



Entrepreneurial Innovation Strategies and Performance of Small and Medium Enterprises in Lagos and Abuja Metropolises

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Abstract

This study investigates the effect of entrepreneurial innovation strategies—disaggregated into product, process, and marketing dimensions—on the performance of Small and Medium Enterprises (SMEs) in Nigeria's primary economic hubs of Lagos and Abuja, with technology adoption as a moderator. The study is based on the Resource-Based View (RBV) and Dynamic Capabilities Theory (DCT) with a descriptive survey research design, involving structured questionnaire to 410 SME owner-managers and executives, with an 82 percent usable response rate. The hypotheses were tested using Hierarchical Regression Modeling and reliability was established using KMO and Cronbachs alpha (=0.837-0.901). Results indicate that product (0.841, $p < .001$) and marketing innovation (0.852, $p < .001$) have a significant positive effect on SME performance, whereas process innovation does not have a significant impact. The positive effects of product (PDITCA: 0.185, $p < .01$) and marketing innovation (MKITCA: 0.172, $p < .01$) are greatly enhanced by technology adoption (TCA). The models describe 90.4% of the variance in the performance of SMEs ($R^2 = 0.904$). The study concludes that for SMEs in Nigeria's competitive urban centres like Lagos and Abuja metropolis, externally-focused innovations are paramount for success, and their impact is magnified by technology. It is therefore recommended that SME managers prioritize investments in product development and digital marketing, while policymakers should foster targeted support for these high-impact areas and invest in national infrastructure to create a more enabling business environment.

Keywords: Entrepreneurial Innovation, SME Performance, Product Innovation, Technology Adoption,

1. Introduction

Small and Medium Enterprises (SMEs) play a pivotal role in the economic development of nations, particularly in emerging markets where they act as engines of job creation, innovation, and inclusive growth. In Nigeria, SMEs represent over 96% of the enterprises, contribute about 48% to the national Gross Domestic Product (GDP), and are responsible for more than 80% of employment (PwC, 2020; NBS & SMEDAN, 2021). Lagos and Abuja, as major economic and political capitals, host a significant concentration of SMEs that serve as critical drivers of commerce and innovation. However, despite their economic prominence, Nigerian SMEs face persistent performance challenges including low productivity, limited profitability, reduced market share, and weak competitiveness (Aderemi et al, 2021; Ekon & Isayas, 2022). These shortcomings are largely attributed to the poor adoption and execution of entrepreneurial innovation—defined as the capacity to generate, apply, and commercialize novel ideas across product, process, marketing, and management dimensions (Chege et al, 2020).

Entrepreneurial innovation is increasingly recognized as a strategic imperative in today's volatile, uncertain, complex, and ambiguous business environment. It enables firms to respond to rapidly shifting market demands, technological disruptions, and global competitive pressures by fostering adaptability, operational efficiency, and customer-centric solutions (Lanza, &

Tripsas, 2023). Innovation-centric SMEs are often more agile and capable of leveraging internal resources to gain competitive advantage and long-term sustainability (Canh, et al, 2019). Nevertheless, the extant literature is skewed toward developed countries, with relatively little empirical attention paid to SMEs in sub-Saharan Africa, particularly in Nigeria. This geographic and contextual gap underscores the need for localized studies that examine how innovation manifests in resource-constrained environments with institutional and infrastructural limitations.

In Nigeria, numerous structural impediments inhibit innovation among SMEs. These include inadequate access to finance, poor technological infrastructure, limited absorptive capacity, and the absence of robust research and development ecosystems (Nnorom et al, 2023; Odusote & Akpa, 2022). For instance, studies show that a significant number of Nigerian SMEs lack the technological sophistication and market intelligence required to implement meaningful innovations, especially in product development and marketing strategies (Aluko & Ibrahim, 2023). Furthermore, many SMEs operate in informal sectors with weak corporate governance structures, making it difficult to institutionalize innovation as a routine strategic function (Gbadamosi, & Nwankwo, 2024).

