Perceptual product congruity as a catalyst for market performance of small and medium enterprises in North Sumatra

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Abstract: This study aims to examine how perceptual product congruity acts as a mediating factor in enhancing the market performance of Small and Medium Enterprises (SMEs) in North Sumatra. The research investigates the influence of innovative performance, marketing capability, and product advantage on market outcomes. A quantitative research design was employed using Structural Equation Modeling (SEM) on a sample of 334 SMEs, comprising 201 small and 133 medium-sized enterprises, selected through proportional cluster random sampling. Data analysis involved validity and reliability testing, as well as assessment of measurement and structural models. The findings reveal that innovative performance positively affects market performance both directly and indirectly through marketing capability and product advantage. Furthermore, perceptual product congruity, defined as the alignment between product attributes and consumer self-concept, significantly mediates the relationship between product advantage and market performance. The study concludes that enhancing innovation and marketing capabilities not only improves product advantages but also fosters stronger congruity with consumer perceptions, thereby influencing purchasing behavior and satisfaction. The results suggest that SMEs can strengthen their competitive position by aligning innovation strategies and marketing efforts with consumer expectations. This alignment enhances brand relevance and market responsiveness, ultimately leading to improved business performance in a dynamic market environment.

Keywords: Congruity, Innovation in SME marketing, Market performance, Perceptual product, Product advantage, SME competitiveness.

1. Introduction

Micro, Small, and Medium Enterprises (MSMEs) are the backbone of Indonesia's economy, contributing significantly to national employment and gross domestic product. In North Sumatra, MSMEs play a vital role in supporting local economic development and community empowerment. However, despite their importance, many MSMEs in the region face persistent challenges in achieving sustainable growth and competitiveness.

A key issue hindering MSMEs in North Sumatra is their weak market performance, which refers to the ability of a business to adapt to market dynamics, fulfill consumer demands, and compete effectively. Limited market access, lack of product innovation, and low adoption of digital technology are among the main factors contributing to this problem. While many MSMEs produce quality goods, they often struggle to differentiate their products or align them with consumer preferences, resulting in limited market expansion and reduced competitiveness. Furthermore, only around 25% of MSMEs in the region utilize digital platforms for marketing, limiting their market exposure.

Changes in technology and globalization are currently transforming how businesses, including MSMEs, operate and market their products. In response to these developments, MSMEs must adopt more flexible approaches in communication, production, and service delivery [1, 2]. These changes

require MSMEs to shift their business paradigms and embrace technological integration across all operational aspects—from product development to customer service. This transformation involves investing in robust digital infrastructure and building the digital skills of employees to effectively respond to emerging market trends.

SMEs worldwide serve as key economic drivers due to their agility and focus on specific market niches [3]. In Indonesia, the significance of MSMEs is underscored by their sheer number—64.2 million in 2020—contributing 61.07% to GDP and absorbing 97% of total employment [4]. Their presence spans diverse sectors such as culinary, fashion, agriculture, and technology, indicating their critical role in inclusive and sustainable economic growth.

According to the Bali Province Office of Cooperatives and SMEs [5] growth in the MSME sector is no longer solely dependent on capital access or traditional resources. The integration of technology and the ability to respond quickly to market shifts have become crucial. With digital platforms enabling broader market outreach, innovative and engaging promotional strategies are now essential to attract and retain customers.

The evolution of the MSME landscape is clearly reflected in national trends. Between 2016 and 2020, the number of small and medium enterprises in Indonesia consistently grew—from 740,785 units in 2016 to 864,144 in 2020—highlighting the sector's resilience and potential for further development.

In this context, market trend shifts, intense competition, and varied customer demands make it essential for MSMEs to adopt comprehensive and adaptive marketing strategies [6]. These strategies must be based on in-depth market analysis, ongoing technological adaptation, and strong efforts to differentiate from competitors. SMEs must be able to design products and services that resonate with consumers and stand out in increasingly saturated markets.

Innovation plays a central role in addressing these challenges. Product innovation enables businesses to meet customer needs in new or improved ways, increase market share, and enhance competitiveness [7, 8]. Continuous innovation in product development, production processes, administration, and technology allows SMEs to stay aligned with market demands and improve their overall performance [9, 10].

However, innovative performance does not automatically translate into improved sales or market share. The commercial success of innovation depends heavily on how well the innovation aligns with customer preferences and how effectively it is marketed. Thus, product-consumer congruity is key: innovations must resonate with market needs to drive significant improvements in market performance.

To this end, marketing capability becomes a critical enabler. It refers to an organization's ability to identify customer needs, understand consumer behavior, and effectively communicate product value [11, 12]. Strong marketing capability helps MSMEs formulate appropriate marketing strategies, tailor their offerings to diverse market segments, and utilize efficient distribution channels.

Empirical evidence supports marketing capability as a significant determinant of superior business performance [13, 14]. It enhances the ability of MSMEs to learn from the market and adapt swiftly to customer changes [15, 16]. Studies have also shown that marketing capability boosts the effectiveness of innovation by helping create product advantages such as higher quality, improved design, better features, and affordability [17, 18].

In conclusion, enhancing the market performance of MSMEs in North Sumatra requires an integrated approach that combines product innovation, technological adaptation, and strong marketing capability. Innovation must be aligned with consumer preferences, while marketing capability ensures that these innovations effectively reach and resonate with target audiences. These efforts will not only improve competitiveness but also contribute to sustainable economic development at the regional and national levels.

The primary aim of this research is to develop a research model that addresses the gap between innovative performance and market performance by introducing perceptual product congruity as an intervening variable, thereby enhancing the role of innovation in driving MSME market performance.

