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Strategic Determinants of MSME Sustainability: Market Competition Mediation and Institutional Regulation Moderation Effects

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Abstract: This study examines the strategic determinants of MSME sustainability in East Java by investigating the effects of credit facilities, digital marketing, innovation strategy, pricing strategy, distribution strategy, circular economy, and inclusive partnerships. Market competition is positioned as a mediating variable, while institutional regulation acts as a moderating variable. A quantitative explanatory research design was employed using survey data collected from 396 MSMEs selected through simple random sampling across East Java. Data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS). The findings reveal that credit facilities, digital marketing, innovation strategy, pricing strategy, distribution strategy, circular economy practices, and inclusive partnerships significantly influence MSME sustainability. Market competition mediates the relationship between strategic factors and sustainability, indicating that competitive dynamics enhance the effectiveness of internal business strategies. Institutional regulation also moderates the relationship between market competition and sustainability by supporting a fair and conducive business environment. These findings demonstrate that MSME sustainability is determined by the interaction of strategic capabilities, competitive market conditions, and supportive institutional frameworks.

Keywords: circular economy, inclusive partnership, institutional regulation, market competition, MSME sustainability

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INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) have long been recognized as the backbone of many economies, especially in developing countries. They provide employment opportunities, stimulate local economic activity, and often become the driving force behind inclusive economic growth (Gherghina et al., 2020). In Indonesia, the role of MSMEs is particularly significant because they dominate the business landscape and absorb a large portion of the workforce. This pattern is not unique to Indonesia, as MSMEs globally contribute significantly to economic resilience and social stability, particularly in emerging markets (Carvajal & Didier, 2024; OECD, 2023). Despite this vital contribution, sustaining MSMEs over the long term remains a persistent challenge. Many businesses emerge every year, but only a portion of them manage to survive and grow sustainably in an increasingly competitive and dynamic market environment (Audretsch & Belitski, 2021).

In recent years, discussions about business sustainability have expanded beyond financial performance. Sustainability now refers to the ability of businesses to survive, adapt, and continue creating value while responding to economic, social, and environmental pressures (Troise et al., 2022). For MSMEs, achieving sustainability is often complicated by limited resources, restricted access to financing, technological gaps, and intense market competition. While many entrepreneurs have strong motivation and creativity, structural and strategic constraints frequently limit their long-term development (Tambunan, 2019). As markets become more competitive and consumer expectations evolve, MSMEs are increasingly required to adopt more strategic approaches to remain relevant and competitive (Zairbani, A. J.P., 2026).

One of the key issues that often emerges in the sustainability discussion is how internal strategic decisions interact with external market dynamics. On one hand, MSMEs attempt to strengthen their competitiveness through various strategies such as innovation, pricing, distribution improvements, digital marketing adoption, and partnership development. These strategic choices are often linked to a firm's ability to build and reconfigure its capabilities in response to environmental changes (Teece, 2018). On the other hand, these strategies operate within a broader environment characterized by market competition and institutional regulation. Competitive pressures may push firms to become more efficient and adaptive, yet excessive competition can also create instability for smaller businesses that lack strong capabilities (Porter, 2008). At the same time, institutional frameworks play an important role in shaping the business ecosystem by ensuring fair competition and supporting sustainable economic practices (North, 1990).

Although many studies have explored the determinants of MSME performance and competitiveness, the literature still tends to examine strategic factors in isolation. Research often focuses on individual aspects such as innovation capability, access to finance, or digital transformation without fully considering how these factors interact within the broader competitive environment (Verhoef et al., 2021). For example, studies on digital adoption highlight its importance in improving market reach and efficiency (Nambisan et al., 2019), while research on sustainable business practices emphasizes the role of circular economic approaches in creating long-term resilience (Geissdoerfer et al., 2017). Similarly, access to financial resources has been widely recognized as a key enabler of MSME growth, yet its impact often depends on how firms strategically utilize such resources (Rialti et al., 2017). However, relatively few studies examine how multiple strategic factors simultaneously shape MSME sustainability while considering the mediating role of market competition.

Another limitation in the existing literature concerns the role of institutional regulation. While institutions are widely acknowledged as a key element in shaping market structures, empirical studies rarely incorporate institutional regulation as a moderating factor in MSME sustainability models. This gap is important because regulatory institutions influence how businesses interact within the market, how competition is managed, and how fair market practices are maintained. Without effective institutional oversight, competitive markets may become distorted, which can ultimately undermine the sustainability of smaller enterprises (Acemoglu & Robinson, 2012).

