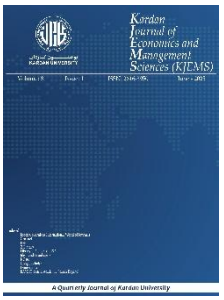

Kardan Publishing

Kardan Journal of Economics and Management Sciences (KJEMS)

ISSN: 2616-3950 (P) 2959-0493 (O), Journal homepage: kjems.kardan.edu.af

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To cite this article: Abdulkazeem, A. (2025). Exploring the innovative practices of small and medium confectionery enterprises and their performance in Bida, Niger state, Nigeria. *Kardan Journal of Economics and Management Sciences, 8*(1), *180–200.*
DOI: 10.31841/KJEMS.2025.185

To link to this article: http://dx.doi.org/10.31841/KJEMS.2025.185

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Published online: 30 June 2025

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Kardan Journal of Economics and Management Sciences 8 (1) 180 – 200
©2025 Kardan University
Kardan Publications
Kabul, Afghanistan
DOI: 10.31841/KJEMS.2025.185
https://kardan.edu.af/Research/CurrentIssue.aspx?j=KJEMS

Received: 05 Apr 25
Revised: 22 May 25
Accepted: 04 Jun 25
Published: 30 Jun 25

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Abstract

Although several confectionery businesses in Bida Niger State are yet to know how technology adoption and process improvement help in improving SMEs performance, these things are very vital to business success. This study examined innovative practices of the small and medium confectionery enterprises (SMEs) and their business performance in Bida, Niger State, Nigeria. The survey research design was used because it is accurate, cost-effective, and able to collect data from a large population within a limited time frame. The study was designed for the Managers of the registered bread bakeries within the Association of Master Bakers, Bida branch, and this was meant to ensure reliability and standardization. Thus, 55 bakery managers constitute a total population with a computed sample size of 48 respondents from the Raosoft formula. Structured questionnaires were used to collect primary data, and simple random sampling was applied to ensure the sampling objective and security. Technology adoption ($B = .161$, $p = .171$) does not appear to produce any statistically significant effect on SMES' performance, whereas process improvement ($B = .635$, $p < .001$) does, and it is significant at a $p = .000$ level, signifying strong statistical significance. Technology adoption (.165) has much less effect than the .635 process improvement. Through this study, it is demonstrated that innovation is a necessity for the sustenance of SMEs' success in the confectionery sector. The research shows that technology adoption has not demonstrated substantial improvements because employees need better training and proper tool utilisation. Organisations of SMEs should fund training initiatives that develop worker capabilities for using modern technologies to optimize their potential advantages. Therefore, the research recommended that process optimization, technological advancements, and developing skills will improve the performance required for continuous investment.

Keywords: *Innovative Practices, Performance, SMES, Innovativeness, Confectionery*

1. Introduction

Small and Medium Enterprises (SMEs) maintain widespread recognition as economic growth enablers that promote development at every stage of economic evolution for developed and developing countries. Businesses now widely implement innovative approaches for operation expansion and increased profitability because of today's fast-changing business environment. Innovation functions as an essential business growth

method that directly connects to industrial development and corporate competition potential. In developed economic systems, innovation functions as a vital driver toward industrial sector-based economic growth, according to existing research (Simic *et al.,* 2020). The global market success of SMEs depends on innovation because this competence enables them to thrive and compete effectively (Perera and Samarakoon, 2021).

