# Innovation Strategies and Competitiveness among Small and Medium Enterprises (SMEs) in Lagos State, Nigeria

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## Abstract

*This study examines the impact of innovation strategies on the competitiveness of small and medium-sized enterprises (SMEs) in Nigeria, focusing on Lagos State. It explores whether adopting innovative business practices—such as product development, process improvement, and digital transformation—enhances SME performance, market position, and growth. The study also identifies key challenges hindering innovation adoption, assesses the role of financial access in supporting or impeding innovation, evaluates the influence of digital transformation, and examines the effectiveness of government policies in fostering SME innovation. Data for this research were collected from both primary and secondary sources. A structured questionnaire was distributed, with 275 responses retrieved from 284 distributed copies. The analysis, conducted using Pearson Chi-square in SPSS, revealed significant relationships between innovation strategies and SME competitiveness, as well as between financial access and innovation adoption. Digital transformation and technological advancements were found to positively influence SME growth, while government policies were largely ineffective in promoting innovation. Based on these findings, it is recommended that SMEs invest in research and development to drive innovation. Business owners should leverage knowledge-sharing platforms and industry collaborations to stay updated on market trends. Additionally, training programmes on innovation management should be introduced to help SMEs optimise business strategies. Government and financial institutions should create more accessible funding mechanisms to support innovation. Enhancing digital infrastructure and regulatory frameworks will further enable SMEs to embrace technological advancements and strengthen their competitiveness in the market.*

**Keywords:** Access to finance, digital transformation, government policies, innovation within SMEs, support mechanisms, technological advancements.

## 1. Introduction

Innovation is a fundamental driver of the survival and growth of small and medium enterprises (SMEs) worldwide. This is particularly true for developing economies like Nigeria, where SMEs play a pivotal role in economic advancement. In Nigeria, SMEs significantly contribute to employment generation, poverty alleviation, and economic diversification, accounting for over 80% of the workforce and nearly 50% of the nation's GDP (Onugu, 2018). However, Nigerian SMEs operate in a challenging business environment, characterised by limited access to financing, inadequate infrastructure, and stiff competition from larger firms with superior resources (Ogundipe, Akinbami & Olaniyan, 2022). Consequently, adopting innovative strategies has become essential for SMEs in Nigeria to maintain competitiveness, meet market demands, and leverage growth opportunities.

The scope of innovation in SMEs encompasses product, process, and organisational innovations that address the unique constraints faced by smaller enterprises. Product innovation entails the development of new products or substantial improvements to existing ones to align with consumer preferences or introduce unique offerings (Schumpeter, 1942). Process innovation focuses on refining production and operational processes to enhance efficiency and cost-effectiveness, while organisational innovation involves structural changes aimed at improving management practices and resource allocation (Roper & Dundas, 2020). Research has shown that embracing such innovation strategies enhances the competitiveness of SMEs by enabling them to adapt to market dynamics, boost operational efficiency, and mitigate risks associated with technological advancements (Nyandoro, Amadi & Azubuike, 2022). Despite these potential benefits, Nigerian SMEs often struggle to implement large-scale innovation due to financial constraints and restricted access to advanced technologies, placing them at a disadvantage relative to larger firms with greater capital and technological capabilities.

The competitive pressures facing Nigerian SMEs have intensified due to globalisation and digitalisation, exposing local businesses to increased competition from regional and international enterprises. Studies indicate that SMEs in Nigeria that employ strategic innovation practices, such as digital transformation and sustainable business models, are better positioned to navigate these competitive forces, expand market share, and enhance resilience (Adegbite, Oseni & Salami, 2021b). Some Nigerian SMEs, particularly in fintech and e-commerce, have successfully leveraged innovation to penetrate new markets, demonstrating the value of strategic innovation in fostering business growth. However, research reveals that only a small percentage of Nigerian SMEs actively pursue innovation, largely due to financial and technical limitations (Abiola & Tijani, 2020).