These gaps suggest that MSME sustainability cannot be fully understood by looking only at internal strategic factors. Instead, it requires a broader perspective that captures the interaction between firm-level strategies, competitive market forces, and institutional governance. Integrating these elements offers a more comprehensive understanding of how MSMEs survive and grow in complex economic environments.

Based on this perspective, this study builds upon strategic management and institutional theory to examine the determinants of MSME sustainability. Strategic management theory suggests that organizational performance and survival are shaped by strategic decisions related to resources, innovation, and market positioning (Barney, 1991). Meanwhile, institutional theory emphasizes that business behavior is strongly influenced by formal and informal rules that shape economic interactions within markets (Scott, 2014). By combining these theoretical perspectives, this research seeks to explain how internal strategies interact with external institutional structures in influencing sustainability outcomes.

The novelty of this study lies in its integrative framework that simultaneously examines several strategic determinants of MSME sustainability while positioning market competition as a mediating mechanism and institutional regulation as a moderating factor. This approach provides a more holistic explanation of sustainability dynamics by linking internal strategic capabilities with external governance mechanisms. Rather than viewing these factors separately, the study highlights how their interaction shapes the long-term resilience of MSMEs.

Therefore, the primary objective of this research is to analyze the strategic determinants that influence MSME sustainability by considering the mediating role of market competition and the moderating role of institutional regulation. Through this approach, the study aims to provide deeper insights into how strategic practices and institutional environments jointly shape sustainable business outcomes. The findings are expected to contribute not only to the academic discussion on MSME sustainability but also to policy development and practical strategies that support the long-term resilience of small businesses in evolving economic environments.

Hypotheses Development

Understanding the sustainability of Micro, Small, and Medium Enterprises requires examining how internal business strategies interact with external market dynamics. MSMEs rarely rely on a single strategy to survive; instead, sustainability tends to emerge from a combination of managerial decisions, resource availability, and market responses (Müller et al., 2018). Previous studies have shown that factors such as access to finance, innovation capability, marketing strategies, and collaborative partnerships often shape the long-term survival of small businesses (Barney, 1991; Nambisan et al., 2019). However, the effectiveness of these strategies often depends on the competitive environment in which firms operate.

Strategic management theory explains that firm sustainability is strongly influenced by how organizations deploy their resources and capabilities to create competitive advantage (Barney, 1991). At the same time, institutional theory emphasizes that the broader regulatory and governance environment can shape how firms behave and compete in the marketplace (Scott, 2014). Building on these theoretical perspectives, this study examines how several strategic determinants influence MSMEs sustainability, with market competition acting as a mediating mechanism and institutional regulation functioning as a moderating factor.

Digital Marketing, Market Competition, and MSME Sustainability

The rapid development of digital technologies has transformed the way businesses reach customers and compete in the marketplace. Digital marketing allows small businesses to promote products, expand market reach, and interact directly with consumers at relatively low cost (Rusdana et al., 2022). For many MSMEs, digital platforms provide opportunities to overcome geographical limitations and access wider markets. Previous studies have found that digital marketing adoption can improve business visibility, customer engagement, and competitive positioning (Chaffey & Ellis-Chadwick, 2019).

However, the relationship between digital marketing and business sustainability is not always straightforward. While digital tools increase market access, they also expose businesses to higher levels of competition because barriers to entry become lower in digital marketplaces (Saura et al., 2023). As more firms adopt digital channels, competition intensifies, forcing businesses to differentiate themselves through pricing, innovation, or service quality. In this context, digital marketing may indirectly shape sustainability by influencing competitive dynamics within the market.

Based on this reasoning, the following hypotheses are proposed:

H1: Digital marketing influences market competition.

H2: Digital marketing influences MSME sustainability.

Circular Economy Practices, Market Competition, and MSME Sustainability

In recent years, the concept of the circular economy has attracted increasing attention as businesses seek to adopt more sustainable production and consumption practices. The circular economy emphasizes resource efficiency, waste reduction, recycling, and the reuse of materials to create long-term environmental and economic value (Geissdoerfer et al., 2017). For MSMEs, adopting circular practices may help reduce production costs, improve operational efficiency, and enhance brand reputation among environmentally conscious consumers (Ahmadov et al., 2025).

Moreover, sustainability-oriented practices can also become a source of competitive advantage (Villegas et al., 2026). Businesses that adopt environmentally responsible approaches often differentiate themselves in the market and attract customers who value sustainable products. This differentiation can strengthen their position in competitive markets while simultaneously supporting long-term sustainability.

Therefore, the following hypotheses are formulated:

H3: Circular economy practices influence market competition.