The innovative approach helps businesses find new market territories and expand their market presence, which creates competitive advantages (Hartono, 2018). Innovation describes the process of introducing fresh products as well as enhanced processes and services to boost organizational operational outcomes. Business growth and efficiency enhancements, together with new market opportunities, are established through modern technology deployment and strategic business planning, as well as resource utilization optimization (Twaliwi and Isaac, 2017). The rising level of global market competition requires Nigerian micro, small, and medium enterprises (MSMEs) to adopt innovation strategies for both competitive survival and growth sustainability (Olughor, 2015). The lack of innovation adoption by Nigerian SMEs prevents their full market expansion and dominance, according to Adeoye *et al.* (2019). The business environment's fast pace and global nature require SMEs to innovate because this ensures long-term competitive strength during technological progress and market competition. Developing economies maintained protected business environments for their firms. The introduction of globalization brought intensified international rivalry that compelled companies to adopt innovative strategies for continued existence. Numerous Small and Medium Enterprises (SMEs) throughout the region face difficulties against international competition due to insufficient competitiveness, according to the findings of Prasanna *et al.* (2019). Business survival requires enterprises to develop innovative product development skills alongside process advancement, organizational transformation, and market relationship development (Migdadi, 2022). SMEs need to construct innovative capabilities to boost their market competitiveness. Zombie-like obsolescence threatens organizations that neglect to include innovation in their strategic planning because their outdated products and inefficient processes, together with restricted market flexibility, result in death. The indispensable role of SMEs as economic growth drivers, along with sustainability maintainers, stands essential in all types of economies (Adeoye *et al.,* 2019). SMEs play a major role in poverty reduction and job market growth alongside nationwide economic expansion (Singh and Hanafi, 2020). SMEs stand as vital economic infrastructure in Nigeria because they help stabilize the nation while expanding industrial growth. The national data shows that Nigerian enterprises consist of 97% SMEs, which utilize 50% of the workforce and generate industrial output at 50% (SMEDAN, 2022).

Technology adoption stands as an essential factor that drives efficiency improvements and produces better confectionery products while enhancing operational performance in this sector. SMEs operating in Niger State have transformed their business operations through modern technology advancements such as automated baking equipment and digital marketing platforms, and inventory management systems that enable them to face market competition. Business performance has been significantly improved through the combination of process improvement strategies, which include lean manufacturing alongside quality control techniques as well as supply chain optimization (Rasheed *et al.,* 2023). Most confectionery SMEs operating within Niger State currently face difficulties in implementing technological solutions and optimizing their business procedures.

Several confectionery businesses operating in Bida, Niger State, remain unaware of how technology adoption alongside process improvement drives SMEs performance, although these factors matter significantly for business success. The sluggish technology adoption pace results from high implementation expenses, technical skill deficiencies, and resistance to altering procedures, which limits both production effectiveness and customer satisfaction findings (Omowole *et al.*, 2024). Business expansion meets barriers alongside diminished profit potential when organizations utilize poor process enhancement tactics that result in operational stagnation, quality instability, and wasted resources. Previous research has investigated SMEs performance from numerous angles yet empirical studies about how technology adoption along with process improvement affect confectionery businesses specifically within Bida, Niger State, have been insufficient. SMEs represent over 90% of worldwide companies and maintain operations that employ approximately 70% of the workforce based on OECD data from 2010 (OECD, 2010). The Small and Medium Enterprises Development Agency of Nigeria (SMEDAN, 2022) recognizes these businesses as crucial elements for innovation facilitation, competition enhancement, and local economic development stimulation in emerging economic systems, where Nigeria stands as an example. SMEs have proved their importance as essential contributors to both commercial expansion and innovation objectives at the national level.

Confectionery businesses produce and market a variety of sweet food items, including candies, chocolates, baked goods, and sugar-based sweets for consumption. Industrial manufacturers operate alongside artisanal producers in various sizes of enterprises. Five basic types make up this industry, including (i) chocolate makers, (ii) candy stores, as well as (iii) bakeries that create bread and baked goods, custodial pastry shops, and (v) sugar refineries. The research exclusively explores bakeries generating bread supply in the Bida metropolis. The confectionery industry enhances Nigerian economic development by creating jobs, stimulating growth and innovation, raising living standards, and generating revenue. Small confectionery businesses in Bida, Niger State face multiple obstacles that limit their innovative practices primarily because they lack both a conducive innovation culture and research-and-development commitment and insufficient stakeholder interchanges. Such barriers limit their capabilities to grow through sustainability while competing in markets effectively. The existing literature shows that research about innovation has mostly investigated SMEs yet provides scarce attention to confectionery business practices, especially in Bida, Niger State, Nigeria. This research addresses a missing link by investigating the impact of innovative practices, technology adoption, and process enhancement on confectionery SMEs' performance within the Bida metropolis.