Given these challenges, it is critical to examine the role of entrepreneurial innovation in enhancing SME performance within Nigeria's urban economic zones. This study is anchored on two theoretical lenses: Resource-Based View (RBV) and Dynamic Capabilities Theory (DCT). RBV posits that firms achieve sustainable competitive advantage through the effective deployment of valuable, rare, inimitable, and non-substitutable internal resources—including knowledge, innovation capacity, and human capital (Barney, 1991). DCT complements RBV by emphasizing a firm's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments (Teece et al 1997). Together, these theories provide a robust foundation for analyzing how entrepreneurial innovation influences various dimensions of SME performance.

The primary objective of this study is to investigate the effect of entrepreneurial innovation—measured across three dimensions: product, process, and marketing innovation—on the performance of selected SMEs in Lagos and Abuja metropolises. The study also explores the moderating effect of technology adoption on the innovation-performance relationship. The study will offer evidence-based information to improve managerial practices, influence evidence-based policies, and develop academic knowledge on SME competitiveness using a quantitative research design that will be backed by hierarchical regression modelling. By deploying a descriptive survey research design with hierarchical regression modelling, the study will offer evidence-based information to improve managerial practices, influence evidence-based policies, and develop academic knowledge on SME competitiveness. In doing so, it addresses critical gaps in the literature and contributes to a deeper understanding of innovation-driven competitiveness among SMEs in emerging economies.

Ultimately, this research seeks to answer pressing questions on the entrepreneurial innovation strategies in form of product, process and marketing on the performance of SMEs in Lagos and Abuja metropolises. The findings are expected to offer actionable recommendations for SME owners, government agencies, innovation policymakers, and development partners aiming to create an enabling environment for sustainable entrepreneurship in Nigeria's dynamic urban centres.

2. Theoretical background and hypotheses

Entrepreneurial innovation is increasingly seen as a central mechanism through which small and medium enterprises (SMEs) enhance their performance, adapt to market shifts, and build sustainable competitive advantages. Rooted in both the Resource-Based View (RBV) and Dynamic Capabilities Theory (DCT), the strategic deployment of innovation allows firms to exploit internal resources and reconfigure capabilities in response to dynamic external environments (Barney, 1991; Teece et al, 1997). In Nigeria's SME landscape, where structural challenges and market volatility persist, innovation becomes not merely a competitive edge but a necessity for survival and growth (Eze & Okpala, 2024). This study therefore, considers entrepreneurial innovation through three interrelated dimensions—product, process, and marketing innovations—and explores their respective impacts on SME performance indicators such as competitive advantage, productivity, and profitability.

Product innovation entails the development or significant enhancement of goods or services to meet evolving customer needs and preferences. This form of innovation often serves as the first touchpoint between SMEs and their markets, directly influencing customer satisfaction, brand loyalty, and strategic differentiation. According to Woltier et al. (2021), firms that consistently innovate their products are more likely to retain market relevance and sustain competitive advantage. In highly competitive urban economies such as Lagos and Abuja, SMEs that invest in product innovation can distinguish themselves in saturated markets.

Hypothesis 1. Product innovation has a significant positive effect on performance of selected SMEs in Lagos and Abuja metropolis.

Process innovation, by contrast, focuses on internal efficiency and operational enhancement. It includes improvements in production methods, workflow systems, and service delivery that aim to reduce costs and increase output. In the context of Nigerian SMEs—many of which operate with constrained financial and infrastructural resources—process innovation is vital for maximizing productivity (Exposito & Sanchis-Llopis, 2019). Prior research highlights that SMEs that embrace process innovation can deliver better quality at lower costs, thereby improving operational performance and responsiveness to market demands (Akinwale et al., 2018).

Hypothesis 2. Process innovation has a significant positive effect on performance of selected SMEs in Lagos and Abuja metropolis.