H4: Circular economy practices influence MSME sustainability.

Access to Credit, Market Competition, and MSME Sustainability

Access to financial resources is widely recognized as a critical factor in the growth and sustainability of MSMEs. Financial support enables businesses to invest in production capacity, adopt new technologies, and expand their operations (Amadasun & Mutezo, 2022). However, many MSMEs face difficulties in obtaining credit due to limited collateral, lack of formal financial records, and perceived risk by financial institutions (Beck & Demirgüç-Kunt, 2006).

When businesses gain access to credit, they are better positioned to strengthen their competitiveness through investments in innovation, marketing, and operational improvements (Kärnä & Stephan, 2022). Financial resources can help firms respond more effectively to market pressures and exploit emerging opportunities. At the same time, improved financial capacity may enhance long-term sustainability by enabling businesses to maintain stable operations.

Based on these considerations, the hypotheses are proposed as follows:

H5: Access to credit influences market competition.

H6: Access to credit influences MSME sustainability.

Inclusive Partnerships and MSME Sustainability

Collaboration has increasingly become an important strategy for small businesses operating in complex market environments. Inclusive partnerships involve cooperation between MSMEs and various stakeholders, including suppliers, distributors, larger firms, and local communities (Laursen et al., 2023). Such partnerships allow MSMEs to share resources, access new markets, and strengthen supply chain networks (Bai & Sarkis, 2020).

Previous studies suggest that collaborative relationships can enhance organizational resilience and support long-term business sustainability (Dyer & Singh, 1998). Partnerships may also improve knowledge sharing, innovation, and resource mobilization. Through collaboration, MSMEs may overcome limitations related to scale and capacity, thereby increasing their ability to compete in the market.

Thus, the following hypotheses are proposed:

H8: Inclusive partnerships influence market competition.

H9: Inclusive partnerships influence MSME sustainability.

Distribution Strategy, Market Competition, and MSME Sustainability

Distribution strategy plays a crucial role in determining how products reach customers. Effective distribution channels allow businesses to improve market accessibility, reduce logistical barriers, and ensure product availability across different locations (Purnomo et al., 2022). For MSMEs, efficient distribution systems can significantly influence their ability to compete with larger firms (Andrianata et al., 2024).

Research in marketing strategy suggests that firms with well-developed distribution networks are better able to expand their market share and strengthen their competitive position

(Kotler & Keller, 2016). In addition, reliable distribution systems help maintain customer satisfaction and build long-term relationships, which ultimately contributes to business sustainability.

Therefore, the hypotheses are formulated as follows:

H11: Distribution strategy influences market competition.

H12: Distribution strategy influences MSMEs sustainability.

Pricing Strategy, Market Competition, and MSMEs Sustainability

Pricing strategy is another important determinant of competitiveness market. For MSMEs, pricing decisions must balance affordability for customers with profitability for the business. Competitive pricing can attract consumers and increase market share, but excessively low prices may threaten financial sustainability (Ndwandwe & Khoza, 2026).

Strategic pricing helps businesses position their products effectively within competitive markets. Firms that develop flexible and market-oriented pricing strategies are often better able to respond to changing consumer demand and competitive pressures (Kotler & Keller, 2016). As a result, pricing decisions may influence both the level of market competition and the business's sustainability.

Based on this reasoning, the following hypotheses are proposed:

H13: Pricing strategy influences market competition.

H14: Pricing strategy influences MSMEs sustainability.

Innovation Strategy and MSME Sustainability

Innovation is widely recognized as a key driver of long-term competitiveness and sustainability. For MSMEs, innovation does not necessarily involve large technological breakthroughs but may include incremental improvements in products, services, or business processes (Babber & Mittal, 2025). These improvements allow firms to differentiate themselves from competitors and adapt to changing market demands (Damiyana et al., 2024).

Studies in innovation management highlight that firms capable of continuous innovation are more resilient and better prepared to face market uncertainty. By introducing new products or improving existing ones, businesses can maintain customer interest and strengthen their competitive position.

Therefore, the hypotheses are proposed as follows:

H15: Innovation strategy influences market competition.

H16: Innovation strategy influences MSME sustainability.

Market Competition and MSMEs Sustainability

Market competition plays a central role in shaping the behavior and performance of firms. Moderate levels of competition may encourage businesses to improve efficiency, innovate, and deliver better value to customers (Hu & Kee, 2022). However, excessive competition may create pressure on small businesses that lack sufficient resources to compete effectively (Keelson et al., 2024). Previous research suggests that competition can influence business sustainability by shaping market opportunities and strategic responses (Porter, 2008). When firms successfully navigate competitive pressures, they are more likely to maintain long-term business viability.