1.2 Objectives of the Research

1. To ascertain the effect of technology adoption on confectionery SMEs' performance in Bida, Niger State.
2. To determine the influence of process improvement of confectionery SMEs performance in Bida, Niger State.

1.3 Research Questions

1. To what extent does technology adoption affect confectionery SMEs' performance in Bida, Niger State?

2. To what extent does process improvement influence confectionery SMEs performance in Bida, Niger State?

2. Literature Review

This literature review examines the innovative practices and capacity of small and medium enterprises, analyzing existing studies, theories, and methodologies to identify trends, gaps, and future research directions.

2.1 Conceptual Review

2.1.1 Innovativeness

Innovation means a natural tendency to try out creative and experimental approaches by presenting fresh products and services (Zaato *et al.,* 2020). People who exhibit innovation engage in creative and experimental activities, which result in some developments that progress from present expertise yet require new competency acquisitions (Thoudam *et al.,* 2022). Small and medium enterprises use innovation as their network tool, which provides new market knowledge and technological access (Dossou *et al.,* 2021). Innovativeness serves as a key strategic factor for SMEs by enabling new thought development process modernization and product/service development, which leads to better market entry, larger market share capture, and competitive advantages (Zaato *et al.,* 2020).

SMEs achieve different levels of performance because they deploy innovations effectively, according to Adam and Alarifi (2021). SMEs need to change their business aspects naturally, which results in object changes inside the company and consequently affects their innovation levels (Al Suwaidi *et al.,* 2021). Companies operating in competitive markets exhibit greater product innovation when they belong to the SME category, according to Ebrahimi *et al.* (2018). Organizational survival depends on innovation because it drives product and service advancement and process improvement, as well as technical design and organizational restructuring, according to Manaf *et al.* (2021). The innovative actions of SMEs lead to greater customer satisfaction along with enhanced growth outcomes and social performance (Onyenma, 2019). The company's operational management and SME performance success depend on innovation, according to Ayoko (2021). The innovative capabilities of SMEs lead to enhanced performance by giving them superior market advantages across product development operations, marketing, human resource management, and building national and international business connections (Perera and Samarakoon, 2021). Adam and Alarifi (2021) explained innovation as the organizational process of adopting fresh technology or management practices to achieve better operation results.

The productivity growth of SMEs depends largely on their innovative capability, as the OECD (2016) explains. Inclusive growth receives positive effects from innovativeness because it eliminates productivity obstacles and decreases pay disparities between SME employees and employees in large firms. SMEs usually receive less innovative ratings than large firms, but a group of scholars focuses on SMEs' innovation levels to show that selected small firms outperform larger companies. Businesses achieve substantial expansion by executing their strategies successfully while obtaining government backing for their environment and strategy execution systems. Large firms conduct business activity outsourcing to attain innovation, which opens new opportunities for SMEs, argues Hernandez *et al.* (2020). In entrepreneurship studies, innovativeness

functions as the main concept, which describes the business trends that create space for innovative approaches and experimental developments that result in new services and product creation.

SMEs typically view innovation as competitive and profitable solutions that fulfil customer requirements through new products and procedures. Firms that use innovation demonstrate their capability to promote fresh concepts into new technological products, operational systems, and marketing approaches, which strengthens firms' competitiveness through acquiring various competencies (Hernandez *et al.*,2020).

Previous literature consistently suggests that innovativeness has a significant and positive effect on SMEs' performance (Ayoko, 2021; Al Suwaidi *et al.,* 2021; Zaato *et al.,* 2020; Hoque *et al.,* 2018; Duru *et al.,* 2018). In the context of this study, business organizations use innovative practices as strategic approaches to deploy new or better methods, technologies, and processes to boost operational performance, market competitiveness, and business efficiency. The business sector of confectionery SMEs implements innovative practices by using contemporary baking technologies, together with digital marketing techniques and quality control systems, along with streamlined production systems to generate maximum output while responding to changing consumer preferences. These practices involve both product innovations and process improvements, such as lean manufacturing, supply chain optimization, and research-led product development approaches. Through innovative methods, implementation, and confectionery, small and medium enterprises in Bida Niger state will boost productivity while cutting costs and improving quality and marketing reach to drive sustainable business expansion.