Marketing innovation encompasses new methods for product promotion, pricing strategies, packaging, and customer engagement. It allows SMEs to access new customer segments, adapt to digital marketing trends, and create more personalized offerings. Gharghina et al. (2020) emphasized that effective marketing innovation correlates strongly with improved financial performance, especially profitability. In the digitally transforming Nigerian marketplace, SMEs that adopt innovative marketing practices are better positioned to convert consumer insights into revenue streams and competitive positioning.

Hypothesis 3. Marketing innovation has a significant positive effect on performance of selected SMEs in Lagos and Abuja metropolis.

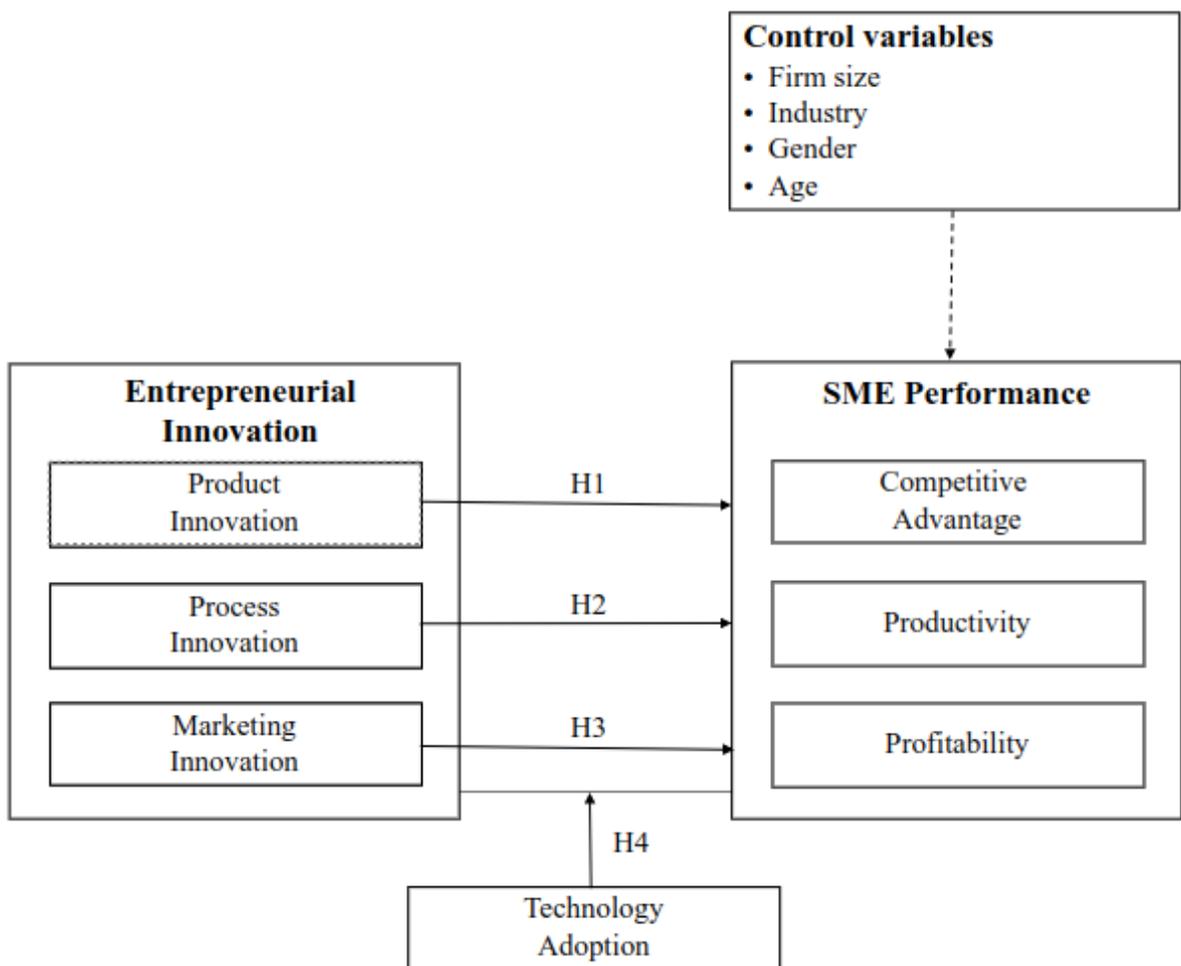
While these three innovation dimensions provide foundational strategies for performance enhancement, the extent to which they influence outcomes is often moderated by a firm's technological capabilities. Technology adoption acts as a catalyst for innovation