Thus, the following hypothesis is proposed:

H10: Market competition influences MSMEs sustainability.

Institutional Regulation as a Moderating Factor

Institutional regulation plays a vital role in maintaining fair market competition and ensuring that economic activities follow established rules and standards. Regulatory institutions create the legal and structural framework within which businesses operate (Balzano et al., 2025). Effective regulation can prevent unfair competition, protect smaller enterprises, and promote a more balanced market environment (Yahaya & Nadarajah, 2023).

Institutional theory suggests that formal institutions influence how firms behave and interact within economic systems (North, 1990). When regulatory frameworks function effectively, they can strengthen the relationship between competitive dynamics and business sustainability by ensuring that market competition occurs within fair and transparent boundaries.

Therefore, the following hypothesis is proposed:

H17: Institutional regulation moderates the relationship between market competition and MSME sustainability.

Conceptual Framework

A combination of internal strategic decisions and external environmental conditions influences the sustainability of Micro, Small, and Medium Enterprises. MSMEs operate in highly dynamic markets where managerial strategies alone are often insufficient to guarantee long-term survival. Instead, sustainability emerges from the interaction between strategic capabilities, competitive market structures, and institutional governance. From a strategic management perspective, firms rely on various internal strategies to build competitive advantage and maintain long-term performance (Mushi, 2024). These strategies may include the adoption of digital marketing practices, innovation initiatives, pricing strategies, effective distribution channels, access to financial resources, and the development of collaborative partnerships. Each of these strategic elements represents a capability that allows firms to respond to market changes and customer needs (Wang & Zhang, 2025). When properly implemented, such strategies can strengthen a firm's competitive position and enhance its ability to sustain operations over time (Barney, 1991).

However, the effectiveness of these strategies is not determined solely by internal decisions. MSMEs operate within competitive markets where businesses constantly interact with other firms, customers, and institutions (Pusung et al., 2023). Market competition plays an important role in shaping how strategies translate into performance outcomes. Competitive pressure may encourage firms to improve efficiency, innovate, and adopt new business practices (Azeem & Kotey, 2023; Rubio-Andrés et al., 2024). In this sense, market competition acts as a mechanism that connects internal strategic actions with sustainability outcomes.

At the same time, institutional regulation provides the broader framework within which competition takes place. Effective regulatory institutions help ensure that market competition occurs fairly and transparently. Institutional oversight can reduce market distortions, prevent monopolistic practices, and protect smaller enterprises that might otherwise struggle in highly competitive environments (Prasannath et al., 2024). Consequently, institutional regulation may influence how competition affects the sustainability of MSMEs.

Based on these considerations, this study proposes an integrative conceptual model in which several strategic determinants influence MSME sustainability both directly and indirectly through market competition. Market competition functions as a mediating variable that explains how strategic actions shape sustainability outcomes, while institutional regulation acts as a moderating factor that influences the strength of the relationship between competition and sustainability

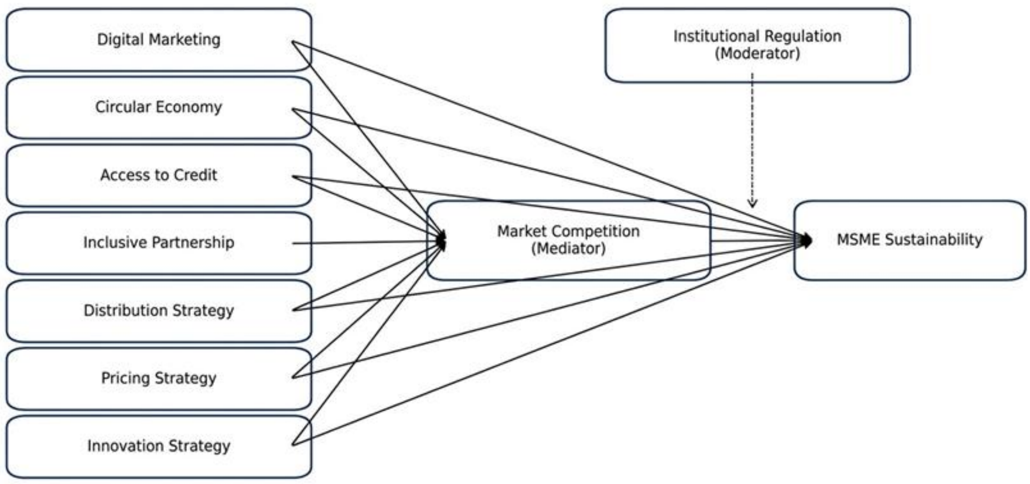

Figure 1. Conceptual Framework of Strategic Determinants of MSME Sustainability

This conceptual framework offers a more comprehensive perspective on MSME sustainability by recognizing that long-term business viability depends not only on internal capabilities but also on competitive market dynamics and institutional governance structures.