2.1.2 Technology Adoption

Dimoso and Utonga (2024) demonstrated that digital technologies enable SMEs to boost their market competition, together with innovation and global economic expansion. The implementation of digital technologies by SMEs depends heavily on their available financial resources, quality of digital infrastructure, and digital literacy skills. Developing nations experience operational development in their digital entrepreneurship and innovation settings from their regulatory systems, institutional backing, and cultural characteristics. According to Eliyana *et al.* (2024), digital technological transformation has become essential for long-term success and development throughout all social levels. Digital transformation exists when businesses reform their operational model through the convergence of contemporary digital tools, such as artificial intelligence, cloud computing, and blockchain, alongside big data. Initial outcomes from digital transformation strategies to boost production efficiency and company innovation have been observed in business groups including China, Vietnam, Pakistan, Taiwan, Malaysia, Indonesia, South Korea, Nigeria, America, and South African respective entities, making digital transformation a central developmental strategy for SME management. Studies demonstrate that digital technology fails to generate a straight positive relationship with company performance (Ayo-Balogun *et al.,* 2024). The process of digitalization served some businesses well, yet other companies, like Nigerian and UK banking institutions, did not thrive under digitalization. Technology production by itself fails to deliver results because businesses need technology distribution, followed by its full utilization to obtain all possible advantages. The adoption of artificial intelligence, together with big data, cloud computing, cybersecurity, IoT, blockchain smart technologies, and service

automation, aims to enhance business performance among small and medium-sized enterprises (SME) owners (Ayo-Balogun *et al.,* 2024).

Ogunwale *et al.* (2024) prove that technological applications deliver both lasting comfort and high efficiency, mostly when used for education processes. New technology implementation enables organizations to gain different competencies and knowledge bases. The implementation of electronic business alongside electronic commerce and electronic marketing contributes favourably to all kinds of businesses at every scale across the world. The process of business technological implementation consists of integrating modern technological solutions to improve operational efficiency and organizational output, and performance. Small confectionery businesses operating in Bida, Niger State, adopt innovative baking machinery combined with automated systems and digital marketing programs alongside inventory software tools to achieve productivity along with enhanced product quality and better marketplace positions.

Digital innovations such as data analytics, e-commerce platforms, and other business process streamlining tools help these businesses improve their operations and increase customer involvement. SME confectionery businesses can solve operational obstacles while maximizing their resources and securing sustainable development in a market that grows more competitive through effective technology adoption.

2.1.3 Process Improvement

The systematic enhancement of organizational processes leads organizations to attain operational efficiency alongside effectiveness, combined with improved quality outputs. Process improvement starts by finding inefficiencies in workflows, followed by a study of current processes to create improvements that maximize performance outcomes (Adesina *et al.,* 2024). Different organizations within several industries apply process improvement methodologies to create better operations, minimize expenses, and increase customer fulfillment levels. Ezeh *et al.* (2023) establish process improvement as fundamental business process rethinking and radical redesign that drives significant transformations in key performance measures, including cost, quality, service, and speed. According to Prasanna *et al.* (2019), process improvement serves as an organized method that enables organizations to maximize their core procedures for improved efficiency. According to Dutta *et al.* (2021), process improvement describes continuous initiatives that enhance products, services, and processes until they fulfil customer needs as well as regulatory mandates. Information and communication technology has brought extensive developments to all aspects, and organizations now experience swift transformations in their technical, operational, and organizational factors. The organization needs systems and procedures alongside regulatory measures to improve business process efficiency and performance, which results in achieving business goals and securing its market competitiveness. Business process improvement provides organizations with a method for process optimization to produce better products and services for customers. Business process improvement generates small progressive enhancements of business methods through multiple methodologies, along with techniques and tools that advance organizational process enhancement capacity (Czvetkó *et al.,* 2022).