2. Research Questions

Based on the background and research problem, the research questions are as follows:

1. Does Innovative Performance influence Marketing Capability in SMEs in North Sumatra?
2. Does Innovative Performance influence Product Advantage in SMEs in North Sumatra?
3. Does Innovative Performance influence Perceptual Product Congruity in SMEs in North Sumatra?
4. Does Marketing Capability influence Perceptual Product Congruity in SMEs in North Sumatra?
5. Does Product Advantage influence Perceptual Product Congruity in SMEs in North Sumatra?
6. Does Innovative Performance influence Market Performance in SMEs in North Sumatra?
7. Does Marketing Capability influence Market Performance in SMEs in North Sumatra?
8. Does Perceptual Product Congruity influence Market Performance in SMEs in North Sumatra?
9. Does Product Advantage influence Market Performance in SMEs in North Sumatra?
10. Does Innovative Performance influence Market Performance through Marketing Capability in SMEs in North Sumatra?
11. Does Marketing Capability influence Market Performance through Perceptual Product Congruity in SMEs in North Sumatra?
12. Does Innovative Performance influence Market Performance through Perceptual Product Congruity in SMEs in North Sumatra?
13. Does Innovative Performance influence Market Performance through Product Advantage in SMEs in North Sumatra?
14. Does Product Advantage influence Market Performance through Perceptual Product Congruity in SMEs in North Sumatra?

Figure 1 illustrates the conceptual framework of this study, which outlines the relationships among the key variables being investigated. This framework was developed based on relevant theoretical foundations and previous empirical findings, and it serves as the basis for formulating the research hypotheses.
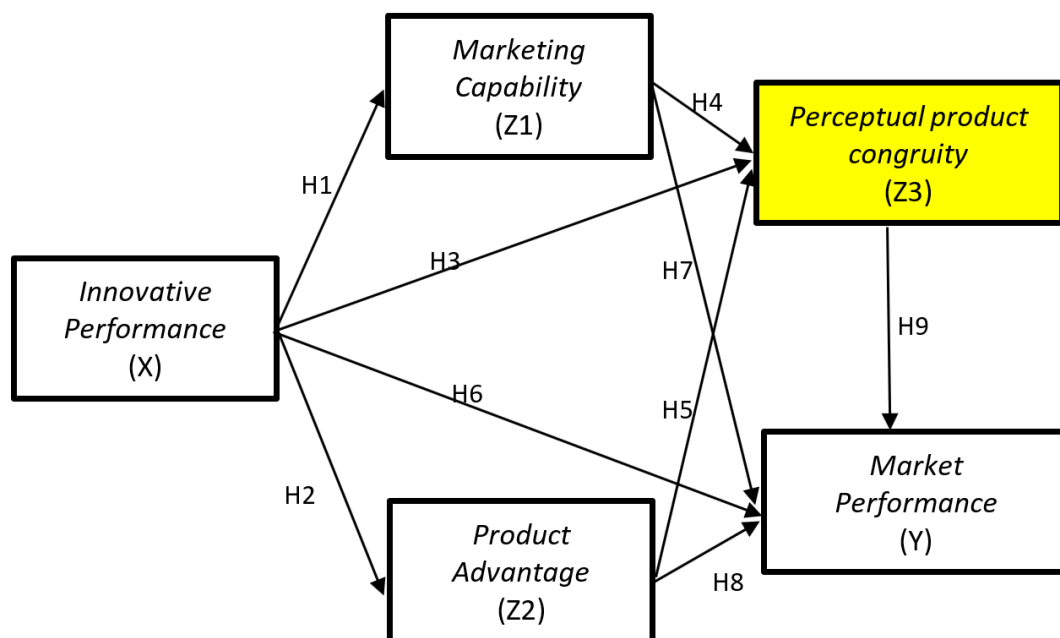

Figure 1.
Conceptual Framework.

3. Method

This study uses a quantitative research method with a positivist paradigm, which views reality as something that can be observed, measured, structured, and objectively verified through cause-and-effect relationships [18]. The positivist paradigm aligns with the researcher's intention to examine how marketing capability, innovative performance, product advantage, and perceptual product congruity influence market performance among SMEs in North Sumatra. The quantitative approach is appropriate for this paradigm because it involves structured data that can be analyzed numerically and objectively.

The research was conducted in the Province of North Sumatra, specifically in Medan City, Deli Serdang Regency, Serdang Bedagai Regency, and Langkat Regency, which have a significant number of SMEs engaged in the creative economy sector. The population of this study consists of 2,023 creative economy SME actors across the four regions. Using Slovin's formula, a total of 334 SME actors were selected as the sample. The primary data was collected through the distribution of questionnaires related to the research variables, while secondary data was obtained from literature, previous studies, official documents, and other supporting materials such as social media and online sources.

The data collection techniques included questionnaires with closed-ended statements and documentation from relevant institutions or individuals. Data analysis was carried out using descriptive statistics and Structural Equation Modeling (SEM) with the Partial Least Square (PLS) approach. Further analysis included Importance-Performance Map Analysis (IPMA) to identify priority variables based on their importance and performance levels, and Multi-Group Analysis (MGA) to compare results between two SME groups: those operating for less than five years and those operating for more than five years. This comprehensive analysis enabled a deeper understanding of the direct and indirect effects among variables and provided strategic insights into SME market performance.

4. Result and Discussion

This research involves 334 SMEs in North Sumatra using a quantitative approach based on Structural Equation Modelling (SEM-PLS). The main emphasis of these results is on the mediating role of Perceptual Product Congruity in strengthening the impact of Innovative Performance, Marketing Capability, and Product Advantage on Market Performance.

4.1. Characteristics of Respondents

A total of 60.2% of respondents are small business owners, while 39.8% are medium-sized business owners. The majority operate in the culinary sector (38.9%) and fashion (23.5%). Most respondents have a high school education (47%) or a diploma/bachelor's degree (42%). The majority have 3–5 years of business experience.