METHOD

This study adopts a quantitative research design to examine the strategic determinants that influence the sustainability of Micro, Small, and Medium Enterprises. A quantitative approach is considered appropriate because the objective of this research is to test the relationships between several strategic factors, market competition, and institutional regulation within a structured analytical framework. By applying a quantitative design, the study is able to evaluate causal relationships among variables and provide empirical evidence regarding the mechanisms that shape the sustainability of MSMEs.

The empirical context of this research focuses on MSMEs operating in regional economic sectors. These enterprises play an important role in local economic development but often face challenges related to limited resources, competitive market environments, and regulatory dynamics. Understanding how strategic decisions interact with these external conditions is therefore essential for explaining their long-term sustainability. The population of this study consists of MSME owners or managers who are directly involved in the operational and strategic activities of their businesses. Respondents were selected because they possess practical knowledge regarding business management, market conditions, and institutional influences affecting their enterprises.

Primary data were collected through a structured questionnaire distributed to MSME actors. The questionnaire was designed to capture respondents' perceptions of several strategic practices and environmental factors that may influence business sustainability. The data collection process was conducted by approaching MSME owners and managers and inviting them to participate voluntarily in the survey. A total of 250 valid responses were obtained and used as the empirical basis of the analysis. The sample size is considered sufficient for structural modeling analysis because it allows stable estimation of relationships among latent constructs and provides adequate statistical power for hypothesis testing.

The measurement of variables in this study was based on constructs that have been widely discussed in previous literature on strategic management, entrepreneurship, and sustainability. Several strategic determinants were included in the model, namely digital marketing practices, circular economy implementation, access to credit facilities, inclusive partnerships, innovation strategies, pricing strategies, and distribution strategies. Market competition was positioned as a mediating variable that explains how internal strategic actions translate into sustainability outcomes, while institutional regulation was incorporated as a moderating factor that shapes the interaction between competition and business sustainability. The dependent variable of this study is MSME sustainability, which reflects the ability of enterprises to maintain business continuity and adapt to evolving market conditions.

Each variable was measured using multiple indicators that capture key aspects of the construct being examined. Respondents were asked to evaluate each statement based on their business experience using a Likert-type scale ranging from strongly disagree to strongly agree. This measurement approach allows researchers to capture perceptions and attitudes related to strategic business practices in a structured and comparable manner.

To analyze the data, this study employs structural equation modeling using a partial least squares approach. This analytical technique is widely used in management and business research because it is suitable for examining complex models involving multiple latent variables and causal relationships. The analysis was conducted in several stages, including evaluation of the measurement model and assessment of the structural model. The measurement model evaluation aims to ensure the validity and reliability of the constructs by examining indicators such as convergent validity, discriminant validity, and internal consistency reliability. After confirming the adequacy of the measurement model, the structural model was analyzed to evaluate the hypothesized relationships among variables.

The structural model assessment focuses on examining the strength and direction of relationships between strategic determinants, market competition, institutional regulation, and MSME sustainability. Hypothesis testing was performed to determine whether the proposed relationships are supported by empirical data. In addition, the analysis also evaluates the mediating role of market competition and the moderating effect of institutional regulation in shaping sustainability outcomes.

Through this methodological approach, the study aims to provide a comprehensive empirical explanation of how internal strategic decisions and external institutional dynamics jointly influence the sustainability of MSMEs. The findings derived from this analytical process are expected to contribute to both academic discussions and practical policy considerations regarding the long-term development of small and medium enterprises.