One of the most significant barriers to innovation for Nigerian SMEs is inadequate access to financing. Financial institutions often perceive SMEs as high-risk borrowers due to sector volatility, leading to stringent loan conditions and high interest rates (Eniola & Entebang, 2019). As a result, many SMEs struggle to secure the funds necessary for research and development (R&D),

technology adoption, and capacity-building initiatives—critical components of sustained innovation. Additionally, infrastructure deficiencies, including inconsistent electricity supply and limited broadband access, further hinder SMEs' ability to implement technology-driven innovations (Abdullahi & Zubair, 2021).

Human capital constraints also pose challenges to innovation in Nigerian SMEs. Many small businesses face difficulties in attracting and retaining skilled professionals capable of driving innovative initiatives. The shortage of skilled labour, coupled with limited managerial expertise, reduces SMEs' capacity to develop and implement effective innovation strategies (Ogundipe, Adeniyi & Adeyemi, 2022). Some Nigerian SMEs have attempted to address these challenges through partnerships with research institutions and government agencies, but these collaborations remain relatively scarce and have yet to yield widespread impact across the SME sector.

Recognising the importance of innovation for SME competitiveness, the Nigerian government has introduced various policies and programmes aimed at fostering innovation. Initiatives such as the National Policy on MSMEs and the establishment of the Bank of Industry (BOI) provide financial assistance and technical support to SMEs (National Bureau of Statistics [NBS], 2021). However, the effectiveness of these initiatives has been mixed, with limited reach and varying levels of impact across different sectors. Studies suggest that while government interventions offer some support, SMEs require a more comprehensive framework encompassing mentorship, training, and accessible funding mechanisms to drive sustainable innovation (Oke, Adewale & Esan, 2020; Adekalu, Oludeyi, Genty & Wolo, 2013).

The integration of digital technologies presents both opportunities and challenges for Nigerian SMEs. Digital transformation enables businesses to optimise operations, enhance productivity, and expand customer reach. However, many SMEs in Nigeria lack the digital infrastructure and technical expertise needed to fully leverage these technologies (Adeniji, Ehi & Tijani, 2022). Research indicates that SMEs that adopt digital tools experience improved operational efficiency and enhanced customer engagement, yet the upfront costs and skills gap remain significant barriers (Omobolanle & Ehi, 2023). The success of digital transformation efforts in Nigerian SMEs is closely tied to government policies supporting digital literacy, broadband accessibility, and cybersecurity, as these factors directly influence SMEs' ability to integrate and sustain digital solutions.

Given the crucial role of innovation in strengthening SME competitiveness, this study explores the various strategies Nigerian SMEs employ to navigate competitive pressures and the obstacles they encounter in implementing these strategies. Additionally, it examines the role of external support mechanisms, including government policies and financial assistance, in creating an enabling environment for innovation. Understanding these dynamics will provide valuable insights into how Nigerian SMEs can harness innovation to enhance their market positioning and contribute to broader economic development. By addressing these challenges and fostering a conducive

environment for innovation, Nigerian SMEs can unlock their potential for sustainable growth, resilience, and global competitiveness in an increasingly dynamic business landscape.

## 2. Literature Review

The study developed a conceptual and empirical review alongside a theoretical framework to explore innovation strategies and SME competitiveness. It examined key concepts, challenges, financing, digital transformation, government policies, and relevant theories, including Schumpeterian innovation and the innovative firm theory.

### 2.1. The Concept of Competitiveness, Innovation and Small and Medium Enterprises (SMEs)

Competitiveness refers to a firm's ability to sustain advantage through innovation, efficiency, and adaptability (Igbenedion et al., 2024). For SMEs, competitiveness is driven by product quality, cost optimisation, and innovation (Kafouros, Wang & Hong, 2020). Innovation enables differentiation and market expansion, especially in a globalised economy where digital transformation is essential (Adegbite, Adenuga & Oladapo, 2021a). However, financial and technical constraints often limit SMEs' digital adoption (Lafuente, Szerb & Acs, 2020).