implementation, particularly in digitally driven economies. It enables SMEs to scale their innovations, improve efficiency, and access new markets through digital platforms. According to the World Economic Forum (2023), over 85% of firms view digital transformation as a key driver of future competitiveness. In Nigeria, however, technology adoption remains uneven due to infrastructural gaps and cost barriers (Odusote & Akpa, 2022). Understanding its moderating effect is critical for identifying the boundary conditions under which innovation translates into performance.

Hypothesis 4. Technology adoption moderates the relationship between entrepreneurial innovation and SME performance in Lagos and Abuja Metropolis.

Together, these hypotheses frame a conceptual model that empirically investigates how entrepreneurial innovation, reinforced by technology adoption, contributes to the performance of SMEs operating within Nigeria’s complex urban economic environments.

Figure 1 Conceptual Framework



3. Methodology

3.1. Data collection and sample

To examine the relationships proposed in our conceptual model, this study employed a quantitative research methodology, utilizing structured surveys to gather empirical data from small and medium-sized enterprises (SMEs) operating in Lagos and Abuja, Nigeria.

The research design of the study was a descriptive survey design to test the effect of entrepreneurial innovation strategies on the performance of SMEs in Lagos and Abuja metropolis, using technology adoption as a moderating factor. Primary data were collected using a structured questionnaire to a sample of 500 SMEs owner-managers and top executives of SMEs in the register of Small and Medium Enterprises Development Agency of Nigeria (SMEDAN,2023), equally distributed across the two cities of Lagos and Abuja in manufacturing, retail, ICT, hospitality, and professional services sectors for a period of 60 days, which resulted in 410 valid responses (82% usability rate).

Entrepreneurial innovation strategies were evaluated in product, process and marketing dimensions, whereas SME performance was evaluated in terms of competitive advantage, productivity and profitability. The moderating variable was technology adoption and the control variables were firm age, size, industry type and owner demographics. The constructs were all rated using a five-point Likert scale and tested using Kaiser–Meyer–Olkin (KMO) Measure of Sampling Adequacy and Cronbach alpha tests ($\alpha = 0.837-0.901$).

The SPSS version 28, was used to analyze the data, and descriptive statistics, correlation, and Hierarchical Regression Modeling were utilized to test both the direct and moderating relationships between innovation and technology adoption and the performance of SMEs.

4. Data Analysis

This section presents the data analysis, results, and discussion of findings on entrepreneurial innovation and SME performance in Lagos and Abuja. Using descriptive statistics, correlation, and hierarchical regression, the study examines how product, process, and marketing innovation influence SME performance, while considering the moderating role of technology adoption. Besides, to establish the reliability and validity of the survey instrument Kaiser–Meyer–Olkin, Cronbach's alpha and Bartlett's tests were conducted prior to proper estimation.

Table 1: Reliability and Validity Results

Indicators	No of Items	KMO	Cronbach's alpha	Bartlett's Test (P-value)
Competitive Advantage (CPA)	5	0.789	0.883	0.000
Productivity (PDT)	5	0.795	0.891	0.000
Profitability (PFT)	5	0.745	0.901	0.000
SME performance (SME)	15	0.774	0.893	0.000
Product Innovation (PDI)	5	0.768	0.887	0.000
Process innovation (PCI)	5	0.772	0.837	0.000
Marketing Innovation (MKI)	5	0.782	0.898	0.000
Entrepreneurial Innovation (ENI)	15	0.773	0.875	0.000
Technology Adoption (TCA)	5	0.789	0.883	0.000