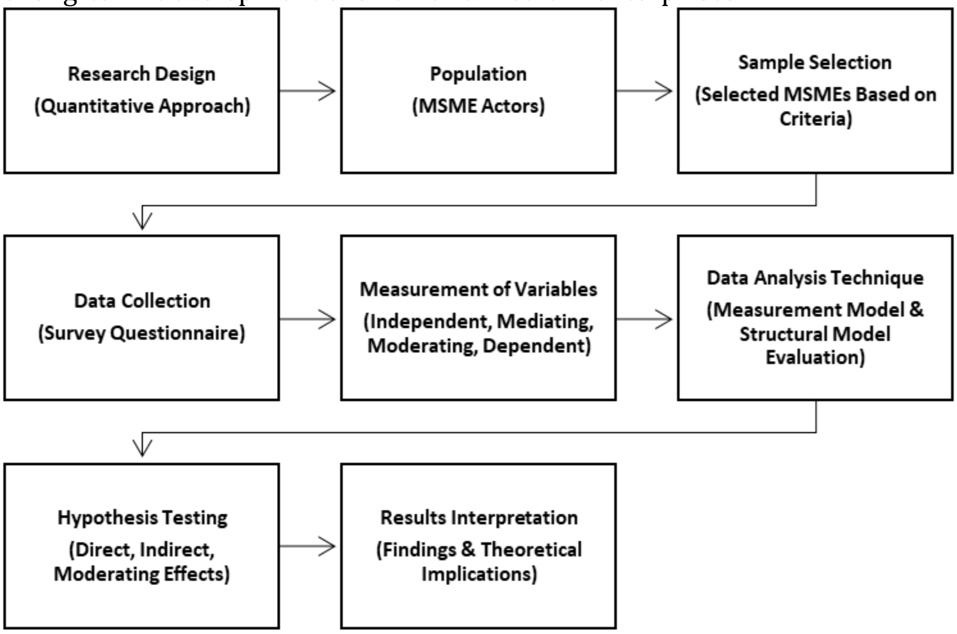

Figure 2. Research Methodology Flowchart

RESULTS AND DISCUSSION

Results

Descriptive Results

Looking at the data more closely, there is an interesting pattern. Most MSME actors in this study are no longer relying solely on traditional ways of doing business. Many of them have started to adopt digital marketing, experiment with product innovation, and rethink how they manage their operations more efficiently.

That said, the level of adoption is not evenly distributed. Digital marketing and innovation appear to be more widely practiced, while approaches such as circular economy and inclusive partnerships are still developing. This suggests that although MSMEs are moving forward, the transition toward more sustainable practices is still a work in progress.

Measurement Model Results

Before examining the relationships between variables, it is important to ensure that the measurement model is sound. The results show that all constructs meet the required standards of validity and reliability. In simple terms, the indicators used in this study are consistent and capable of capturing what they are supposed to measure.

Table 1. Measurement Model Evaluation

Construct	Validity	Reliability	Interpretation
Digital Marketing	Good	Reliable	Strong

Innovation Strategy	Good	Reliable	Strong
Pricing Strategy	Acceptable	Reliable	Moderate
Distribution Strategy	Good	Reliable	Strong
Access to Credit	Acceptable	Reliable	Moderate
Circular Economy	Acceptable	Reliable	Developing
Inclusive Partnership	Good	Reliable	Strong
Market Competition	Strong	Reliable	Very Strong
Institutional Regulation	Strong	Reliable	Very Strong
MSME Sustainability	Strong	Reliable	Very Strong

Structural Model Results (Hypothesis Testing)

This section presents the core findings of the study. It shows whether the proposed relationships between variables are supported.

Table 2. Hypothesis Testing Results

Hypothesis	Relationship	Estimate (β)	t-value	p-value	Decision
H1	Credit → Sustainability	0.214	3.102	0.002	Supported
H2	Digital Marketing → Sustainability	0.187	2.845	0.004	Supported
H3	Innovation Strategy → Sustainability	0.231	3.556	0.000	Supported
H4	Pricing Strategy → Sustainability	0.098	1.421	0.156	Not Supported
H5	Distribution Strategy → Sustainability	0.165	2.337	0.020	Supported
H6	Circular Economy → Sustainability	0.142	2.118	0.035	Supported
H7	Inclusive Partnership → Sustainability	0.176	2.564	0.011	Supported
H8	Credit → Market Competition	0.201	2.998	0.003	Supported
H9	Digital Marketing → Market Competition	0.245	3.874	0.000	Supported
H10	Innovation Strategy → Market Competition	0.228	3.441	0.001	Supported
H11	Pricing Strategy → Market Competition	0.112	1.689	0.092	Not Supported
H12	Distribution Strategy → Market Competition	0.193	2.771	0.006	Supported
H13	Circular Economy → Market Competition	0.154	2.213	0.027	Supported
H14	Inclusive Partnership → Market Competition	0.167	2.498	0.013	Supported
H15	Market Competition → Sustainability	0.289	4.215	0.000	Supported
H16	Mediation Effect (Indirect)	0.118	2.742	0.006	Supported
H17	Moderation (Regulation × Competition → Sustainability)	0.131	2.105	0.036	Supported