4.2. Common Method Bias

Before conducting the measurement analysis, the researcher examined the data to avoid common method bias, which often occurs when data for both independent and dependent variables come from the same source. To ensure the absence of this bias, the full collinearity test technique was applied [19] producing variance inflation factor (VIF) values. If a VIF exceeds 3.3, it indicates the presence of pathological collinearity, which suggests the existence of common method bias in the model.
Table 1 below presents the results of the common method bias assessment.

Table 1.
Common Method Bias.

Full collinearity estimates	
Correlations	**VIF**
Innovative Performance → Market Performance	1.566
Innovative Performance → Marketing Capability	1.000
Innovative Performance → Perceptual Product Congruity	1.477
Innovative Performance → Product Advantage	1.000
Marketing Capability → Market Performance	1.527
Marketing Capability → Perceptual Product Congruity	1.416
Perceptual Product Congruity → Market Performance	1.475
Product Advantage → Market Performance	1.429
Product Advantage → Perceptual Product Congruity	1.379

As shown in Table 1, all VIF values fall within the range of 1.000 to 1.566, which is significantly below the threshold of 3.3. This result indicates that there is no evidence of extreme collinearity in the data, and therefore, no common method bias is present in the measurement model used. This finding strengthens the conclusion that the relationships among constructs in this study are not distorted by the use of a common data source.

To evaluate the validity and reliability of the constructs used in this study, a measurement model analysis was conducted. Figure 1 presents a visual representation of the measurement model, which includes the relationships between latent constructs and their indicators. This model is used to ensure that each indicator significantly reflects the construct it represents, as well as to assess the strength and direction of each factor loading.
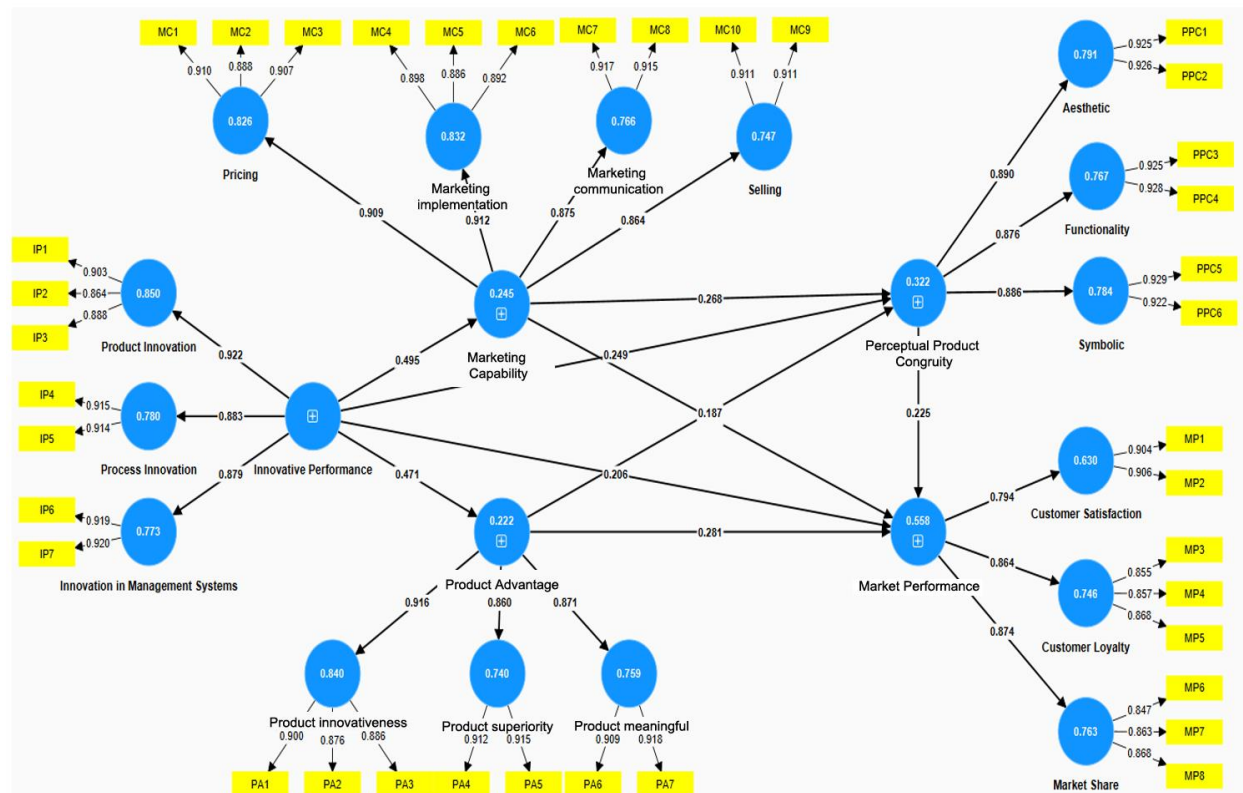

Figure 1.
Measurement model.

Figure 1. Measurement Model illustrates the explanation regarding the validity and reliability testing of the constructs. To ensure construct validity and indicator reliability in the measurement model, an analysis was conducted on the first-order reflective constructs by referring to the values of factor loadings, Cronbach's Alpha (CA), Composite Reliability (CR), and Average Variance Extracted (AVE). This analysis aims to evaluate the extent to which the indicators consistently and validly reflect the latent constructs they represent.

4.3. Structural Model Evaluation (Inner Model)

Table 2.
Structural Model Evaluation (Inner Model).