Innovation involves developing new products, refining processes, and improving organisational practices (Schumpeter, 1942). Product, process, and organisational innovation enhance competitiveness by improving efficiency and meeting evolving market demands (Teece, 2018; Nyandoro et al., 2022). Digital innovation offers further gains but is often hindered by poor infrastructure and limited expertise in developing economies like Nigeria (Ogundipe et al., 2022).
SMEs, defined by employee size and turnover, are vital to Nigeria's economy, contributing nearly 50% of GDP and employing over 80% of the workforce (NBS, 2021; Onugu, 2018). Their agility promotes innovation and market responsiveness (Roper & Dundas, 2020). However, SMEs face challenges including limited access to finance, weak infrastructure, and skill shortages (Abdullahi & Zubair, 2021; Adegbite et al., 2021a). Government support exists but is often hampered by implementation gaps (Oke, Ogundipe & Oyelaran-Oyeyinka, 2020). Addressing these issues is key to enhancing SME innovation and competitiveness.

**Innovation Strategies and Competitiveness of SMEs in Nigeria**

Research on innovation strategies and SME competitiveness in Nigeria highlights the crucial role of innovation in ensuring SME survival and growth in an increasingly globalised economy. Product, process, and organisational innovation are key strategies that allow SMEs to maintain a competitive edge. Nigerian SMEs face unique challenges in adopting these strategies, limiting their ability to compete effectively (Abiola & Tijani, 2020).
Innovation is widely recognised as a driver of economic growth and competitiveness (Ayyagari, *et al*., 2020). Nigerian SMEs operate in an environment plagued by limited access to finance, inadequate infrastructure, and a shortage of skilled labour, making innovation both essential and

challenging (Adam & Alarifi, 2021). According to Amaeshi, Asiabaka, and Okoye (2021), SMEs can only sustain their market position by leveraging innovation to meet consumer demands, adapt to technological advancements, and enhance operational efficiency. Based on the foregoing, the following null hypothesis is proposed to guide the empirical investigation:

**Ho**: *There is no significant relationship between innovation strategies and the competitiveness of SMEs.*

**Challenges that Hinder SMEs from Adopting Innovation Strategies**

Innovation is crucial for SMEs in developing economies like Nigeria, where they drive economic growth and employment. However, several challenges hinder their ability to adopt innovation strategies, including financial constraints, poor infrastructure, skill shortages, and inadequate government support. These barriers limit SMEs' competitiveness and innovation potential.

Nigerian SMEs face several innovation challenges. Financial constraints, driven by strict lending and high interest rates, hinder investment in R&D and new technologies. Poor infrastructure, including unreliable power and weak road networks, disrupts operations. High technology costs and rapid advancements limit adoption. A shortage of skilled labour and managerial expertise further reduces innovation capacity. Government initiatives often fall short due to bureaucracy and weak implementation. Lastly, limited collaboration and access to innovation networks restrict knowledge sharing and competitiveness (Zamani, 2022; Abdullahi & Zubair, 2021; Ogundipe, et al., 2022; Nyandoro, et al., 2022; NBS, 2021). Based on the foregoing, the following null hypothesis is proposed to guide the empirical investigation:

**$Ho_1$**: *There is no significant relationship between identifiable challenges and the adoption of innovation strategies by SMEs.*

**Access to Finance in Supporting or Impeding Innovation among Nigerian SMEs**

Access to finance is critical for SMEs to invest in research, technology, and capacity-building, yet it remains a major obstacle in Nigeria. Limited financing restricts innovation adoption, reducing SMEs' competitiveness in dynamic markets. Nigerian SMEs face financial constraints due to being perceived as high-risk borrowers, resulting in strict lending conditions and limited access to affordable credit (Eniola & Entebang, 2019). This hampers investment in R&D and innovation (Abiola & Tijani, 2020). Alternative financing, like microfinance and peer-to-peer lending, offer some relief but remain limited in scale and accessibility (Ogundipe, et al., 2022). Government initiatives, such as BOI and NEDEP, aim to improve financing but suffer from bureaucracy and limited reach (NBS, 2021; WEF, 2023). Low financial literacy and digital finance adoption further restrict SMEs' ability to secure funding (Omobolanle & Ehi, 2023). Based on the foregoing, the following null hypothesis is proposed to guide the empirical investigation:

**$H_{o2}$**: *There is no significant relationship between access to finance and supporting/ impeding innovation among SMEs in Lagos State.*

**Digital Transformation and Technological Challenges for Nigerian SMEs**

Digital transformation is reshaping Nigerian SMEs, offering opportunities for market expansion and efficiency while presenting challenges related to infrastructure and skills gaps. Digital transformation offers Nigerian SMEs opportunities to enhance efficiency, customer reach, and competitiveness through tools like e-commerce, cloud computing, and digital marketing (Nwaiwu, 2018; Okoye, 2021). These technologies improve decision-making and streamline operations (Akanbi & Agbolade, 2019). Social media platforms help SMEs engage customers cost-effectively (Bello, Onuoha & Olukemi, 2021). However, barriers such as high adoption costs, limited technical skills, poor digital literacy, and infrastructure challenges—including unreliable electricity and internet—limit effectiveness, especially in rural areas (Eze, 2021; Olawale & Garwe, 2018). Many SMEs remain unable to fully utilise digital tools for growth and innovation (Kalejaiye & Oba, 2019). Based on the foregoing, the following null hypothesis is proposed to guide the empirical investigation:

**$H_{o3}$**: *There is no significant relationship between digital transformation and technological advancements and SME competitiveness.*

**Government Policies and Innovation Support for Nigerian SMEs**

Government policies and support mechanisms play a crucial role in fostering innovation among Nigerian SMEs, which are vital to economic growth. However, their impact depends on accessibility, efficiency, and sector-wide implementation (Adegboye & Iweriebor, 2018; Oladimeji, 2020). The Nigerian government supports SME innovation through initiatives like the CBN's MSME Development Fund and Bank of Industry loans (Iloani & Okoro, 2019; Osakwe, 2018). However, access is hindered by bureaucracy and low awareness (Adegboye & Iweriebor, 2018). Skill-building programmes like NDE and ITF aim to equip entrepreneurs, but limited rural reach reduces their impact (Oladimeji, 2020). Regulatory reforms offer tax incentives and IP protection, yet poor implementation and corruption persist (Ekpo & Onyeiwu, 2021). Public-private partnerships with global institutions provide funding and market access, though weak coordination hampers their success (Iloani & Okoro, 2019). Based on the foregoing, the following null hypothesis is proposed to guide the empirical investigation:

**$H_{o4}$**: *Government policies and support mechanisms are not effective in promoting innovation within Nigerian SMEs.*

## 2.2 Theoretical Review

**Schumpeterian Theory of Innovation and Entrepreneurship**

The Schumpeterian Theory of Innovation and Entrepreneurship is an integral part of innovation-based endogenous growth models proposed by Joseph Schumpeter, a renowned twentieth-century

economist (Schumpeter, 1942). This theory highlights the pivotal role of entrepreneurship and innovation in economic growth, emphasising the continuous process of change within economies and markets. Schumpeter describes entrepreneurs as agents of innovation and key drivers of economic transformation (Schumpeter, 1954). According to Schumpeter, innovation and entrepreneurship are fundamental to economic development, as entrepreneurs introduce new combinations of production factors, leading to radical and discontinuous change.

Schumpeter attributes economic development to various forms of innovation, including the introduction of new products, modification of existing products, adoption of new production methods, opening of new markets, utilisation of novel sources of raw materials, and restructuring of industries (Schumpeter, 1954). Schumpeter conceptualises innovation as an industrial transformation process that reshapes economic structures through "creative destruction." This process reallocates resources from obsolete firms to emerging ones, fostering dynamic economic growth (Schumpeter, 1942).