Source: Author's Computation

The results in Table 1 indicate a strong level of reliability and validity for all the indicators tested. The Kaiser-Meyer-Olkin (KMO) values for each variable, which range from 0.745 to 0.795, suggest that the sample size is adequate for conducting factor analysis, as values above 0.7 are generally considered acceptable. The Cronbach's alpha values, ranging from 0.837 to 0.901, indicate excellent internal consistency for each construct, as values above 0.7 are

considered reliable. Additionally, the Bartlett's Test of Sphericity has a p-value of 0.000 for all indicators, indicating that the correlation matrix is significantly different from an identity matrix, further supporting the appropriateness of factor analysis. These results suggest that the measures for Competitive Advantage (CPA), Productivity (PDT), Profitability (PFT), SME Performance (SME), Product Innovation (PDI), Process Innovation (PCI), Marketing Innovation (MKI), Entrepreneurial Innovation (ENI) and Technology Adoption (TCA) are both reliable and valid for further analysis.

Table 2: Descriptive Results

Indicators	N	Mean	Std. Deviation
CPA	410	4.58	0.53
PDT	410	4.52	0.37
PFT	410	4.55	0.36
SME	410	4.55	0.34
PDI	410	4.57	0.39
PCI	410	4.34	0.63
MKI	410	4.46	0.44
TCA	410	4.43	0.44
Gender	410	0.47	0.50
Number of employees	410	9.26	11.61
Years in Business	410	19.75	14.18
Industry	410	0.49	0.50

Source: Author's Computation, **Note:** Competitive Advantage (CPA), Productivity (PDT), Profitability (PFT), SME performance (SME), Product Innovation (PDI), Process Innovation (PCI), Marketing Innovation (MKI), Technology Adoption (TCA), Gender (1 = male; 0 = female), Industry (1 = manufacturing; 0 = service) and Standard Error values are reported in parentheses.

The descriptive statistics in Table 2 show that the mean scores for all key indicators are relatively high on a 5-point scale, suggesting strong agreement among respondents. Specifically, the highest mean is observed for Competitive Advantage (CPA) at 4.58, followed closely by Product Innovation (PDI) at 4.57, indicating that SMEs in Lagos and Abuja perceive innovation and competitive positioning as core strengths. Profitability (PFT), Productivity (PDT), and Marketing Innovation (MKI) also record high means above 4.4, while Process Innovation (PCI) and Technology Adoption (TCA) have slightly lower means, though still strong at 4.34 and 4.43, respectively. Gender distribution is nearly balanced (Mean = 0.47), and most businesses have a relatively small workforce (Mean = 9.26 employees) with notable variation (Std. Dev. = 11.61). Importantly, the SME indicator (Mean = 4.55, Std. Dev. = 0.34) reflects a consistently strong performance perception across small and medium-sized enterprises, reinforcing their role as resilient contributors to economic activities in the study area. The relatively low standard deviation suggests a high level of agreement among respondents about the strength of SME performance. Furthermore, on average, the SMEs have been in operation for nearly 20 years (Mean = 19.75), suggesting experienced business operations. Lastly, the Industry variable, with a mean of 0.49 and a standard deviation of 0.50, shows a balanced distribution between manufacturing and service industries.

Table 3: Correlation Results

Indicators	CPA	PDT	PFT	SME	PDI	PCI	MKI	TCA	Gender	Size	Age	Industry
CPA	1											
PDT	0.439	1										
PFT	0.432	0.712	1									
SME	0.818	0.829	0.823	1								
PDI	0.423	0.687	0.669	0.694	1							
PCI	0.363	0.399	0.338	0.446	0.259	1						
MKI	0.465	0.697	0.569	0.684	0.505	0.358	1					
TCA	0.315	0.329	0.285	0.378	0.220	0.307	0.271	1				
Gender	0.627	0.345	0.340	0.070	0.336	0.263	0.344	0.193	1			
Size	0.484	0.267	0.229	0.013	0.251	0.242	0.248	0.146	0.262	1		
Age	0.633	0.305	0.327	0.043	0.311	0.284	0.292	0.182	0.297	0.253	1	
Industry	0.481	0.238	0.179	0.064	0.225	0.194	0.216	0.142	0.356	0.159	0.211	1

Source: Author’s Computation, **Note:** Competitive Advantage (CPA), Productivity (PDT), Profitability (PFT), SME performance (SME), Product Innovation (PDI), Process Innovation (PCI), Marketing Innovation (MKI), Technology Adoption (TCA), Gender (1 = male; 0 = female), Age (Year in business), Industry (1 = manufacturing; 0 = service), Size (Number of employees) and Standard Error values are reported in parentheses.

