $p = 0.042$ , CI [0.099, 14.329], not spanning zero, H8 is supported. The result indicates that innovation capability does not influence business performance directly but is transmitted through intermediate mechanisms that convert innovative potential into competitive and relational advantage. The wide CI suggests the strength of this transmission varies across firms depending on how effectively innovation is operationalized into market positioning and partnership quality.

Theoretical support. This finding is consistent with the dynamic capabilities view, which holds that capability-based resources typically affect performance indirectly rather than directly, often being fully or partially mediated by innovation-related outcomes when the direct relationship between reconfiguration and firm performance is not significant, and that product innovation exerts a significant positive mediating effect on the relationship between dynamic capabilities and firm performance. In competitive and resource-limited industry settings, innovation capability alone rarely guarantees performance gains, its value is realized primarily when channeled through relational partnership quality, positioning this mediator as an essential conduit rather than an optional pathway.

### 3.1.3 Goodness of Fit Evaluation

**Table 2.** Goodness-of-Fit Indices

| Goodness of Fit Indices | Cut-off Value | Result  | Conclusion   |
|-------------------------|---------------|---------|--------------|
| Chi-Square              |               | 116.047 | Good Fit     |
| Probability             | $\geq 0.05$   | 0.053   | Marginal Fit |
| CMIN/DF                 | $\leq 2.00$   | 1.248   | Good         |
| GFI                     | $\geq 0.90$   | 0.918   | Good         |
| AGFI                    | $\geq 0.90$   | 0.881   | Marginal Fit |
| TLI                     | $\geq 0.90$   | 0.928   | Good         |
| CFI                     | $\geq 0.90$   | 0.945   | Good         |
| RMSEA                   | $\leq 0.08$   | 0.039   | Good Fit     |

The evaluation of the goodness-of-fit indices indicates that the proposed model demonstrates an adequate overall fit with the empirical data. The chi-square (CMIN) value is 116.047, with a significance probability of (0.053). Although the probability value is slightly above the recommended threshold of 0.05, its proximity to the cut-off suggests a marginal level of fit and should therefore be interpreted together with the other goodness-of-fit indices. The CMIN/DF value of (1.248) is below the recommended cut-off of 2.00, indicating a good level of model fit. The other goodness-of-fit indices provide further support for the adequacy of the proposed model. The GFI value of (0.918) exceeds the recommended threshold of 0.90, indicating good fit. The AGFI value of (0.881) is slightly below the recommended threshold and therefore indicates a marginal fit. Meanwhile, the TLI and CFI values of (0.928) and (0.945), respectively, exceed the recommended threshold of 0.90 and indicate good fit. The RMSEA value of (0.039) is also well below the maximum recommended value of 0.08, indicating a good level of fit and a relatively low approximation error. Overall, six of the eight reported goodness-of-fit measures meet or indicate acceptable levels of fit, while the significance probability and AGFI indicate marginal fit. Taken together, the results suggest that the proposed model demonstrates an adequate overall fit with the empirical data and is therefore suitable for subsequent hypothesis testing.

### 3.1.4 Mediation Analysis

**Table 3.** Results of Mediation Analysis

| Relationship                           | Calculation of Effect Value | Direct Effect | Indirect Effect | Total Effect | Conclusion                                    |
|----------------------------------------|-----------------------------|---------------|-----------------|--------------|-----------------------------------------------|
| IC $\rightarrow$ BP                    | –                           | –0.948        | –               | –0.948       | Rejected (not significant)                    |
| IC $\rightarrow$ PC $\rightarrow$ BP   | $1.308 \times 0.464$        |               | 0.607           |              | Rejected (not significant)                    |
| IC $\rightarrow$ PRQ $\rightarrow$ BP  | $1.300 \times 1.208$        |               | 1.570           |              | Accepted (significant)                        |
| IC $\rightarrow$ BP (total indirect)   | $0.607 + 1.570$             | –             | 2.177           | 2.177        | Accepted (significant)                        |
| Total Effect (direct + total indirect) | $-0.948 + 2.177$            | –0.948        | 2.177           | 1.229        | Positive net effect (significance not tested) |

The result of the mediation analysis shows that innovation capability does not have a significant direct effect on business performance ( $\beta = -0.948$ ; CI [–12.554, 0.953];  $p = .255$ ), indicating that innovation capability alone does not automatically improve business performance without a transmitting mechanism (mediator). Instead, the total indirect effect of innovation capability on business performance is significant ( $\beta = 2.177$ ; CI [0.099, 14.329];  $p = .042$ ), and this effect is transmitted through partnership relationship quality rather than through product competitiveness. The specific indirect effect through partnership relationship quality is significant ( $\beta = 1.570$ ; CI [0.213, 14.244];  $p = .021$ ), whereas

the specific indirect effect through product competitiveness is not significant ( $\beta = 0.607$ ; CI  $[-0.572, 3.876]$ ;  $p = .211$ ). Although innovation capability strongly predicts product competitiveness ( $\beta = 1.308$ ;  $p < .001$ ), product competitiveness does not significantly predict business performance ( $\beta = 0.464$ ;  $p = .319$ ). Accordingly, the indirect path through product competitiveness is classified as not significant, whereas the path through partnership relationship quality is classified as significant mediation. Because the total indirect effect is significant and the direct effect is not, the overall pattern is consistent with indirect-only mediation operating through partnership relationship quality (Han, 2023). Although the specific indirect effect through partnership relationship quality is numerically larger than that through product competitiveness, the difference between the two effects was not formally tested and should therefore be interpreted with caution (Coutts & Hayes, 2022; Sarstedt & Moisesescu, 2024).