Entrepreneurs play a crucial role in reallocating resources to innovative uses, thereby revolutionising production and market structures (Schumpeter, 1939). Innovation serves as a tool for gaining a competitive edge, allowing firms to differentiate their products, enhance productivity, and boost profitability. Schumpeter argues that firms must continuously innovate to remain competitive, as innovation drives business growth, increased investments, and overall economic expansion (Schumpeter, 1942). He asserts that innovation is not solely about inventing entirely new products but also involves refining existing processes, combining methods, leveraging available resources, and integrating new technologies. This theory underscores the foundational role of innovation in competitiveness and sustained economic growth, aligning with the objectives of this study.

**Theory of the Innovative Firm**

The Theory of the Innovative Firm, proposed by William Lazonick, explains superior firm performance in imperfect markets. It posits that firms transform productive resources into commercially viable goods and services through innovation. Superior economic performance arises when firms create higher-quality products at lower costs (Lazonick & O'Sullivan, 2000). Innovation enhances competitiveness by enabling firms to produce efficiently, reduce costs, and deliver greater value to customers. Innovative firms engage in continuous improvement to sustain market leadership, differentiate themselves, and adapt to changing industry conditions (Porter, 1990). Instead of competing solely through price variations, they leverage innovation to maintain their market positions. Innovation economics suggests that increased production inputs alone cannot explain output growth; instead, firms' innovative capabilities drive sustained competitiveness.

By investing in quality and productive resources, innovative firms develop superior products, services, and operational methods. In the short term, innovation may increase costs, but in the long

run, it reduces unit costs while expanding market share (Lazonick & O'Sullivan, 2000). Additionally, innovation allows firms to penetrate various market segments based on consumers' economic power, building a foundation for broader market access. Innovation fosters differentiation, allowing firms to create unique products and services tailored to specific customer needs. Through continuous improvements in products, processes, and organisational methods, firms enhance competitiveness (Porter, 1998). This theory underscores the essential role of innovation in driving firm success, market differentiation, and sustained competitive advantage, making it relevant to this study.

### 2.3 Empirical Review

Igbenedion *et al* (2024) explored SME competitiveness and employment creation, emphasising SME growth as a mediator. With the state's declining capacity to employ citizens, SME growth is increasingly seen as key to job creation and economic development. Using the capabilities-based view (CBV) theory, the study examined how SME competitiveness (product innovation, differentiation, and imitation) influences employment generation through SME growth. A cross-sectional survey of 93 SMEs in Nigeria was conducted, analysed using structural equation modeling. Results showed that product innovation and differentiation significantly impact employment generation, with SME growth mediating this relationship.

Agazu and Kero (2024) reviewed the link between innovation strategy and firm competitiveness through a systematic literature review of 40 studies (2015–2023) using PRISMA and descriptive content analysis. Findings confirmed a positive correlation between innovation strategy and competitiveness, highlighting the need for further research in the field.

Akoma *et al* (2023) examined innovation and SME performance in Nigerian manufacturing firms. A survey of 126 SMEs in Ogun State revealed that proactiveness and risk-taking significantly moderate the relationship between innovation and performance, with proactive SMEs achieving better outcomes. Nnorom *et al* (2023) studied innovation's impact on SME competitiveness in Lagos. Regression analysis of 471 respondents confirmed product, process, and market innovation significantly enhance competitiveness. Zamani (2022) analysed technology adoption in SMEs via a systematic literature review, identifying 11 key influencing factors and advocating for a dynamic adoption framework. Other studies explored marketing innovation, competitor orientation, and competitive intelligence, all reinforcing innovation's critical role in SME growth and competitiveness.

## 3. Methodology

The study employed a 'descripto-explanatory' research design, which integrates both descriptive and explanatory approaches. The descriptive design was suitable for characterising innovation strategies and competitiveness among SMEs in Alaba International Market, Ojo, Lagos, Nigeria. This approach allowed the study to assess the nature and status of innovation strategies within

SMEs. The explanatory design, on the other hand, was used to establish causal relationships between the independent and dependent variables. A cross-sectional survey strategy was adopted to collect data at a specific point in time, providing a snapshot of innovation strategies and SME competitiveness (Hair, Money, Samouel & Page, 2010). This strategy facilitated efficient data collection from a large population while ensuring economic feasibility and better researcher control.

