INNOVATION AND RESILIENCE IN FRAGILE ECONOMIES: A CONCEPTUAL FRAMEWORK FOR SME PERFORMANCE

Isah Nda Isah
Department of Business Administration and Management,
Niger State Polytechnic, Zungeru
Isahisah1982@gmail.com
07067364369
Dr. Mohammed Ibrahim Naala
Department of Business Administration,
Ahmadu Bello University, 810211 Zaria
mninaala@abu.edu.ng
08035567041
Prof. SuleimanAbdullahi Karwai
Department of Business Administration,
Ahmadu Bello University, 810211 Zaria
karwaisa@yahoo.co.uk
08033298134
Prof. Usman Abubakar
Department of Local Government Administration and Policy Studies,
Ahmadu Bello university, Zaria
08133815776
Biousman46@gmail.com

Abstract
This paper develops a conceptual framework that links product, process, and market innovation to SME performance, emphasizing their complementarities and the moderating role of organizational resilience. Drawing on the Resource-Based View (RBV) and Dynamic Capabilities Theory (DCT), the study argues that innovation resources alone do not guarantee superior outcomes in fragile economies unless they are orchestrated through resilience. Resilience is theorized as a multidimensional capability comprising robustness, integrity, redundancy, resourcefulness, and rapidity, which conditions the performance effects of innovation and amplifies the synergies among innovation types. Prior research in emerging markets often examines innovation in isolation or treats resilience as an outcome, leaving unexplored how resilience shapes innovation–performance dynamics. To prepare for future empirical testing, a pilot study with 30 SMEs was conducted solely for instrument validation, confirming that the proposed measures are reliable and valid. The contribution of this paper is therefore conceptual: it advances theory by repositioning resilience from a passive outcome to an active moderating capability and by theorizing innovation complementarities as a source of performance advantage in volatile environments. The framework provides a foundation for subsequent empirical studies and practical insights for SMEs operating in fragile economies.

Keywords: *SME performance; product innovation; process innovation; market innovation; organizational resilience; complementarities; instrument validation*

Introduction
Small and Medium Enterprises (SMEs) are the backbone of Nigeria's economy, contributing substantially to employment generation, GDP, and innovation capacity (SMEDAN & National Bureau of Statistics, 2021; World Bank, 2022). Despite this importance, their survival and growth remain precarious because of persistent infrastructural deficits, unstable regulatory environments, and unpredictable customer demand (Akpan et al., 2022; Oiku, 2024). These vulnerabilities are compounded by high financing costs, weak technological adoption, and limited access to global value chains, all of which restrict the competitiveness of Nigerian SMEs (Aluko et al., 2024). In contrast, SMEs in Asian and Latin American economies often benefit from stronger industrial clusters, targeted policy support, and robust export linkages, which enhance their resilience and growth prospects (Aliasghar et al., 2023; Li et al., 2024; UNCTAD, 2024). Nigerian SMEs therefore operate under more fragile institutional and market conditions, amplifying their vulnerability to shocks and partly explaining their uneven performance outcomes.

Against this backdrop, innovation is widely recognised as a critical driver of competitiveness and long-term survival (Jaradat, Al-Hawamleh, & Altarawneh, 2025; Ahmed & Sandow, 2024). Nevertheless, most studies tend to examine innovation types; market, process, or product in isolation rather than as complementary strategies (Bogetoft et al., 2024). Evidence from emerging economies increasingly shows that firms rarely pursue a single innovation pathway; instead, they blend incremental improvements with more radical changes to sustain performance over time (Bhadra et al., 2024). In Nigeria, such complementarities remain underexplored, leaving an important gap in understanding how different innovation strategies interact to influence performance outcomes.