The total effect of innovation capability on business performance is obtained by combining the direct effect ( $-0.948$ ) and the total indirect effect ( $2.177$ ), resulting in a positive total effect of  $1.229$ . Because the direct and indirect effects have opposite signs, the total effect is smaller than the indirect effect alone, which is consistent with an inconsistent mediation pattern. However, the significance of the total effect was not tested, and the wide confidence intervals indicate considerable uncertainty in these estimates. These findings highlight the importance of examining the mechanisms through which innovation capability is associated with business performance strategic marketing and distribution partners, while acknowledging that the cross-sectional design does not permit causal conclusions

### 3.2 Discussion

The test results show that innovation capability has a positive and significant effect on both product competitiveness (H1:  $\beta = 1.308$ ;  $p < .001$ ) and partnership relationship quality (H2:  $\beta = 1.300$ ;  $p = 0.001$ ), whereas its direct effect on business performance is negative but statistically non-significant (H3:  $\beta = -0.948$ ;  $p = 0.255$ ). The wide confidence interval for H3 ( $-12.554$  to  $0.953$ ), which crosses zero, further indicates substantial uncertainty surrounding the estimated direct effect. Therefore, the non-significant direct effect should not be interpreted as evidence of a negative relationship between innovation capability and business performance. Rather, when considered alongside the significant total indirect effect reported in the mediation analysis, the finding suggests that the contribution of innovation capability to business performance is transmitted primarily through intervening mechanisms. This pattern is consistent with the resource-based view (RBV), which conceptualizes valuable, rare, inimitable, and non-substitutable resources and capabilities as foundations of competitive advantage, while recognizing that their performance implications depend on how these internal capabilities are deployed and translated into value-generating outcomes (Barney, 1991). In this context, innovation capability may constitute an important internal capability, but its contribution to business performance appears to materialize through a relational mechanism, namely partnership relationship quality, rather than through product competitiveness. This interpretation is also consistent with recent SME-based evidence suggesting that innovation capability can influence firm performance indirectly through intervening organizational capabilities and mechanisms rather than functioning solely as a direct determinant of performance (Indrawati et al., 2026).

Product competitiveness, however, did not function as a significant mediator in this study. Although innovation capability strongly predicted product competitiveness (H1), the path from product competitiveness to business performance was not significant (H4:  $\beta = 0.464$ ;  $p = 0.319$ ), and the specific indirect effect through this variable was likewise not significant (H6:  $\beta = 0.607$ ;  $p = 0.211$ ; CI  $[-0.572, 3.876]$ ). This is a notable departure from prior evidence in which product, process, and management related innovation has been found to directly and significantly improve SME performance, such as the study of Mexican SMEs by (Guzman et al., 2019). Plausible explanations for the weaker result here include insufficient differentiation of the resulting product advantage, unmodelled moderators such as industry competitive intensity, or a time lag between the emergence of product competitiveness and its manifestation in measurable performance a limitation inherent to the cross sectional design used here.

By contrast, partnership relationship quality emerged as the only significant mediator of the innovation capability business performance relationship. Partnership relationship quality exerted a significant positive effect on business performance (H5:  $\beta = 1.208$ ;  $p = 0.014$ ), and the specific indirect effect through this pathway was also significant (H7:  $\beta = 1.570$ ;  $p = .021$ , CI  $[0.213, 14.244]$ ). Combined with the non-significant direct effect of innovation capability on business performance (H3) the non-significant indirect effect through product competitiveness (H6), this pattern is consistent with an indirect-only mediation, whereby the indirect effect is significant while the corresponding direct effect is non-significant (Han, 2023; Sarstedt & Moisesescu, 2024). Because the direct effect ( $\beta = -0.948$ ) and the total indirect effect ( $\beta = 2.177$ ) have opposite signs, the pattern also reflects inconsistent mediation, and the wide confidence intervals indicate considerable uncertainty. In addition, the difference between the two specific indirect effects was not formally tested, so the relative strength of the partnership relationship quality pathway should be interpreted cautiously. These findings indicate that partnership relationship quality defined as the quality of relationships between MSMEs and their key downstream partners, encompassing trust, commitment, satisfaction, and effective communication represents the primary transmission mechanism through which innovation capability contributes to business performance. This result provides empirical support for relationship marketing theory, which positions trust and commitment as central mechanisms for sustaining long-term exchange relationships (Morgan & Hunt, 1994), and for prior evidence that relationship quality can mediate the link between organizational capabilities and firm performance (Rotich et al., 2025).