The study targeted SMEs in Alaba International Market, Ojo, Lagos, Nigeria, which employs thousands of workers. According to the Corporate Affairs Commission (CAC, 2024), there were 987 registered SMEs: 346 small enterprises (10–49 permanent employees) and 641 medium enterprises (50–300 permanent employees).
The sample size was determined using Yamane's formula:
n=N1+N(e2)n = /frac{N}{1 + N(e^2)}
where:

- **n** = sample size
- **N** = total population (987)
- **e** = margin of error (0.05)

Applying this formula: n=9871+987(0.052) =284n = /frac {987}{1 + 987(0.05^2)} = 284
The sample of 284 was proportionally distributed among SMEs based on their representation in the population.

Primary data was collected using a semi-structured questionnaire, designed to gather qualitative and quantitative information. The questionnaire had two sections: the first captured respondents' demographic details, while the second focused on variables related to innovation strategies, SME competitiveness, financial access, digital transformation, and government support. The questionnaire, titled ISCASMAMEQ, was administered by the researcher and trained assistants from Lagos State University, Ojo, to ensure high response rates and accuracy. Data collection took place in November 2024. The instrument's validity was ensured by aligning questions with research objectives and subjecting it to peer review. Cronbach's alpha test was used to assess reliability, with all variables scoring above 0.70, indicating acceptable internal consistency (Kothari, 2004). A pilot study with 20 enterprises further refined the questionnaire.

Data was analysed using descriptive and inferential statistics. Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to summarise data, while inferential statistics, particularly Pearson's Chi-Square test, were applied to examine relationships

between variables. Statistical analysis was conducted using SPSS, with diagnostic tests performed to validate assumptions before conducting the Chi-Square test.

## 4. Results

This section presents the study's results and data analysis, including descriptive statistics, hypothesis testing, and Pearson Chi-square estimates. It examines the relationship between independent and dependent variables, focusing on innovation strategies and competitiveness among SMEs in Nigeria.

### 4.1. Test of Hypotheses

**Hypothesis One**

**$H_1$**: There is no significant relationship between innovation strategies and the competitiveness of SMEs.

**Table 1: Chi-square results on innovation strategies and the competitiveness of SMEs.**

| Variables | N | Level of Significance | Degree of Freedom | $\chi^2$ Cal | $\chi^2$ tab | Decision |
|---|---|---|---|---|---|---|
| The adoption of innovation strategies impacted the competitive positioning of SMEs in Lagos over the past five years. | 275 | 0.05 | 3 | 24.3 | 7.815 | Accepted |

From Table 1, it is evident that $\chi^2$ Cal = 24.3 is greater than $\chi^2$ tab = 7.815 at a 0.05 level of significance. Hence, the null hypothesis ($H_0$) is rejected. This means that there was a significant relationship between innovation strategies and the competitiveness of SMEs.

**Hypothesis Two**

**$H_2$**: There is no significant relationship between identifiable challenges and the adoption of innovation strategies by SMEs.

**Table 2: Chi-square results on adoption of innovation strategies by SMEs.**

| Variables | N | Level of Significance | Degree of Freedom | $\chi^2$ Cal | $\chi^2$ tab | Decision |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| Limited access to skilled labour affects the adoption of innovation strategies in Lagos-based SMEs. | 275 | 0.05 | 3 | 137 | 7.815 | Accepted |

From Table 2, it is evident that $\chi^2$ Cal = 137 is greater than $\chi^2$ tab = 7.815 at a 0.05 level of significance. Hence, the null hypothesis ($H_0$) is rejected. This means that there was a significant relationship between identifiable challenges and the adoption of innovation strategies by SMEs.

**Hypothesis Three**

**$H_3$**: There is no significant relationship between access to finance and supporting/ impeding innovation among SMEs in Lagos State.