Structural Model Assesment	R^2	Adjusted R^2	Q^2	Model Fitness
Market Performance	0.557	0.552	0.388	
Marketing Capability	0.241	0.239	0.186	
Perceptual Product Congruity	0.322	0.316	0.244	
Product Advantage	0.221	0.219	0.168	
SRMR				0.077

The inner model analysis results presented in Table 2 indicate that the structural model has good predictive quality and a statistically acceptable structure. The highest R^2 value is found in the Market Performance construct (0.557), indicating that 55.7% of the variability in market performance can be explained by the exogenous constructs in the model. According to Hair, et al. [20] this value falls within the moderate to strong category and reflects the substantial influence of the predictor variables. Other constructs such as Perceptual Product Congruity ($R^2 = 0.322$), Marketing Capability ($R^2 = 0.241$), and Product Advantage ($R^2 = 0.221$) also show moderate determination values, yet remain conceptually significant in explaining the variability of these constructs.

Furthermore, all constructs show positive Q^2 values above 0.15, ranging from 0.168 to 0.388, indicating that the model possesses predictive relevance for all the endogenous constructs tested. The highest Q^2 value is again found in Market Performance, reinforcing its position as the primary outcome construct significantly influenced by other variables.

In terms of overall model fit, the SRMR (Standardized Root Mean Square Residual) value of 0.077 falls below the 0.08 threshold, indicating that the model has a good global fit and is acceptable in terms of goodness of fit. Overall, these results demonstrate that the proposed structural model has adequate predictive capability and stable inter-construct relationships, making it suitable for hypothesis testing and drawing theoretical conclusions.
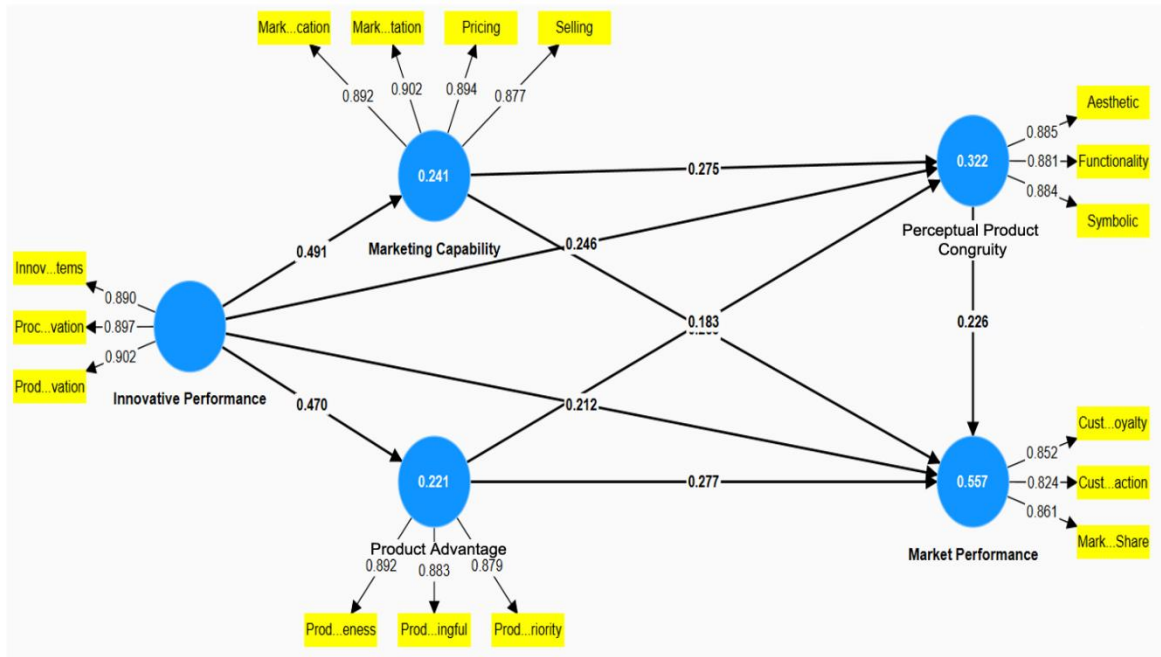
Figure 2.
Blindfolding (Q2).

Figure 2. Blindfolding (Q²) presents the explanation of the predictive relevance analysis conducted for the structural model. To assess the strength and predictive quality of the proposed structural model, an inner model analysis was carried out using several key indicators, namely the coefficient of determination (R^2 and Adjusted R^2), the Q^2 value (predictive relevance), and the Standardized Root Mean Square Residual (SRMR) as an overall measure of model fit. The R^2 value indicates the extent to which the variance in the endogenous constructs can be explained by the exogenous constructs in the model, while a Q^2 value greater than 0 indicates the presence of predictive relevance.

4.4. Direct Hypothesis Testing

Table 3.
Direct Hypothesis Testing.

Direct path		β	M	STDEV	T-statistics	p-values
H1	IP → MP	0.212	0.215	0.072	2.961	0.003
H2	MC → MP	0.253	0.256	0.070	3.592	0.000
H3	PA → MP	0.277	0.273	0.073	3.778	0.000
H4	PPC → MP	0.226	0.219	0.060	3.778	0.000
H5	IP → MC	0.491	0.500	0.068	7.171	0.000
H6	IP → PA	0.470	0.476	0.071	6.597	0.000
H7	IP → PPC	0.246	0.247	0.073	3.366	0.001
H8	MC → PPC	0.275	0.276	0.077	3.558	0.000
H9	PA → PPC	0.183	0.174	0.069	2.64	0.009

Note (s): MC (Marketing Capability); PA (Product Advantage); PPC (Perceptual Product Congruity); MC (Market Performance).

Based on Table 3, all hypotheses from H1 to H9 are statistically significant ($p < 0.05$), indicating that the structural model developed in this study is supported by empirical data.

H$_1$ indicates that Innovative Performance (IP) has a positive and significant effect on Market Performance (MP) (β = 0.212; t = 2.961; p = 0.003). This means that the higher the innovative performance of a business, the greater its market performance.