Organizations use process improvement as a strategic methodology that helps them evaluate their business functions to enhance operational effectiveness while minimizing waste and optimizing performance levels. In the context of confectionery SMEs in Bida, Niger State, process improvement consists of developing better manufacturing

approaches while implementing quality systems to optimize productivity levels together with standardized supply chain operation through lean manufacturing principles. Standardized workflows, reduction measures, and feedback integration form part of the operational enhancement system, which leads to continuous operational development.

2.1.4 SME's Performance

Within SME's performance means the quality alongside the quantity of work executed by employees according to their assigned duties (Muhtadi *et al.,* 2021). The aspect of performance presents a complex nature because it depends on various specific targets along with the selected areas under assessment (Muralis, 2018). One approach does not suffice to evaluate performance because it exists without universal applicability. In the view of Zaato *et al.* (2020), SME performance demonstrates organisations' capability to reach their set targets, together with the tasks endorsed by the firm. Performance assessment included financial and non-financial metrics as well as individual components of these measurements. According to Muhtadi *et al.* (2021), there exist two fundamental performance classes, which consist of individual performance and organizational performance. This research centre analysed organisational performance as its main subject of study.

Different approaches exist among researchers regarding how to measure SME performance. A quantitative analysis of SME performance exists according to Cicea *et al.* (2019), who pointed out that performance measurement should include efficiency in addition to financial results, alongside production levels and market share alongside profitability and productivity costs, liquidity, and other relevant factors. According to Cicea *et al.* (2019), performance evaluation can follow qualitative assessment paths by evaluating goal achievement together with leadership styles, employee conduct, and customer fulfilment, as well as product evolution and process improvements, and organizational and marketing transformations.

Nura *et al.* (2019) explained that SME performance represents the ability of a company to achieve its established goals. Yudha (2019) explained that small and medium enterprises (SMEs) performance improvements occur when their business actors display entrepreneurial orientation. Entrepreneurial orientation functioned as an essential organizational resource that impacted SMEs' performance because it outlined systematic methods for businesses to collaborate with environmental opportunities (Hoque *et al.,* 2018). According to Olufemi (2018), the development and operational success of SMEs stands as every vital checkpoint for measuring industrialization as well as modernization and employment creation, together with urbanization, alongside income distribution equity and welfare benefits, and per capita income rise and general life standards for citizens. The financial performance evaluation of a firm depends on investment levels together with profit margins and sales growth, and profitability. According to Mohammed *et al.* (2018), performance measurement within SMEs represents how entrepreneurs identify opportunities before using their resources to generate financial success.

Following the necessary conceptual review, the study adopted established definitions of SMEs' performance that cover each contributing factor required to meet established objectives, which SMEs use for survival and long-term sustainability.

2.2 Theoretical Review

This research adopts the Resource-Based View theory. Penrose Edith established the theory in 1959, stating that organizations should receive assessments based on how their resources support goal accomplishment. RBV views organizations as resource-dependent bodies that should be understood through their stored physical and human resources, such as land usage, personnel, and monetary assets, which create economic development potential. Organizations build sustainable high-growth rates by acquiring resources that hold unique characteristics of value, rareness, and a difficult-to-imitate nature along with distinctiveness. Business organizations use multiple approaches to leverage their valuable resources and thus create sustainable competitive advantages both inside their organization and through external strategies.

According to Barney (1991), the theory holds that organizational resources with capabilities determine both survival and performance in their markets. According to Miller (2019), resources that organizations hold differ between businesses in a way that makes them non-portable between entities. The research describes resources as tangible assets, including physical items and financial capital; intangible elements encompassing product quality, together with brand name and brand image; and personnel-based elements containing technical expertise and knowledge assets (Grant, 1991).

According to Russo and Fouts (1997), the ability of organizations remains essential for obtaining a competitive advantage. Every business strategy depends on the organisational systems that gather, connect, and deploy physical and non-physical and human assets to obtain permanent market leadership and preserve business operations through changing circumstances. According to RBV, the survival and performance ability of confectionery SME's depends on their ownership of strategic resources and their ability to utilise these resources to reach their vision through mission delivery. According to this view, every confectionery SME needs resources to survive, but the crucial element lies in transforming those resources into a competitive advantage, more than the basic ownership.