**Table 3: Chi-square results on access to finance and supporting/ impeding innovation among SMEs in Lagos State.**

| Variables | N | Level of Significance | Degree of Freedom | $\chi^2$ Cal | $\chi^2$ tab | Decision |
|---|---|---|---|---|---|---|
| Banks and other financial institutions play significant roles in encouraging or restricting innovation among Lagos SMEs. | 275 | 0.05 | 3 | 92.5 | 7.815 | Accepted |

From Table 3, it is evident that $\chi^2$ Cal = 92.5 is greater than $\chi^2$ tab = 7.815 at a 0.05 level of significance. Hence, the null hypothesis ($H_0$) is rejected. This means that there was a significant relationship between access to finance and supporting/ impeding innovation among SMEs in Lagos State.

**Hypothesis Four**

**$H_4$**: There is no significant relationship between digital transformation and technological advancements and SME competitiveness.

**Table 4: Chi-square results on digital transformation and technological advancements and SME competitiveness.**

| Variables | N | Level of Significance | Degree of Freedom | $\chi^2$ Cal | $\chi^2$ tab | Decision |
|---|---|---|---|---|---|---|
| Technological advancements contribute to improved customer service and market reach for Lagos-based SMEs. | 275 | 0.05 | 3 | 160.5 | 7.815 | Accepted |

From Table 4, it is evident that $\chi^2$ Cal = 160.5 is greater than $\chi^2$ tab = 7.815 at 0.05 level of significance. Hence, the null hypothesis ($H_0$) is rejected. This means that there was a significant relationship between digital transformation and technological advancements and SME competitiveness.

**Hypothesis Five**

**$H_5$**: Government policies and support mechanisms are not effective in promoting innovation within Nigerian SMEs.

**Table 5: Chi-square results on government policies and support mechanisms are not effective in promoting innovation within Nigerian SMEs.**

| Variables | N | Level of Significance | Degree of Freedom | $\chi^2$ Cal | $\chi^2$ tab | Decision |
|---|---|---|---|---|---|---|
| There are specific government programmes or incentives that have been most effective in promoting innovation within SMEs in Lagos. | 275 | 0.05 | 3 | 156.5 | 7.815 | Accepted |

From Table 5, it is evident that $\chi^2$ Cal = 156.5 is greater than $\chi^2$ tab = 7.815 at 0.05 level of significance. Hence, the null hypothesis ($H_0$) is rejected. This means that government policies and support mechanisms are not effective in promoting innovation within Nigerian SMEs.

**4.2 Discussion of Findings**

This section of the study provides a comprehensive discussion on the research findings and their alignment with existing literature. The results confirm key hypotheses related to innovation strategies, challenges, access to finance, digital transformation, and government policies affecting SMEs in Nigeria.

The study found a significant relationship between innovation strategies and SME competitiveness. Research consistently shows that SMEs adopting innovative strategies improve market positioning, operational efficiency, and sustainability. Nybakk and Jenssen (2012) emphasised that strategic innovation secures a competitive advantage that is rare, valuable, and difficult to replicate. Rubio-Andrés, Linuesa-Langreo, and Sastre-Castillo (2024) confirmed that innovation-driven strategies enhance SME market performance despite resource limitations. Further research on SMEs in Colombia demonstrated a positive correlation between innovation capabilities and financial performance, reinforcing the role of innovation in driving SME competitiveness.

The study established a significant relationship between identifiable challenges and innovation adoption in SMEs. Key barriers include financial constraints, limited skilled labour, inadequate infrastructure, regulatory burdens, and resistance to change. Financial limitations were a primary obstacle, preventing SMEs from funding research, acquiring technology, and implementing new business models. Zamani (2022) found that restricted financial resources hinder SME innovation, while Abdullahi and Zubair (2021) highlighted the importance of venture capital and government support.

A shortage of skilled labour further restricted innovation, especially in emerging economies. Infrastructure deficiencies, such as unreliable electricity and poor internet connectivity, also impeded digital transformation efforts. Regulatory complexities, including excessive taxation and bureaucratic hurdles, discouraged SMEs from pursuing innovation. Despite these barriers, some SMEs overcame challenges through strategic partnerships, alternative financing, and skills development programmes. Addressing these issues requires targeted policy interventions to enhance SME innovation capabilities.