Alongside innovation, resilience is equally essential for SMEs operating in volatile environments (Lengnick-Hall et al., 2011; Duchek, 2020). Resilience enables firms to anticipate, absorb, and adapt to shocks while also exploiting new opportunities (Chandratreya, 2025; Li et al., 2024). Evidence from Southeast Asian economies such as Vietnam and Indonesia shows that resilience reinforces the benefits of innovation by helping SMEs sustain operations during crises (Huynh et al., 2022). In Nigeria,

however, resilience is still predominantly studied as an outcome of innovation or leadership rather than as a moderating capability that actively conditions how innovation translates into performance (Oiku, 2024; Ibidunni et al., 2025). This narrow treatment restricts theoretical development and overlooks the possibility that resilience may function as a dynamic capability shaping the effectiveness of multiple innovation types simultaneously.

To date, no study has modeled the interaction of product, process, and market innovation with resilience as a multidimensional moderator in African SMEs. This paper is conceptual and develops a framework that integrates innovation complementarities with organizational resilience to explain SME performance under institutional voids and persistent turbulence. Its boundary conditions lie in fragile economies such as Nigeria, where volatility is structural and systemic rather than episodic. The contribution of the study is the theoretical model itself, which positions resilience as an active moderating capability within the Resource-Based View (RBV) and Dynamic Capabilities Theory (DCT) traditions. To prepare for future empirical testing, the paper also reports on a pilot study that prevalidated the measurement instrument, confirming clarity, reliability, and validity of the scales. The pilot is strictly limited to instrument validation and does not test the model or its propositions

Literature Review and Theoretical Foundation

Innovation has long been recognized as a central driver of SME competitiveness and growth (OECD, 2018). Firms that invest in innovation are generally better positioned to differentiate themselves, capture new markets, and sustain profitability in competitive and turbulent environments (Bogetoft et al., 2024). Within the SME context, three categories of innovation are consistently linked to performance outcomes: product, process, and market innovation. Product innovation refers to the introduction of new or improved goods and services that enhance customer value and generate competitive advantage (Sarkar et al., 2024). Process innovation relates to the adoption of new methods of production or delivery that improve efficiency, reduce costs, or raise quality standards (Kiguru, 2025). Market innovation entails novel marketing practices, including branding strategies, pricing models, and distribution approaches, which enable firms to penetrate existing markets more effectively or create entirely new market segments (Otieno, 2024).

The role of innovation in shaping SME outcomes, however, is not uniform across regions. Evidence shows that innovation enhances performance, but the degree and form of this effect are highly context-dependent. In Asia, for example, process and product innovation are frequently associated with significant performance gains, reflecting the region's strong manufacturing intensity, technological adoption, and export orientation (Hoang et al., 2024; Vo et al., 2025). SMEs in countries such as Vietnam, South Korea, and China often benefit from government-supported innovation policies, industrial clusters, and integration into global value chains, which magnify the benefits of innovation activities (Tien et al., 2025). In contrast, African evidence reveals more uneven effects. Innovation outcomes on the continent are often shaped by institutional fragility, poor infrastructure, limited access to financing, and gaps in managerial and technical capacity (Kato, 2024; Ayalew & Xianxhi, 2020). Studies from Nigeria and Kenya suggest that while innovation can boost growth, many SMEs struggle to fully realize its benefits due to structural bottlenecks such as unreliable electricity, lack of digital infrastructure, and weak knowledge transfer systems (Aluko et al., 2024; Kiguru, 2025). These variations underscore that innovation's impact is contingent on context-specific capabilities that determine how well SMEs can implement, sustain, and scale innovative practices.

Alongside innovation, organizational resilience has emerged as a critical construct for understanding SME survival and competitiveness in uncertain environments. Resilience is broadly defined as a firm's ability to withstand shocks, adapt to disruptions, and exploit opportunities under uncertainty (Duchek, 2020). Kantur and İşeri-Say (2012, 2015) conceptualize resilience as comprising robustness, integrity, redundancy, resourcefulness, and rapidity. In practice, resilient SMEs can sustain operations during crises, reconfigure resources, and pivot business models more quickly than less resilient firms (Lengnick-Hall et al., 2011). The COVID-19 pandemic underscored the importance of resilience for SMEs globally, with firms able to rapidly adopt digital tools, diversify supply chains, or redesign product offerings demonstrating higher survival and recovery rates (Li et al., 2024; Carmeli & Hartmann, 2024).