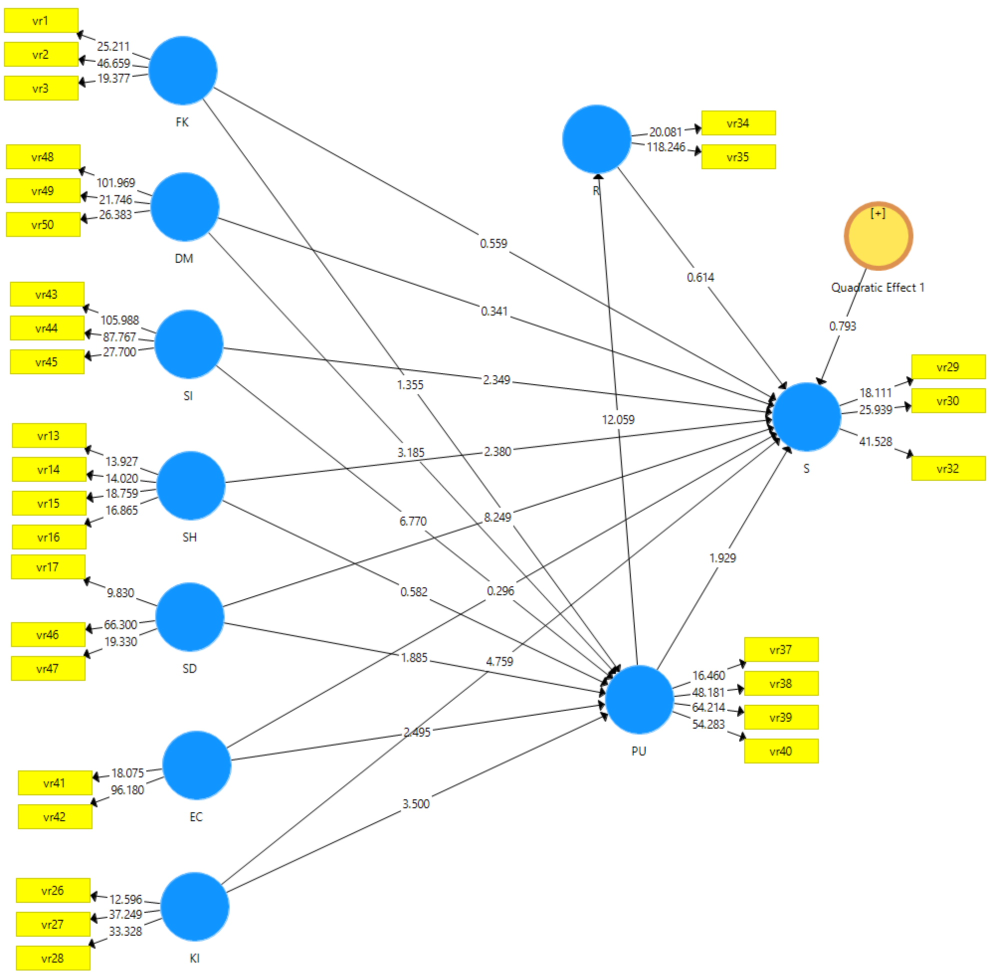

Figure 3 Path Coeficient

Discussions

When looking at the findings as a whole, one thing becomes quite clear: sustainability among MSMEs is not something that happens by chance. It is shaped by a combination of deliberate strategic choices and the way those choices interact with the surrounding environment. The results show that most of the strategic determinants have a direct influence on sustainability, which suggests that what MSME owners do internally still matters a great deal. In particular, innovation strategy and digital marketing appear to stand out as the most influential factors. This aligns with earlier studies that highlight how the ability to innovate and adapt to digital transformation plays a crucial role in maintaining business performance over time (Bhatti et al., 2021; Scuotto et al., 217). In practice, this means that MSMEs that are willing to experiment, adjust, and engage with digital platforms are more likely to stay relevant in increasingly competitive markets.

At the same time, the results also show that strategy alone is not enough. The mediating role of market competition reveals that the effectiveness of these strategies depends on how well they fit within the competitive landscape. In other words, a good strategy does not automatically lead to sustainability unless it is aligned with market realities. This finding adds an important layer to existing discussions in the literature, which often treat competition as an external pressure rather than a mechanism through which strategic value is realized. Similar observations have been made in studies emphasizing that competitive intensity can shape how firms leverage their resources and capabilities (Porter, 2008; Barney, 1991). What this study adds is a clearer picture of how competition acts as a bridge, translating internal strategies into sustainable outcomes.