The study confirmed a significant relationship between access to finance and SME innovation in Lagos State. Financial resources determine SMEs' ability to invest in research, digital transformation, and operational improvements. SMEs with sufficient financial backing are more likely to innovate and gain a competitive advantage. Eniola and Entebang (2019) found that

financial investment is a crucial enabler of SME innovation, while Adegbite *et al.* (2021b) emphasised the role of financial support in advancing technology adoption and market expansion. However, many SMEs face challenges in securing loans due to stringent lending requirements, high interest rates, and collateral demands. Government-backed funding initiatives often suffer from bureaucratic inefficiencies, limiting their accessibility. Financial literacy gaps also prevent SME owners from effectively managing available financial resources. Addressing these issues through financial education programmes and tailored SME funding solutions is crucial for fostering innovation.

The study confirmed a strong relationship between digital transformation, technological advancements, and SME competitiveness. SMEs that integrate digital tools experience improved efficiency, customer engagement, and market positioning. Technologies such as cloud computing, artificial intelligence, and automation enhance productivity and decision-making. Adeleye (2020) found that technological innovation drives SME growth and market differentiation, while Akanbi and Agbolade (2019) demonstrated how digital adoption enhances business scalability. However, financial limitations, inadequate digital skills, and infrastructure constraints hinder SMEs from fully leveraging digital transformation. Policy support, financial incentives, and capacity-building initiatives are necessary to facilitate technological adoption.

The study found that government policies and support mechanisms in Nigeria have been largely ineffective in fostering SME innovation. Although various programmes exist to support business growth, SMEs continue to face barriers due to poor policy implementation, financial constraints, and regulatory challenges. SMEs struggle to access government-backed funding due to bureaucratic hurdles and complex application processes. Nybakk and Jenssen (2012) emphasised that for innovation policies to be effective, they must be transparent, accessible, and tailored to SME needs. Rubio-Andrés, *et al* (2024) also highlighted financial constraints as a major obstacle to SME innovation in developing economies.

Regulatory challenges, including multiple taxation and excessive licensing requirements, further discourage innovation. Poor infrastructure exacerbates these issues, limiting SMEs' ability to implement digital and technological advancements. Interestingly, private-sector initiatives and international partnerships have played a more significant role in fostering SME innovation than government interventions. SMEs that successfully implement innovation strategies often rely on private investors, venture capital firms, and global organisations rather than government policies. Strengthening public-private collaboration may be a more effective approach to supporting SME innovation in Nigeria.

## 5. Conclusions and Recommendations

The study confirms that innovation strategies significantly enhance the competitiveness of SMEs in Lagos State. Businesses that adopt product innovation, process improvements, and digital transformation achieve better market reach, customer satisfaction, and operational efficiency.

However, financial constraints, limited skilled labour, inadequate infrastructure, and regulatory bottlenecks hinder innovation adoption. Based on these findings, it is recommended that:

To enhance SME innovation, businesses should invest in research and development while leveraging collaboration and knowledge-sharing platforms to stay updated on market trends and technological advancements. Training programmes on innovation management should be introduced to help SMEs refine their business strategies. The government and private sector must improve infrastructure, including stable electricity and broadband connectivity, to support innovation. Capacity-building initiatives should equip SME owners and employees with essential digital and technical skills. Policies should also be enacted to reduce bureaucratic obstacles and lower the cost of doing business. Financial institutions should offer SME-friendly financing options with lower interest rates and flexible repayment structures. The government should establish a transparent grant system while SMEs explore alternative funding sources like venture capital and crowdfunding.

Public-private partnerships should provide affordable digital training, and SMEs should adopt cost-effective digital solutions. Strengthening collaboration between government, private sector, and academia will create a supportive ecosystem for SME innovation and growth. Further research is recommended to empirically assess how innovation novelty influences business competitiveness.

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