The relevance of resilience is particularly pronounced in emerging markets, where volatility is structural rather than episodic. In Southeast Asia, research shows that resilience enables SMEs to cope with supply chain disruptions and market fluctuations, thereby reinforcing the benefits of innovation (Nguyen & Ngo, 2020). However, the sources of resilience in Africa often differ. African SMEs frequently rely on informal mechanisms such as networks, improvisation, and community trust to sustain operations during crises (Abubakar, 2019). For example, studies from Ghana and Nigeria reveal that entrepreneurs often draw on social capital and local networks to access resources, knowledge, or informal credit during shocks (Awosika & Tara Ndidi, 2023). These contrasts highlight the need for region-specific analysis, since resilience in Africa may rest less on formalized organizational routines and more on adaptive improvisation embedded in local contexts.

Innovation resources alone do not guarantee improved performance; they require orchestration through resilience (Teece, 2014). Product and process innovation often demand substantial resource commitments, exposing SMEs to risks if shocks disrupt resource flows. Market innovation requires flexibility and responsiveness to shifting consumer preferences, but without resilience, firms may struggle to adapt quickly. In such situations, innovation investments can paradoxically increase vulnerability instead of delivering positive performance outcomes. Empirical studies outside Africa confirm that resilience moderates the innovation–performance link. For instance, research in New Zealand's tourism sector found that resilience enhanced the performance benefits of innovation during post-disaster recovery (Chowdhury et al., 2019). Similarly, Annarelli and Nonino (2016) concluded that resilience functions as a strategic and operational capability that helps firms derive greater value from innovation in uncertain environments. More recent studies extend these findings, showing that resilience improves SMEs' ability to integrate innovation into long-term growth strategies (Halekotte et al., 2025; Koporcic et al., 2025).

Despite these advances, little is known about how resilience shapes the effectiveness of multiple innovation types in African SMEs. Existing research confirms that innovation improves performance and that resilience enhances adaptability, but systematic modeling of how product, process, and market innovation jointly interact with resilience as a multidimensional moderator is scarce. This gap is particularly evident in sub-Saharan Africa, where SMEs face high levels of institutional voids, financial constraints, and market turbulence (UNCTAD, 2024; Ibidunni et al., 2025). Addressing this gap requires integrating perspectives from the Resource-Based View (RBV), which positions innovation as a strategic resource, and the Dynamic Capabilities Theory (DCT), which emphasizes the adaptive reconfiguration of resources under volatility (Barney, 1991; Teece, 2007). By situating resilience as a dynamic capability that orchestrates innovation resources, this study contributes to a more nuanced understanding of how Nigerian SMEs can transform innovation into sustainable performance outcomes.

Finally, prior research establishes innovation as a critical determinant of SME growth and resilience as an essential condition for survival in volatile environments. Yet in African contexts, these two streams of scholarship remain insufficiently connected. This study therefore integrates innovation and

resilience perspectives to model their joint influence on SME performance, offering a context-sensitive framework for explaining outcomes in Nigeria's fragile economic and institutional landscape.

Methodology

Drawing on the Resource-Based View (Barney, 1991), product, process, and market innovations are regarded as strategic resources that enhance competitive advantage. Dynamic Capabilities Theory (Teece, 2014) suggests that such resources yield superior performance only when they are effectively integrated and adapted under turbulence. Organizational resilience embodies this capability, enabling SMEs to protect operations, adapt to disruption, and exploit opportunities.

This paper is conceptual in nature, and its primary aim is to theorize how resilience conditions the effects of innovation on SME performance within fragile economies. The proposed framework positions product, process, and market innovation as antecedents of performance, with organizational resilience moderating each relationship and strengthening the complementarities among innovation types. To visually summarize these theorized relationships, Figure 1 presents the conceptual model of innovation, resilience, and SME performance. The model highlights both the direct links between innovation and performance and the expectation that resilience amplifies the synergies when multiple innovation types are pursued together. The framework provides the basis for the research propositions that follow, which are intended to guide future empirical testing.