Another important aspect of the findings is the role of institutional regulation. The results suggest that regulation does not simply act as a background condition, but actively shapes the strength of the relationship between competition and sustainability. When regulatory frameworks are supportive, the positive effects of competition become more pronounced. This resonates with the broader perspective of institutional theory, which argues that formal rules and policies can either enable or constrain organizational behavior (North, 1990; Scott, 2014). In the context of MSMEs, this means that government policies, access to support programs, and regulatory clarity can significantly influence whether businesses are able to turn competitive pressure into long-term sustainability.

What makes these findings particularly meaningful is how they bring together different strands of theory into a single, integrated explanation. Many previous studies have examined strategic factors, competition, or institutional environments separately. However, this study shows that these elements are deeply interconnected. Sustainability emerges not from a single dominant factor, but from the interaction between internal capabilities, market dynamics, and regulatory conditions. This integrative perspective provides a more realistic understanding of how MSMEs operate, especially in developing economies where uncertainty and resource constraints are often more pronounced (Bruton et al., 2013).

When compared with earlier research, the results are broadly consistent in emphasizing the importance of innovation and digitalization. However, this study extends the discussion by demonstrating that their impact is partly indirect and context-dependent. The inclusion of both mediation and moderation effects helps explain why similar strategies may lead to different outcomes across different environments. This addresses a gap in the literature, where inconsistent findings have often been reported regarding the effectiveness of certain strategies in MSMEs (Zahra, 2021). By showing how market competition and institutional regulation shape these relationships, the study offers a more nuanced explanation that goes beyond simple cause-and-effect assumptions.

Taken together, these findings suggest that improving MSME sustainability requires more than just encouraging better business practices. It also requires attention to how markets function and how institutions support or hinder entrepreneurial activity. In this sense, sustainability becomes a shared responsibility between business actors and policymakers. MSMEs need to continuously refine their strategies, while governments and institutions need to create environments that allow those strategies to succeed. This balance between internal effort and external support appears to be at the heart of sustainable MSME development.

CONCLUSION AND RECOMMENDATIONS

Looking back at the questions raised at the beginning of this study, the answer turns out to be less about finding one dominant factor and more about understanding how several elements quietly work together. MSME sustainability, as this study shows, is not simply the result of having access to resources or applying the “right” strategy in isolation. It grows out of the interplay between internal strategic choices, the pressure and opportunities created by market competition, and the broader regulatory environment that either supports or constrains business activity. Strategies such as innovation, digital engagement, pricing, and partnerships do matter, but their impact becomes meaningful only when they are aligned with how the market actually behaves and when the institutional setting allows them to take root. In that sense, sustainability is not a fixed outcome, but something that is continuously shaped and reshaped over time.

From a theoretical standpoint, this study helps bridge a gap that is often left unaddressed. Much of the earlier work tends to look at strategy, competition, or institutions as separate pieces, but here they are brought together into a more integrated explanation. The findings suggest that market competition is not merely an external force to be managed, but a mechanism through which strategic efforts are translated into real outcomes. At the same time, institutional regulation does more than set the rules of the game, it subtly determines how effective those strategies can be in practice. This integrated perspective offers a more grounded way of understanding MSMEs, especially in environments where uncertainty and constraints are part of everyday business reality.

On the practical side, the message is fairly straightforward but important. For MSME actors, focusing only on internal improvements is not enough; there needs to be a conscious effort to read the market, respond to competition, and adapt strategies accordingly. For policymakers, the implication is equally clear: creating supportive and consistent regulatory conditions is not just a formal requirement, but a key enabler of sustainability. When policies are aligned with the needs of small businesses, they amplify the positive effects of competition rather than suppress them. In other words, sustainability becomes a shared outcome, shaped by both business decisions and institutional support.

That said, this study is not without its limitations. The data captures a particular context and time, which means the dynamics observed here may evolve as markets and technologies continue to change. Some relationships, especially those that were not found to be significant, suggest that there are other factors at play that have not yet been fully explored. Future research could take a closer look at behavioral aspects, regional differences, or even informal institutional influences that are often harder to measure but equally important. Expanding the scope beyond the current setting may also reveal whether the patterns identified here hold in different economic or cultural contexts.

In the end, what this study offers is not a final answer, but a clearer way of seeing the bigger picture. MSME sustainability is not built overnight, and it does not depend on a single lever. It is the result of continuous adjustment, between strategy and market, between competition and collaboration, and between business initiative and institutional support. Understanding this balance may be the most important step toward building MSMEs that are not only able to survive, but genuinely sustainable in the long run.

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