In the context of food and beverage MSMEs in West Kalimantan, strong partnership relationship quality appear to play a particularly important role. Innovation capability enables MSMEs to develop better products and improve processes; however, without high-quality relationships with marketing partners, these innovations may fail to generate

repeat purchases, loyalty, or positive word-of-mouth. Thus, the performance benefits of innovation capability are realized primarily when firms successfully translate their innovative efforts into deeper partner trust, stronger commitment, higher satisfaction, and more effective communication. Managerially, these findings suggest that MSME owners and managers should not rely solely on investments in product or process innovation. Such investments need to be accompanied by deliberate efforts to strengthen relationships with downstream business partners, for example, through consistent service quality, personalized engagement, transparent communication, and initiatives that foster long-term trust and commitment. Strengthening these relational dimensions may be a more effective pathway for converting innovation capability into improved business performance in resource-constrained settings.

Several limitations should also be acknowledged. First, the cross-sectional design limits the ability to establish temporal or causal relationships among the constructs. Second, the model does not examine potentially relevant moderating variables, such as competitive intensity or firm size, which may influence the strength of the relationships between innovation capability, the mediating mechanisms, and business performance. Third, the specific sample context limits the generalizability of the findings to other industries, regions, or firm populations. Future research could therefore employ longitudinal designs and multi-industry samples to examine the temporal development of these relationships and assess whether the observed mediation patterns remain consistent across different organizational and competitive contexts.

## 4. CONCLUSION

This study indicates an indirect-only mediation pattern in which innovation capability influences business performance not through a significant direct effect, but primarily through the quality of relationships within business partnerships. Of the two mediating pathways examined, partnership relationship quality emerged as the only significant mediating mechanism, while product competitiveness, although strongly enhanced by innovation capability, did not significantly translate into improved business performance. These findings suggest that for food and beverage MSMEs operating in structurally constrained environments such as West Kalimantan, product superiority alone is insufficient to generate improved business outcomes. Instead, the ability to build and maintain high-quality partnership relationships, characterized by trust, commitment, satisfaction, and effective communication with key business and marketing partners, serves as the primary channel through which innovation capability is converted into measurable business performance. Theoretically, these findings challenge the conventional assumption that innovation drives performance chiefly through product differentiation and product competitiveness. Although innovation capability contributes substantially to developing competitive products, such advantages may not automatically generate superior performance without effective partner engagement and collaboration. The findings therefore position relational capital with strategic partners as an important mechanism that complements innovation capability, particularly in resource constrained MSME environments. Innovation should consequently be understood not only as an internal organizational capability but also as a process whose performance effects depend on how effectively firms engage with and respond to their business partners. These findings should nevertheless be interpreted in light of several limitations. First, the cross-sectional design limits the ability to establish temporal and causal relationships among the variables. Second, the geographically bounded sample of food and beverage MSMEs in West Kalimantan may limit the generalizability of the findings to other regions and industries. Third, reliance on self-reported perceptual data may introduce subjective bias. Fourth, the study does not control for potentially relevant factors such as firm size, business age, owner education, managerial experience, or access to financial resources. Future research should employ longitudinal designs, objective performance measures, and broader geographic samples to validate and extend these findings. Comparative studies across industries and regions may also determine whether partnership relationship quality consistently functions as the key mechanism linking innovation capability to business performance. Practically, the findings call for a broader MSME development strategy. Business owners, local governments, and supporting institutions should complement product innovation programs with initiatives that strengthen partner trust, commitment, satisfaction, and communication. Through these high-quality partnership relationships, innovation capability can be more effectively transformed into sustained business performance.

## 5. DECLARATIONS

### 5.1 Author Contributions

Conceptualization: H.J.L., and L.S.H.,

Methodology: H.J.L., L.S.H., and S.T.S.;

Software: H.J.L.;

Validation: L.S.H., and S.T.S.;

Formal Analysis: H.J.L.;

Investigation: H.J.L.;

Resources: H.J.L.;

Data Curation: H.J.L.;

Writing Original Draft Preparation: H.J.L.;



Writing Review and Editing: L.S.H., and S.T.S.;

Visualization: H.J.L.;

All authors have read and approved the published version of the manuscript.

## 5.2 Data Availability

The data presented in this study are available on request from the corresponding author.

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## 5.4 Institutional Review Board Statement

Not applicable.

## 5.5 Informed Consent Statement

Informed consent was obtained from all participants involved in the study.

## 5.6 Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## 5.7 Generative AI and AI-assisted Technologies in The Writing Process

The authors used Generative AI to improve the writing clarity of this paper. They reviewed and edited the AI-assisted content and took full responsibility for the final publication of the manuscript.

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