Conceptual Model

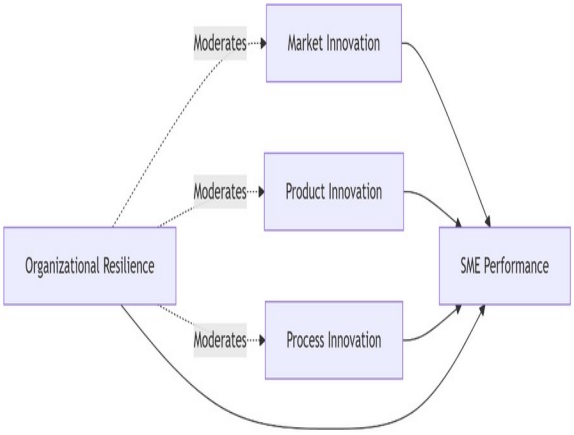

Figure 1: Conceptual Model of Innovation, Resilience, and SME Performance

Research Propositions

Building on the conceptual framework, this study advances a set of propositions to guide future empirical testing. These propositions articulate how different forms of innovation are expected to influence SME performance and how organizational resilience conditions these effects in fragile economies. They are theoretical statements only and have not been empirically tested in the present paper.

P1: Product innovation is expected to enhance SME performance.
P2: Process innovation is expected to enhance SME performance.
P3: Market innovation is expected to enhance SME performance.
P4: Organizational resilience is expected to positively moderate the relationship between product innovation and SME performance.
P5: Organizational resilience is expected to positively moderate the relationship between process innovation and SME performance.
P6: Organizational resilience is expected to positively moderate the relationship between market innovation and SME performance.
P7: Organizational resilience is expected to amplify the complementarities among product, process, and market innovation, leading to superior SME performance.

Complementarities arise when innovations reinforce each other; for example, process innovations that reduce costs may enable more extensive product experimentation, while market innovation accelerates the diffusion of both product and process improvements. Such complementarities, however, are resource-intensive and may create coordination risks. Resilience mitigates these risks by enabling cross-learning, preventing resource bottlenecks, and supporting the rapid integration of multiple innovations. In this sense, resilience is theorized not only to strengthen each innovation's direct effect but also to enhance the synergies among them.

The propositions outlined above represent theoretical expectations rather than empirically tested hypotheses. They provide a roadmap for future large-scale studies that can evaluate how innovation and resilience interact to shape SME performance in fragile economies. To prepare for such empirical testing, this study conducted a pilot exercise aimed solely at prevalidating the measurement instrument. The purpose of the pilot was to confirm item clarity, reliability, and validity within the Nigerian SME context, thereby ensuring that the proposed constructs can be meaningfully examined in subsequent research. The methodology and results of this validation exercise are presented in the next section.

Pilot Study Methodology and Validation

To prepare for future large-scale testing, a pilot study was conducted solely to prevalidate the survey instrument. The objectives were threefold: (a) to confirm that items were clear and understandable to respondents, (b) to establish the preliminary reliability and validity of the adapted scales, and (c) to ensure that organizational resilience could be treated as a coherent construct within the Nigerian SME context (Sekaran & Bougie, 2013). The pilot was methodological in purpose and not designed for hypothesis testing or for drawing substantive conclusions about the proposed model.

Sample

Thirty SME owner-managers were randomly selected from Minna and Bosso (Niger State), covering manufacturing, retail, and service sectors. This sample size is consistent with pretesting standards (Johanson & Brooks, 2010) but is not representative of Nigerian SMEs at large. Accordingly, the findings cannot be generalized beyond establishing the psychometric adequacy of the measures.