H$_2$ tests the effect of Marketing Capability (MC) on Market Performance, and the result is significant (β = 0.253; t = 3.592; p = 0.000). This shows that strong marketing capabilities directly contribute to improved market performance.

H$_3$ confirms that Product Advantage (PA) significantly affects Market Performance (β = 0.277; t = 3.778; p = 0.000), meaning that product superiority positively impacts market outcomes.

H$_4$ shows that Perceptual Product Congruity (PPC) also significantly influences Market Performance (β = 0.226; t = 3.778; p = 0.000), suggesting that consumers' perception of product congruity drives better market performance.

H$_5$ demonstrates that Innovative Performance has a strong influence on Marketing Capability (β = 0.491; t = 7.171; p = 0.000). This indicates that innovation directly enhances a business's marketing capacity.

H$_6$ tests the effect of Innovative Performance on Product Advantage, which is also significant (β = 0.470; t = 6.597; p = 0.000), suggesting that more innovative businesses tend to produce superior products.

H$_7$ shows that Innovative Performance positively affects Perceptual Product Congruity (β = 0.246; t = 3.366; p = 0.001), meaning that innovation contributes to forming positive consumer perceptions of product congruity.

H$_8$ confirms that Marketing Capability has a significant impact on Perceptual Product Congruity (β = 0.275; t = 3.558; p = 0.000), indicating that marketing ability influences how the market perceives the product.

H$_9$ demonstrates that Product Advantage also significantly affects Perceptual Product Congruity (β = 0.183; t = 2.640; p = 0.009), suggesting that superior products shape consumers' perception of product relevance to their needs.

Thus, all paths from H1 to H9 show consistent and significant results, supporting the theoretical model developed in this study.

4.5. Mediation Analysis (Variance Accounted For / VAF)

Table 4.
Mediation Analysis (Variance Accounted For / VAF).

Pathways		P-values	VAF
H10	IP → MC → MP	0.007	43.34%
H11	MC → PPC → MP	0.022	23.46%
H12	IP → PPC → MP	0.027	25.51%
H13	IP → PA → MP	0.007	44.46%
H14	PA → PPC → MP	0.036	23.75%

Note(s): MC (Marketing Capability); PA (Product Advantage); PPC (Perceptual Product Congruity); MC (Market Performance).

Table 4 presents the results of the Variance Accounted For (VAF) evaluation to measure the degree of mediation contribution in explaining the relationship between independent and dependent variables. According to interpretation guidelines, a VAF value between 20% and 80% indicates partial mediation, while a value below 20% suggests no meaningful mediation.

The results show that all mediation paths in the model have VAF values above 20%, indicating that all relationships are partially mediated.

In H10, the mediation path from Innovative Performance (IP) through Marketing Capability (MC) to Market Performance (MP) records a VAF value of 43.34%, demonstrating a substantial mediation contribution, though not completely dominating the direct effect.

A similar pattern is observed in H13, the path from IP → Product Advantage (PA) → MP, with a VAF value of 44.46%, indicating that a significant portion of the influence of IP on market performance flows through the creation of product advantage.

Meanwhile, the paths in H11 (MC → Perceptual Product Congruity (PPC) → MP), H12 (IP → PPC → MP), and H14 (PA → PPC → MP) show VAF values between 23.46% and 25.51%, also falling under the category of partial mediation. These findings suggest that while the direct effects remain significant, the mediation paths through PPC contribute meaningfully to strengthening causal relationships in the model.

Thus, these results confirm that all mediation mechanisms in the model function effectively, albeit partially, and enhance the understanding of the complexity of indirect influences among the variables.

Overall, the VAF evaluation provides additional evidence that the mediation mechanisms in this model play a significant partial role, and that the mediating variables—Marketing Capability, Product Advantage, and Perceptual Product Congruity—empirically function as key links between innovative performance and a company's market performance.

4.6. Importance-Performance Map Analysis (IPMA)

Table 5.
Importance-Performance Map Analysis (IPMA).

Variable	Performance	Importance			
		Marketing Capability	Product Advantage	Perceptual Product Congruity	Market Performance
Innovative Performance	72.109	0.491	0.470	0.246	0.212
Marketing Capability	71.689			0.275	0.253
Product Advantage	71.323			0.183	0.277
Perceptual Product Congruity	72.844				0.226
Market Performance	73.047				

Based on the data analysis presented in Table 5, the performance level of each research variable can be interpreted through the average values measured using a Likert scale of 1 to 5. The conversion into percentages shows that Innovative Performance reaches 68.22% (mean score: 72.109), indicating a potential improvement margin of 31.78%, particularly by leveraging the strong influence of Marketing Capability (0.491) and Product Advantage (0.470).

Marketing Capability itself demonstrates a performance level of 68.42% (mean score: 71.689), with a potential increase of 31.58%, where optimization can focus on strengthening Perceptual Product Congruity (0.275) and Market Performance (0.253). Meanwhile, Product Advantage records a performance level of 68.12% (mean score: 71.323), still allowing an improvement margin of 31.88% through its contribution to Market Performance (0.277) and Perceptual Product Congruity (0.183).

Perceptual Product Congruity reaches 69.33% (mean score: 72.844), leaving a 30.67% opportunity for further improvement, particularly through intervention in Market Performance (0.226). As the endogenous variable, Market Performance stands at 69.57% (mean score: 73.047), with a development potential of 30.43%, which can be achieved by reinforcing its supporting exogenous variables.