Table 3 presents the correlation results for the independent variables, with the aim of examining potential multicollinearity. The correlation matrix reveals the relationships among various independent variables in the study. The SME indicator exhibits very strong positive correlations with Competitive Advantage (CPA) (0.818), Productivity (PDT) (0.829), and Profitability (PFT) (0.823), suggesting that SME performance is strongly associated with these core organizational outcomes. Similarly, SME shows a strong correlation with Product Innovation (PDI) (0.694) and Marketing Innovation (MKI) (0.684), while its relationship with Process Innovation (PCI) (0.446) and Technology Adoption (TCA) (0.378) is moderate. These results highlight the centrality of SMEs in linking innovation, performance, and competitive advantage within the study context. Product Innovation (PDI) has moderate positive correlations with Marketing Innovation (MKI) (0.505) and Process Innovation (PCI) (0.259), indicating a tendency for firms focusing on product innovation to also pursue improvements in marketing and processes. The relationship with Technology Adoption (TCA) is weaker (0.220). Process Innovation (PCI) shows a moderate correlation with Marketing Innovation (MKI) (0.358) and a slightly stronger one with TCA (0.307). The control variables—Gender, Size, Age, and Industry—show weaker correlations with the innovation variables, with Gender exhibiting notable correlations with PDI (0.336), PCI (0.263), and MKI (0.344), while Age has a moderate correlation with PDI (0.311) and MKI (0.292). Overall, the correlations are not so high to suggest multicollinearity issues, indicating that the variables are relatively independent in this study.

The regression analysis was conducted to examine the effects of entrepreneurial innovation—specifically product, process, and marketing innovations—along with technology adoption and firm characteristics on the performance of small and medium enterprises (SMEs) in Lagos and Abuja. The models progressively introduced innovation dimensions, technology adoption, and their interactions to assess both direct and moderating effects on SME performance.

Table 4: Regression Results Predicting SME

Variable	SME performance (SME)			
	Model 1	Model 2	Model 3	Model 4
PDI	–	0.099 (0.030) ***	-0.002 (0.026) *	0.841 (0.234) ***
PCI	–	0.062 (0.018) ***	0.010 (0.016)	0.227 (0.162)
MKI	–	0.149 (0.029) ***	0.084 (0.024) ***	0.852 (0.228) ***
TCA	–	–	0.333 (0.025) ***	0.481 (0.100) ***
PDI*TCA	–	–	–	0.185 (0.052) ***
PCI*TCA	–	–	–	-0.049 (0.035)
MKI*TCA	–	–	–	0.172 (0.050) ***
Gender	0.429 (0.037) ***	0.330 (0.034) ***	0.213 (0.030) ***	0.211 (0.033) ***
Size	-0.168 (0.022)	-0.101 (0.021) ***	-0.016 (0.019)	-0.017 (0.018)
Age	0.538 (0.029) ***	0.431 (0.028) ***	0.466 (0.023) ***	0.468 (0.025) ***
Industry	0.019 (0.033)	0.031 (0.030)	0.017 (0.025)	0.019 (0.024)
(Constant)	3.600 (0.076) ***	2.339 (0.140) ***	1.533 (0.131) ***	0.941 (0.395) ***
R²	0.815	0.855	0.899	0.904
Adjusted R²	0.813	0.852	0.897	0.901
F-value	446.339***	337.356***	446.905***	339.722***