Measurement of Constructs

Product, process, and market innovation were each assessed with three items adapted from the OECD Oslo Manual (2018). Organizational resilience was measured with five items adapted from Kantur and İşeri-Say (2012). For parsimony and conceptual clarity, resilience was operationalized as a unidimensional construct encompassing robustness, integrity, redundancy, resourcefulness, and rapidity (Kantur & İşeri-Say, 2015). Following Hair et al. (2018), the items were averaged to form a composite score, allowing resilience to function as a holistic moderating capability. SME performance was measured with four items adapted from Gunday et al. (2011), capturing financial and non-financial outcomes.

Validation Procedures

The measurement model was evaluated in SmartPLS 4. Reliability was assessed using Cronbach's alpha and composite reliability (CR). Convergent validity was established through item loadings and average variance extracted (AVE), while discriminant validity was tested using the Fornell–Larcker criterion (Hair et al., 2018).

Results

The pilot confirmed that the instrument achieved satisfactory reliability and validity. Cronbach's alpha values ranged from 0.79

to 0.92, composite reliability from 0.85 to 0.94, and all AVE scores exceeded 0.50. Discriminant validity was also supported, with the square roots of AVEs exceeding inter-construct correlations. These findings confirm that the measures are clear, consistent, and ready for deployment in a full-scale study. However, they should not be interpreted as evidence of hypothesis testing or substantive empirical findings.

Table 1 summarizes the reliability and validity statistics, while detailed loadings, cross-loadings, and discriminant validity results are provided in Appendix A (Supplementary Materials).

Table 1

Pilot Study: Reliability and Validity Statistics

Construct	Cronbach's Alpha	Composite Reliability
Product Innovation	.82	.88
Process Innovation	.79	.85
Market Innovation	.84	.89
Organizational Resilience	.92	.94
SME Performance	.87	.91

Note. AVE = Average Variance Extracted.

Taken together, these results confirm that the instrument demonstrates satisfactory reliability, convergent validity, and discriminant validity within the Nigerian SME context. It is therefore ready for deployment in any full-scale study. Detailed factor loadings, cross-loadings, and full discriminant validity results are provided in Appendix A (Supplementary Materials).

Theoretical Implications and Discussion

This section discusses the theoretical implications of the proposed framework, drawing on prior research to situate its contribution. As this is a conceptual study, no empirical hypothesis testing has been conducted. The pilot study served only to validate the measurement instrument and establish readiness for a larger, nationally representative survey. The discussion therefore focuses on how the framework reframes the relationship between innovation and performance in fragile economies, highlighting complementarities among innovation types, the moderating role of organizational resilience, and the contextual realities of African SMEs.

The framework reframes how innovation contributes to SME performance by integrating three underexplored elements: complementarities among innovation types, the moderating role of organizational resilience, and the contextual realities of African SMEs. Prior studies often examine product, process, and market innovation independently, yet in practice, SMEs rarely innovate through a single channel (Bogetoft et al., 2024). Instead, these forms of innovation are interdependent, producing complementarities that can yield superior outcomes. For example, process innovations that lower costs free resources for broader product experimentation, while market innovations accelerate the diffusion of new products and processes. This aligns with evidence from emerging economies showing that firms frequently combine incremental and radical innovations to sustain competitiveness (Bhadra et al., 2024). However, complementarities are resource-intensive and can generate coordination risks, particularly for SMEs operating under institutional and infrastructural constraints (Ayalew & Xianxhi, 2020). Without mechanisms to manage these risks, complementarities may amplify vulnerability rather than create advantage.