Overall, these findings reveal that all variables still have room for performance enhancement of approximately 30–32%. The strategic implication is the need for targeted interventions in key factors such as Marketing Capability and Product Advantage to drive growth in Innovative Performance, while simultaneously strengthening product perception and market performance to achieve more holistic optimization. To ease the interpretation of this table, the evaluation of performance and importance is visualized in the following research model.
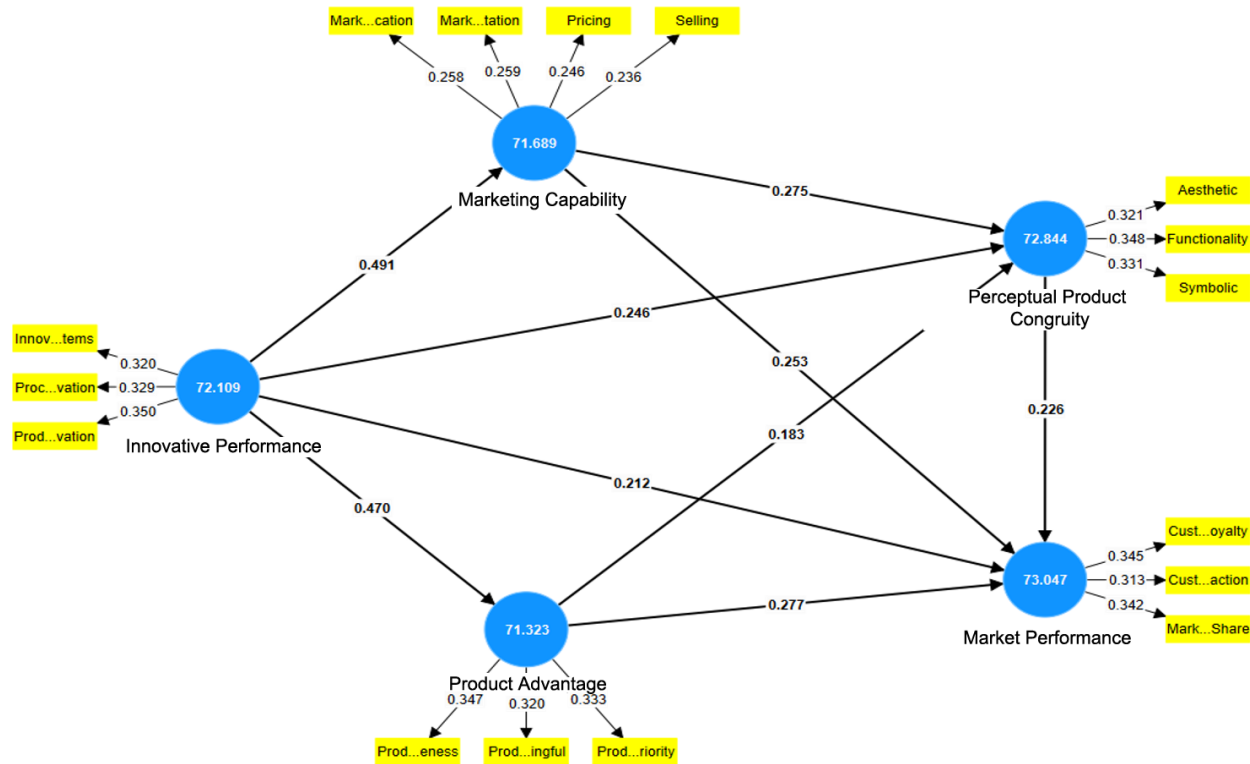
Figure 3.
IPMA Analysis Visualization.

Figure 3. IPMA Analysis Visualization provides a visual representation of the performance levels of each variable, indicated by the percentage values shown within the circles of each construct. The values along the paths represent the importance of each exogenous variable in relation to its corresponding endogenous variable.

This study measures the level of importance to evaluate the magnitude of the total effect exerted by exogenous variables on endogenous variables within the research model. A high importance value indicates a more dominant influence of an exogenous variable on the targeted endogenous construct. Specifically, this study applies the Importance-Performance Map Analysis (IPMA) approach to the three endogenous variables in the structural model.

The importance analysis considers not only direct effects but also indirect effects among variables, providing a comprehensive understanding of the contribution of each predictor. Through this approach, key variables that exert the most significant impact on the endogenous constructs can be identified, serving as a foundation for prioritizing strategic decision-making.

The results of the importance analysis offer a strong empirical basis for understanding the mechanisms of influence among variables in the structural model, while also providing valuable insights for the development of future performance improvement strategies.
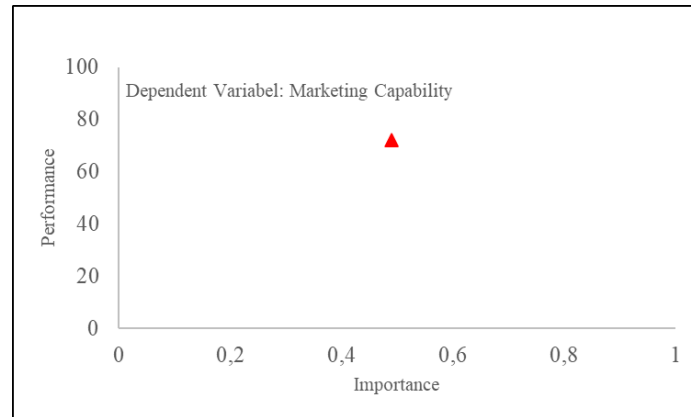
Figure 4.
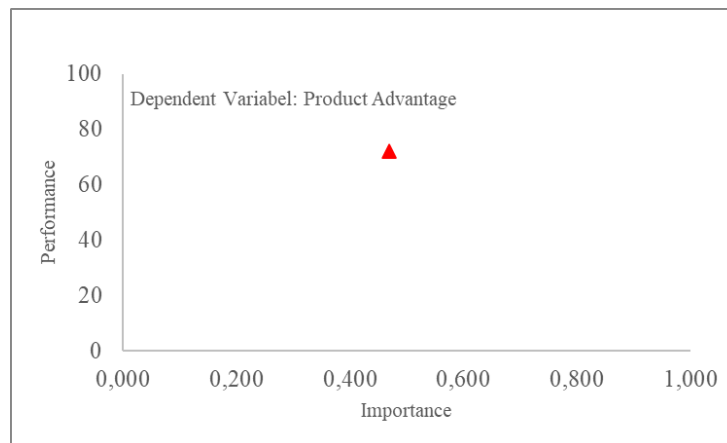IPMA on Marketing Variables *Capability*.