Firms reach competitive advantage through the intelligent use of valuable resource combinations, according to RBV. The adoption of technology by Bida's confectionery SME's operates as a strategic asset to improve operational efficiency, together with business productivity and market standing. Confectionery SME's that adopt advanced technological tools for automated production, digital marketing, and updated inventory systems gain better performance by standing apart from other competitors in the same industry. Based on this theory, technology adoption serves as an essential asset that allows confectionery SMEs to gain a sustainable competitive advantage and achieve business development through proper usage. Organizational capability includes process improvement as its main element according to the Resource-Based View theory. A Confectionery SME's achievement is determined by how efficiently it combines and optimizes equipment infrastructure with process efficiency, brand reputation, and personnel skills and expertise resources. Improving their production processes, such as quality control enhancement along with supply chain streamlining and lean manufacturing intervention, serves as a strategic ability for Bida's confectionery SMEs. Successful resource utilization by confectionery SMEs enhances processes that lead to higher productivity and better product quality, and cost-efficiency, which results in superior business performance. This study advocates the use of RBV to demonstrate how confectionery SMEs should implement technology adoption together with process

improvement as a strategic resource that boosts their organizational performance. The RBV theory shows that confectionery SMEs' achievement depends on more than just acquiring resources, since effective utilization enables them to establish market-leading advantages and thereby gain a competitive advantage.

2.3 Empirical Review

However, none of the studies reviewed were conducted in Bida Metropolis. Therefore, this study analyses the innovativeness practices of confectionery businesses in Bida Metropolis.

Olu-Alonge (2025) conducted a study to understand the connection between innovation practices and sustainable development practices on Small and Medium Enterprises (SMEs) organizational performance in Southwestern Nigeria. The study used a descriptive survey research design for its methodology. Seventeen thousand five hundred and thirty-three (17533) Southwest Nigerian SMEs, which were registered, formed the population, and we used 317 of those businesses for this research. This research established that implementing sustainable development methods with innovative practices leads to enhanced business performance for SMEs, which includes them in their organizational structure. The study suggests that successful improvement and sustainability of SMEs require a focus on innovation practice together with sustainable development methods to boost business outcomes.

Quintero and Zúñiga (2025) analyzed, through a structural equation model, the relationship between innovation capabilities, innovation strategy, and financial performance, specifically in 136 SMEs based in Valle del Cauca, Colombia. The study produced evidence for strong positive links between innovation capability and innovation approach and between these measures and financial outcomes.

Galadanchi and Katsina (2024) conducted a conceptual analysis to understand how manufacturing SMEs in Nigeria benefit from innovative practices regarding their productivity, profitability, and business performance. The research relies on existing scientific work as well as theoretical foundations that explain how innovation produces business success. The research points out specific difficulties alongside potential prospects experienced by Nigerian manufacturing SMEs during their innovation promotion process. The study shows that innovative capability produces substantial performance enhancements, but Nigerian manufacturing SMEs face obstacles related to poor infrastructure and restricted funding, along with weak governmental backing. The researchers presented suggestions to enhance SME innovation practices to build better economic growth contributions from Nigerian businesses.

The research done by Olaleye *et al.* (2024) focused on understanding how innovation capabilities affect sustainability in Nigerian SMEs while evaluating organizational resilience, sustainable competitive advantage, and environmental dynamism as intervening factors. The researchers gathered data through PLS-SEM from 401 personnel who worked at SMEs operating in the Lagos Metropolitan Area of Nigeria. The research data proves that business sustainability benefits from innovation capabilities. The research results emphasize the crucial role of sustainable competitive advantage and the environmentally dynamic nature for sustaining business operations. The results indicate that small business owners benefit from environmental dynamism because it promotes business sustainability along with enhancing their innovation capabilities.