Organizational resilience provides that mechanism which is conceptualized as robustness, integrity, redundancy, resourcefulness, and rapidity (Kantur & İşeri-Say, 2012, 2015; Duchek, 2020), resilience enables SMEs to absorb shocks and continue leveraging innovation under uncertainty. Each dimension functions as a moderator that conditions innovation outcomes. Robustness and redundancy sustain process innovations during supply chain breakdowns, ensuring continuity of production (Lengnick-Hall et al., 2011). Integrity and rapidity make market innovations actionable by aligning organizational units and accelerating responses to shifting consumer demand (Li et al., 2024). Resourcefulness allows SMEs to creatively adapt product innovations, an especially valuable capability in resource-constrained African contexts (Abubakar, 2019). Evidence from Southeast Asia shows that resilience reinforces the benefits of innovation by supporting operational continuity during crises (Nguyen & Ngo, 2020; Huynh et al., 2022), and Nigerian research suggests that firms with stronger resilience outperform peers during turbulence (Ibidunni et al., 2025; Oiku, 2024). Thus, resilience transforms innovation from a vulnerable investment into a dynamic driver of performance.

The framework also refines the Resource-Based View (RBV) and Dynamic Capabilities Theory (DCT). RBV positions innovation as a strategic resource capable of sustaining advantage when valuable, rare, and inimitable (Barney, 1991). Yet in fragile environments such as Nigeria, resources alone do not secure superior outcomes. Weak infrastructure, limited finance, and policy instability constrain the translation of resources into performance (Kato, 2024; Akpan et al., 2022). DCT addresses this limitation by emphasizing firms' ability to reconfigure resources under volatility (Teece, 2007, 2014). Resilience provides the micro-foundations of these dynamic capabilities, enabling SMEs to pivot innovation strategies and sustain complementarities in turbulent contexts. In this sense, resilience is not an optional complement to innovation but a necessary condition for its effectiveness in fragile economies.

The theoretical implication is that resilience must be modeled not merely as an outcome of leadership or innovation as some African studies have done (Oiku, 2024; Ibidunni et al., 2025) but as an active, multidimensional moderator that amplifies the benefits of innovation and mitigates its risks. Practically, this suggests that SME managers cannot rely solely on innovation investments. To unlock performance gains, they must deliberately cultivate resilience through practices such as developing backup supply arrangements, cross-training employees, and adopting digital technologies that enable rapid response (Chandratreya, 2025; Carmeli & Hartmann, 2024). For policymakers, the implication is that innovation-focused interventions such as grants, training, or technology support will have limited impact unless paired with programs that strengthen SME resilience. Evidence from global crises shows that resilience enables innovation to generate lasting competitive advantage (Annarelli & Nonino, 2016; Chowdhury et al., 2019).

Therefore, this study demonstrates that innovation alone does not guarantee performance in volatile African markets. The greatest gains emerge when product, process, and market innovations are pursued in combination and filtered through resilience. By situating resilience as both a buffer and a catalyst, the framework explains how SMEs can convert innovation into sustainable advantage, even in contexts marked by persistent turbulence.

Conclusions and Recommendations

This study advances theory by conceptualizing organizational resilience as an active moderating capability that shapes how innovation translates into SME performance in fragile economies. Previous research often positioned resilience as an outcome of leadership, innovation, or crisis response (Halekotte et al., 2025; Koporcic et al., 2025). By contrast, this paper theorizes resilience as a multidimensional construct comprising robustness, integrity, redundancy, resourcefulness, and rapidity that actively conditions the effects of product, process, and market innovation. The framework extends the Resource-Based View (RBV) by showing that innovation resources alone are insufficient in contexts with institutional voids, and it refines Dynamic Capabilities Theory (DCT) by identifying resilience as a capability that enables SMEs to deploy and reconfigure innovation under persistent volatility.

The contribution of this study is conceptual. The framework integrates innovation complementarities with resilience and

establishes validated measurement instruments, thereby preparing the ground for large-scale empirical testing. While the pilot study confirms that the measures are reliable within the Nigerian SME context, its purpose was instrument validation only, not hypothesis testing or generalization.

Practically, the framework highlights that innovation investment by SMEs in fragile economies cannot generate sustainable advantage without resilience. Managers should embed innovation within broader resilience-building strategies such as cultivating redundancy in supply networks, resourcefulness through employee cross-training, and rapidity by adopting digital tools that enable fast responses. Policymakers should align innovation programs with resilience support providing digital infrastructure, crisis training, and adaptive finance mechanisms so that innovation efforts translate into lasting performance improvements.