Figure 5.
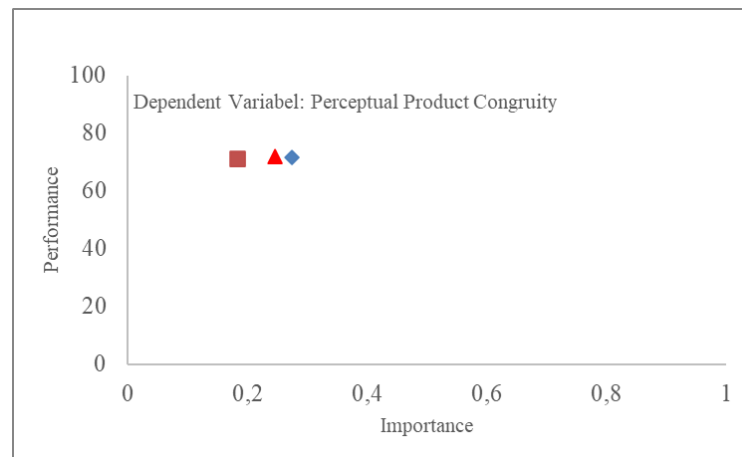IPMA on Variable Product Advantage.

Figure 6.
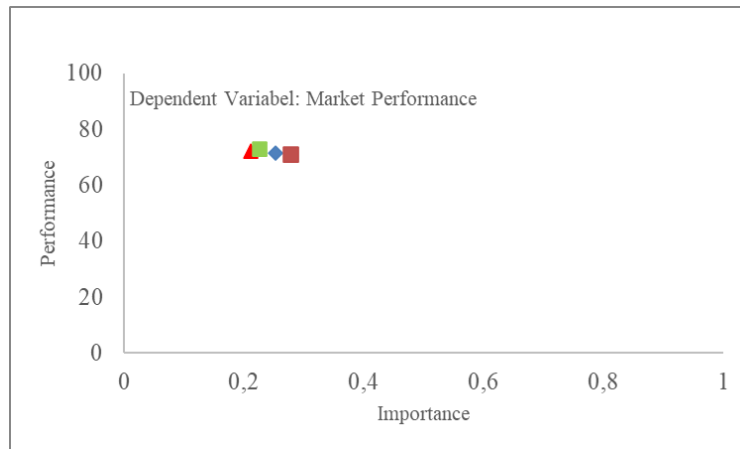IPMA on Variable Perceptual Product Congruity.

Figure 7.
IPMA on Variable Market Performance.

The importance-performance mapping visualization in Figure 4-7 shows the role of the Innovative Performance variable in shaping Marketing Capability. The variable has a direct influence on the exogenous variable. In general, the importance of the variables in this study is relatively balanced in predicting improvements in Marketing Capability. Innovative Performance is a variable that has an importance level with a total effect value of 0.491. When viewed from the current level of variable performance, Innovative Performance is at a level of 72.11% so that the development potential is still 27.89%. This development potential is also still relatively close to the research variables.

By considering the importance and performance of each variable that is a predictor of marketing capability, this study recommends optimizing Innovative Performance for the development of marketing capability in the future. This indicates that MSMEs have ample room to increase their innovation capacity to strengthen Marketing Capability. By optimizing Innovative Performance, MSMEs can more effectively utilize existing resources, create more valuable products, and respond to evolving market trends.

Therefore, focusing on innovation development not only complements basic resource needs, but also becomes a key catalyst in building sustainable and competitive marketing capabilities in the future.

4.7. Multi-Group Analysis (MGA)

A comparative analysis was conducted based on length of business (SMEs <5 years and >5 years). The results show that:

- The influence of Innovative Performance → Market Performance is stronger in SMEs that have been operating for >5 years.
- New SMEs (<5 years) are more influenced by Perceptual Product Congruity in terms of improving market performance.

5. Discussion

This study highlights the role of Perceptual Product Congruity (PPC) as a mediating mechanism in improving market performance (MP) through three main variables: innovative performance (IP), marketing capability (MC), and product advantage (PA). PPC acts as a psychological bridge between consumer perceptions and the identity of products offered by small and medium enterprises (SMEs).

5.1. Innovative Performance → Marketing Capability

Results show that innovative performance has a highly significant direct influence on marketing capability ($\beta = 0.491$; $p < 0.001$). Innovations in products, processes, and management strengthen

responsiveness to market needs. The theory that reinforces this is the Dynamic Capabilities Theory, where innovation enables the strategic flexibility of MSME marketing.

5.2. Innovative Performance → Product Advantage

The coefficient β = 0.470 (p < 0.001) indicates that the higher the innovation, the higher the product excellence. Superior product innovation creates differential added value against competitors. This strengthens the role of Product Differentiation Theory in the competitive achievement of MSMEs.

5.3. Innovative Performance → Perceptual Product Congruity

Innovation also influences the congruence of product perceptions with customer preferences (β = 0.246; p = 0.001). The more consumers' perceptions of the symbolic value of the product match, the greater the potential for loyalty. This is consistent with Sirgy [21] Self-Congruence Theory.

5.4. Marketing Capability → Perceptual Product Congruity

The empirical results (β = 0.275; p < 0.001) confirm that a strong marketing strategy strengthens the perception of product alignment with consumer values. This suggests that market perceptions are shaped not only from product quality, but from how the product is communicated and positioned.