Kastelli (2024) conducted research to establish digital technologies' acceleration of innovation speed while improving corporate innovation performance. A detailed analysis of digital transformation effects on innovation takes place through evidence gathered from 1014 Greek manufacturing firms during a survey in 1014. The investigation revealed that digital capacity makes a direct positive impact on innovation performance when absorptive capacity functions as the mediation link. The total effect of digital capacity on innovation performance becomes stronger via the mediator role of absorptive capacity. The study's findings suggest that existing innovation-related business components need improvement to successfully manage digital transformation through activities including research and development work, actor collaboration, and specialized practice environment development.

Otache (2024) investigated the mediating effect of competitive advantage together with competitive intensity as moderators linking innovation capability (IC) to small and medium-sized enterprises (SMEs) performance, as well as strategic flexibility (SF) to SME performance. The researchers implemented survey research as the main methodological design. A self-reported questionnaire was distributed to 159 Nigerian SMEs through convenient sampling to gather the data. The required mediation and moderation tests were run through Hayes' PROCESS macro version 3. The research findings demonstrate that IC and SF yield positive effects on the operational results of SMEs. Competitive advantage demonstrates strong significance as a mediating force between IC and SME performance, and it also acts as a mediating force between SF and SME performance. The present study demonstrates that competitive intensity has a positive and significant effect on the connection between IC and SME performance.

Anzules-Falcones and Novillo-Villegas (2023) performed research evaluating how innovation capacity relates to entrepreneurial orientation and environmental factors, as well as flexibility. The research took place within three different studies that investigated chemical-pharmaceutical industries and small and medium enterprises located in a small economy. The research examines the connections between innovation capability and the international business growth of those firms. Additional studies confirm the established relationships between interest areas, which demonstrate the connections between entrepreneurial orientation and flexibility and externalities, both locally and internationally, with innovation capacity. This investigation supports both scholarly efforts in theory development about innovation capacity and internationalization, in addition to delivering practical applications for industry professionals.

Carrasco *et al.* (2023) performed research through interviews with 194 Chilean manufacturing SME managers to study how absorptive capacity helps incoming and outgoing open innovation practices alongside innovation strategy mediation effects and open innovation practice effects on performance. The study employed PLS-SEM alongside interviews with 194 managers who run small manufacturing companies in Chile, which use between 10 and 250 personnel. These findings contribute to academic knowledge by showing that absorptive capacity leads positively to both outbound innovation practices and firm strategies and by establishing firm strategies as both a full and complementary mediator between absorptive capacity and inbound and outbound open innovation practices. Open innovation produces positive effects that enhance the performance of small and medium enterprises. The research findings produce essential implications that benefit both SME managers and policy establishment stakeholders.

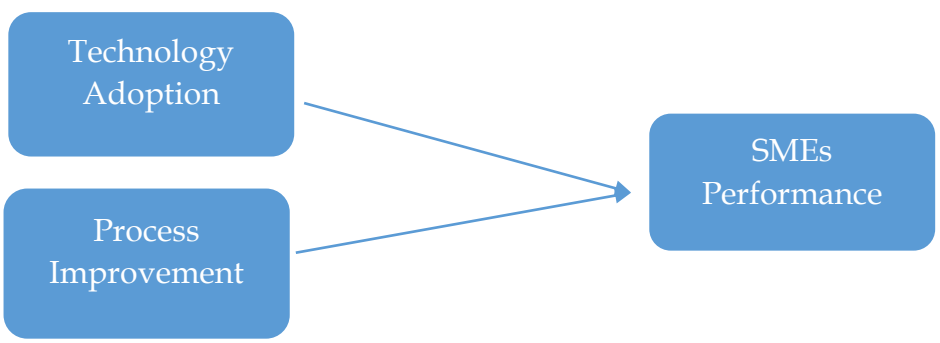
The research conducted by Prakasa et al. (2022) assessed the relationship between absorptive capacity and innovation capability toward business performance. A research study distributed questionnaires to 189 creative SME owners based in Malang City. The research utilized proportional random sampling methods for obtaining its sample population. The data collection process involved questionnaire distribution to the research subjects. Partial least squares analysis with high-order construction served as the method for data analysis. The research data indicated that absorptive capacity acts as a substantial factor for both business performance and innovation capability. Research findings indicate that innovation capability failed to produce any significant influence on business performance. The research did not support innovation capability acting as a link between Absorptive Capacity and Business Performance. SME owners should develop absorptive capacity because it lets them acquire and assimilate new knowledge to achieve enhanced business performance. Innovation capability fails to provide automatic performance improvements to SMEs. Survival during the new normal era requires SMEs to put in significant effort to develop innovations that possess rarity and uniqueness combined with difficult imitation potential.