Limitations and Future Research

This framework, like all conceptual studies, has several limitations that point to opportunities for further research. First, resilience was operationalized as a unidimensional construct for parsimony, following prior methodological guidance (Hair et al., 2018). This simplification facilitated instrument validation but may obscure the distinct moderating effects of specific resilience dimensions. Future studies should test resilience as a higher-order construct to capture how robustness, integrity, redundancy, resourcefulness, and rapidity uniquely condition innovation pathways.

Second, the model is contextually bounded as it is most relevant to SMEs in fragile economies with institutional voids, where volatility is structural rather than episodic. Generalizability beyond such contexts should not be assumed without empirical testing.

Third, the pilot study had a narrow scope, involving 30 SMEs from two localities in Niger State. While adequate for pretesting and instrument validation, it cannot provide insights into sectoral or regional variations. A larger, nationally representative study is required to test the framework empirically and explore heterogeneity across industries and regions.

Finally, resilience itself has antecedents such as leadership, organizational culture, and networks that were not addressed here but deserve investigation. Longitudinal designs will also be critical to capture how innovation–resilience dynamics evolve across crisis and recovery phases.

Therefore, this paper provides a conceptual foundation by linking innovation and resilience in fragile contexts. The next step is rigorous empirical testing to refine the framework, validate its propositions, and generate actionable insights for SMEs and policymakers.

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Appendix

A. Supplementary Measurement Validation Results

This appendix reports detailed psychometric results from the pilot study (n = 30 SMEs). The purpose of this analysis was instrument validation only. These results complement the summary statistics reported in Table 1 of the main text.

Table A1

Item Loadings and Cross-Loadings

Item	Product Innovation	Process Innovation	Market Innovation	Organizational Resilience	SME Performance
PI1	.74	.39	.36	.28	.41
PI2	.79	.37	.35	.31	.43
PI3	.82	.41	.39	.34	.45
PrI1	.38	.72	.40	.29	.37
PrI2	.40	.75	.42	.33	.39
PrI3	.42	.74	.44	.32	.40
MI1	.36	.41	.73	.29	.42
MI2	.38	.42	.76	.33	.44
MI3	.39	.43	.75	.35	.45
OR1	.30	.32	.33	.79	.40
OR2	.31	.33	.34	.80	.41
OR3	.34	.34	.36	.82	.42
OR4	.29	.31	.32	.77	.39
OR5	.35	.36	.37	.78	.43
Perf1	.40	.38	.41	.42	.74
Perf2	.42	.40	.43	.44	.77
Perf3	.43	.41	.44	.45	.78
Perf4	.41	.39	.42	.43	.76

Note. PI = Product Innovation; PrI = Process Innovation; MI = Market Innovation; OR = Organizational Resilience; Perf = SME Performance.Note. Loadings on intended constructs are all > .70. Cross-loadings are lower, supporting discriminant validity.

Table A2

Convergent Validity: Reliability and AVE

Construct	Items	Cronbach's Alpha	Composite Reliability	AVE
Product Innovation	3	.82	.88	.57
Process Innovation	3	.79	.85	.53
Market Innovation	3	.84	.89	.56
Organizational Resilience	5	.92	.94	.61
SME Performance	4	.87	.91	.59

Note. All constructs meet minimum thresholds: α > .70, CR > .70, AVE > .50 (Fornell & Larcker, 1981).

Table A3

Discriminant Validity: Fornell–Larcker Criterion

Construct	Product Innovation	Process Innovation	Market Innovation	Organizational Resilience	SME Performance
Product Innovation	**.75**				
Process Innovation	.46	**.73**			
Market Innovation	.48	.44	**.75**		
Organizational Resilience	.41	.39	.42	**.78**	
SME Performance	.52	.47	.49	.45	**.77**

Note. Bold diagonal values are the square root of AVE. Each exceeds the corresponding inter-construct correlations, supporting discriminant validity.