5.5. Product Advantage → Perceptual Product Congruity

Product excellence drives perceptions that are consistent with consumer expectations (β = 0.183; p = 0.009). Products that are innovative and have technical advantages are more easily emotionally associated by consumers.

5.6. Innovative Performance → Market Performance

Innovation contributes directly to market performance (β = 0.212; p = 0.003), but not as strongly as the indirect effect. This indicates that to create a broader impact, innovation requires the support of other capabilities.

5.7. Marketing Capability → Market Performance

Marketing capability has a direct and significant effect on market performance (β = 0.253; p < 0.001), indicating the important role of marketing in MSME growth strategies.

5.8. Perceptual Product Congruity → Market Performance

Perceptual congruence has a strong influence on market performance (β = 0.226; p < 0.001). This finding is in line with the study of Sheeraz et al. which emphasizes the importance of consumer-brand congruity in shaping customer loyalty and satisfaction [22].

5.9. Product Advantage → Market Performance

Product superiority was a significant predictor (β = 0.277; p < 0.001), reinforcing the importance of value-added uniqueness as a competitive advantage.

5.10. Innovative Performance → Market Performance through Marketing Capability

The results of testing hypothesis H10 show that Marketing Capability (MC) acts as a significant mediator in the relationship between Innovative Performance (IP) and Market Performance (MP), with coefficient β = 0.124, t-statistic = 2.713, and p-value = 0.007. Statistically, this finding affirms that marketing capability is not just a complement to innovation, but a transformational mechanism that enables innovative results to be converted into concrete market achievements.

5.11. Marketing Capability → Market Performance through Perceptual Product Congruity

The results of testing hypothesis H11 show that Perceptual Product Congruity (PPC) significantly mediates the relationship between Marketing Capability (MC) and Market Performance (MP), with a mediation coefficient value of $\beta = 0.062$, t-statistic = 2.291, and p-value = 0.022.

This finding confirms that marketing capabilities not only function in technical marketing activities such as pricing and promotion, but also play an important role in shaping perceptions of product fit with consumer identity, preferences, and expectations. The role of PPC in this mediation path is a psychological mechanism that bridges marketing prowess with real impact in the market.

5.12. Innovative Performance → Market Performance through Perceptual Product Congruity

The test results for hypothesis H12 show that Perceptual Product Congruity (PPC) significantly mediates the effect of Innovative Performance (IP) on Market Performance (MP), with a mediation coefficient $\beta = 0.056$, t-statistic value = 2.215, and p-value = 0.027.

This finding statistically confirms that high innovative performance may not automatically result in strong market performance if it is not communicated and perceived as aligned by consumers. Therefore, PPC acts as a psychological mechanism that bridges innovation and market outcomes, i.e. consumers' perception of the fit between the product offered and their personal identity, expectations and values.

5.13. Innovative Performance → Market Performance through Product Advantag

The results showed that innovative performance indirectly affects market performance through product advantage with a coefficient value of $\beta = 0.130$ and t = 4.762, which means that this relationship is statistically significant.

This means that when MSME actors are able to innovate consistently in their products and processes, these innovations increase the product advantages perceived by consumers.

This advantage in turn strengthens the position of MSMEs in the market. In other words, innovation needs to produce products that are truly superior in the eyes of customers in order to have a significant impact on market performance.

This finding is in line with the Resource-Based View (RBV) approach and studies from Healy et al. which state that product advantage is the main pathway from innovation to competitive advantage. Without product advantage, innovation is difficult to have a real market impact [23].

5.14. Effect of Product Advantage → Market Performance through Perceptual Product Congruity

Empirical findings show that product advantage also affects market performance through perceptual product congruity with a value of $\beta = 0.089$ and t = 3.601, which is also significant.

This shows that the product advantage owned by MSMEs strengthens the perception of congruity between the product and the consumer's self-image. When consumers feel that the product "fits" with their lifestyle and personal values, they will be more satisfied, loyal, and potentially increase sales. This effect then leads to improved market performance.

This finding is supported by Self-Congruence Theory [21] which states that consumers prefer products that reflect who they are or who they want to be. Therefore, product advantages that are not only technical but also symbolic will more effectively drive market results [22].

6. Conclusion

This study proves that innovative performance has a central role in improving the market performance of MSMEs in North Sumatra, both directly and indirectly through three strategic mediation channels: marketing capability, product advantage, and perceptual product congruity.

Directly, innovation has a significant impact on market performance. However, the greatest influence occurs through indirect channels, namely when innovation is able to encourage the formation

of superior products, adaptive marketing strategies, and consumer perceptions that are aligned with the product image.

1. Marketing capability is proven to be a strong mediator between innovation and market performance. The higher the marketing capability, the more effectively innovations are translated into commercial results.
2. Product advantage plays an important role as a link between innovation and market success, suggesting that product quality and uniqueness largely determine the competitiveness of MSMEs.
3. Perceptual product congruity is a psychological factor that bridges the relationship between business strategies and consumer preferences, emphasizing the importance of product imagery that matches consumers' self-values.

These results corroborate various theories such as Resource-Based View (RBV), Self-Congruence Theory, and Dynamic Capability Theory, which collectively explain that the competitive advantage of MSMEs does not only come from the product itself, but from how the product is perceived and marketed.

Thus, to sustainably improve market performance, MSME players need to combine meaningful innovation, strong marketing strategies, superior product creation, and build emotional bonds with consumers through alignment of product perceptions.

Institutional Review Board Statement:

This study was reviewed and approved by the Research Ethics Committee of the University of Sumatera Utara, Indonesia. All participants provided informed consent prior to their involvement in the research. The study procedures complied with the ethical standards of the institution.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Acknowledgement:

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