Source: Author's Computation, **Note:** SME performance (SME), Product Innovation (PDI), Process Innovation (PCI), Marketing Innovation (MKI), Technology Adoption (TCA), Interaction of Product Innovation and Technology Adoption (PDI*TCA), Interaction of Process Innovation and Technology Adoption (PCI*TCA), Interaction of Marketing Innovation and Technology Adoption (MKI*TCA), Gender (1 = male; 0 = female), Age (Year in business), Industry (1 = manufacturing; 0 = service), Size (Number of employees) and Standard Error values are reported in parentheses. * $p < .10$, ** $p < .05$, *** $p < .01$, **** $p < .001$

The regression results in **Table 1a** show that entrepreneurial innovation plays a critical role in shaping SME performance. Product innovation (PDI) has a significant positive effect ($\beta = 0.099$, $p < .001$ in Model 2; $\beta = 0.841$, $p < .001$ in Model 4), while marketing innovation (MKI) is also strongly influential ($\beta = 0.149$, $p < .001$ in Model 2; $\beta = 0.852$, $p < .001$ in Model 4). In contrast, process innovation (PCI) shows weaker effects, becoming insignificant when technology adoption is added ($\beta = 0.062$, $p < .001$ in Model 2; $\beta = 0.010$, ns in Model 3; $\beta = 0.227$, ns in Model 4). Technology adoption (TCA) itself is a powerful predictor ($\beta = 0.333$, $p < .001$ in Model 3; $\beta = 0.481$, $p < .01$ in Model 4). Importantly, interaction terms reveal that TCA amplifies the effects of product (PDI*TCA: $\beta = 0.185$, $p < .01$) and marketing innovation (MKI*TCA: $\beta = 0.172$, $p < .01$), but not process innovation (PCI*TCA: $\beta = -0.049$, ns). Among controls, gender ($\beta = 0.429$, $p < .001$ in Model 1; $\beta = 0.211$, $p < .001$ in Model 4) and firm age ($\beta = 0.538$, $p < .001$ in Model 1; $\beta = 0.468$, $p < .001$ in Model 4) consistently predict higher performance, while firm size has a small negative effect ($\beta = -0.168$, ns in Model 1; $\beta = -0.017$, ns in Model 4). The models explain a high proportion of variance in SME performance (R^2 rising from 0.815 in Model 1 to 0.904 in Model 4), confirming that innovation and technology adoption are critical determinants of SME success in the studied cities. The F-statistics are all

highly significant ($F = 446.339^{***}$ in Model 1 to $F = 339.722^{***}$ in Model 4), demonstrating the robustness of the regression estimates.

4.2 Research Findings

The coefficients suggest that SMEs benefit most from product and marketing innovations, particularly when these are integrated with technology adoption. For instance, the large jump in coefficients for PDI and MKI once TCA is considered underscores technology's amplifying role. However, the lack of consistent significance for process innovation suggests that while it may contribute in some contexts, it is not a decisive factor in performance in Lagos and Abuja. The moderating effects also confirm that technology is not just an independent driver but a crucial enabler of innovation's effectiveness. Gender and firm age effects indicate systemic differences in entrepreneurial performance, with male-led and older SMEs performing better, while firm size and industry type appear less decisive.

This study's findings provide a compelling and nuanced account of how different entrepreneurial innovation strategies affect SME performance in the dynamic urban landscapes of Lagos and Abuja. The results underscore that externally-focused innovations (product and marketing) are primary drivers of performance, a conclusion that gains significant weight when considering the critical enabling role of technology adoption.

The superior impact of product and marketing innovation strongly supports the idea that in highly competitive, consumer-driven markets, firm performance is closely tied to strategies that enhance market positioning and customer value. This aligns with recent scholarship by Foss & Saebi (2023), who argue that in environments marked by rapid change, business model innovations—often driven by new products and marketing approaches—are essential for creating and capturing value. The findings here suggest that for Nigerian SMEs, survival and growth are less about incremental internal tweaks and more about bold, market-facing maneuvers that secure a competitive advantage.

Perhaps the most revealing finding is the inconsistent and ultimately weak influence of process innovation on SME performance. This seemingly counterintuitive result can be understood through the lens of institutional theory in emerging markets. Research by Autio et al, (2024), posits that in economies with significant institutional voids and infrastructural deficits, the efficiency gains from process innovation are often absorbed or nullified by external environmental friction, such as unreliable supply chains or energy costs. Thus, an SME in Lagos or Abuja might perfect an internal workflow, but if external challenges remain unresolved, these improvements fail to translate into bottom-line performance, a conclusion strongly supported by this study's data.

Furthermore, the study confirms the transformative power of technology adoption, not merely as a direct performance driver but as a crucial amplifier for other innovations⁶. This finding resonates with the concept of digital capabilities as a meta-resource. A study by Nambisan et al, (2023), articulates that digital technologies reconfigure the very nature of innovation, enabling firms to scale customer engagement and product delivery in ways previously impossible. The significant interaction effect between technology and both product and marketing innovation in this research empirically demonstrates this synergy⁷. It suggests that for Nigerian SMEs, technology is the essential catalyst that transforms innovative ideas into tangible market performance, separating thriving enterprises from those that stagnate.

5.1 Conclusion

In conclusion, this study provides robust empirical evidence that the pathway to enhanced performance for SMEs in Nigeria's dynamic urban economies is not through innovation in general, but through a specific, externally-focused strategic orientation. The findings decisively show that product and marketing innovations are the primary engines of competitive advantage and profitability, while the impact of internal process innovation is largely neutralized by the challenging operating environment.

Crucially, this research establishes that technology adoption is not merely an independent driver of success but a foundational meta-capability that unlocks and amplifies the potential of market-facing innovations. For SMEs in Lagos and Abuja, the message is clear: survival and growth depend on the synergistic interplay between creating novel products and marketing strategies, and the digital platforms used to deploy them. This study contributes a nuanced, context-specific model to the literature, highlighting that for entrepreneurs in emerging economies, the most effective strategy is to innovate where it matters most—at the intersection of the firm and the market.

5.2 Recommendations

To foster a more competitive and resilient SME sector, the findings advocate for a multi-stakeholder approach centered on strategic innovation and technological integration. For SME owners and managers, this requires a deliberate pivot in resource allocation, prioritizing investments in high-impact, market-facing activities such as product development and digital marketing over internal process enhancements that yield marginal gains in the current infrastructural context. This strategic focus, however, must be underpinned by a non-negotiable commitment to technology adoption, which acts as a crucial amplifier for all innovative efforts. Supporting this, policymakers are urged to move beyond generic support and create targeted interventions, such as grants for R&D and digital literacy programs, while also addressing systemic barriers by investing in national infrastructure to create an environment where internal efficiencies can translate into tangible growth. Finally, the ecosystem of support must be strengthened by financial institutions and educators, who should develop tailored financial products for technology acquisition and new product launches, and update curricula to build SME capabilities in these proven, high-impact areas.

Policy Implications

The findings of this research offer several actionable insights for SME owner-managers, policymakers, and business support organizations in Nigeria and other emerging economies. These implications are crucial for fostering a more resilient and competitive SME sector.

The research provides practical recommendations to SME owners, policy makers and support institutions in Nigeria and other emerging economies. The most important thing to SME managers is to direct the scarce resources to product and marketing innovations that directly contribute to competitiveness and profitability as opposed to excessive investments on process improvement that is limited by ineffective infrastructure. The adoption of technology must be considered as a strategic need, which will allow firms to increase the effectiveness of innovation and reach more markets via digital platforms.

To policy makers, general innovation initiatives must be replaced by specific interventions to facilitate product development, research and development and digital marketing with grants and infrastructure investment. The reinforcement of electricity, logistics, and digital connectivity will enable process innovations to generate real productivity benefits.

Lastly, loan products to purchase technology and launch products should be designed by financial institutions and educators and consultants must incorporate customer-centric innovation and digital strategy into SME training. Specific mentorship and investments of women-led and younger companies are also necessary to facilitate inclusive entrepreneurship.

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