Saunila (2020) performed a study to expand comprehension of innovation capability traits in small businesses through surveys of empirical research. The research displays outcomes derived from an organized review that focuses on small business innovation ability. The study reveals the complete picture of advancing research about innovation capability in small businesses as its primary finding. Through this research, we can identify which subjects appear across innovation capability research studies and how various communities of expertise deal with these topics. A systematic review of innovation capability within small businesses has not yet been conducted. The outcomes help researchers better comprehend the particular features that define innovation capability within the small business domain. The developed definition of innovation capability serves future research as it describes fundamental aspects for studying this capability within small businesses. Managers can develop enhanced innovation practices by studying review outcomes that detail various components of innovation capability.

These studies fail to identify any investigations that took place in Bida Metropolis. This investigation examines the innovative strategies of Small and Medium Confectionery Enterprises and their Performance evaluation in Bida, Metropolis.

2.4 Conceptual Framework

The study examines the impact of innovative practices on the performance of Small and Medium-sized Enterprises (SMEs) in the confectionery sector in Bida, Niger State.



Source: Author's Conceptualization (2025).

3. Methodology

The survey design proved acceptable due to its accuracy and cost efficiency, as well as its effective capacity to gather information from broad populations within finite time durations. CEOs and managers of all registered bread bakeries located in the Bida metropolitan area serve as the target population. The study selected bakeries from the Association of Master Bakers, Bida branch, Niger State, for its research because unregistered businesses were excluded from establishing research reliability and standardization. The research population consists of fifty-five registered bread bakery CEO's and managers who operate in the Bida metropolis. Statistical accuracy combined with proper representation occurred through the application of the Raosoft formula to identify the suitable sample size. The sample calculation based on a 5% margin of error at a 95% confidence level and 50% response distribution yields 48 needed respondents for the research.

This research used structured questionnaires as its primary data collection instrument while collecting primary data from respondents. The research selected probability sampling because it granted every individual in the population equal opportunities to become a study participant to prevent biases. The chosen study uses simple random sampling to improve both the objective nature and the ability to generalize its findings.

The research examined two fundamental characteristics of innovativeness: technological adaptations and process enhancements. Statistical evaluation included descriptive and inferential statistics methods. Multiple linear regression analysis conducted through SPSS examined the connections between these variables that influenced bread bakery performance. The statistical techniques used for evaluation offered a deep investigation into how these independent elements influence business performance, which delivers crucial information to support bakery profitability in the Bida metropolis.

4. Model Formulation

The study employs a multiple regression model to assess the relationship between innovative practices and SME performance. The general functional form of the model is:

$Y = f(X1, X2)$

Where:

Y = Performance of Confectionery SME's (Dependent Variable)

X1 = Technology Adoption (Independent Variable)

X2 = Process Improvement (Independent Variable)

Mathematical Model

$Y=\beta0+\beta1X1+\beta2X2+\epsilon$

Where:

$\beta0$ = Intercept

$\beta1$, $\beta2$ = Regression Coefficients measuring the effect of technology adoption and process improvement, respectively

ϵ = error Term

Hypotheses Testing

H_{01}: Technology adoption has no significant effect on the performance of confectionery SMEs in Bida, Niger State.

H_{02}: Process improvement has no significant influence on the performance of confectionery SMEs in Bida, Niger State.

Table 4.1
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.735[a]	.541	.520	.857

a. Predictors: (Constant), Process improvement, technology adoption

The research data reveals that the independent variables of process improvement and technology adoption show a strong positive effect on SMEs' performance through their R-value (.735). The model indicates that process improvement, together with technology adoption, explains 54.1% of the changes in SMEs' performance levels. The unexplained factors present in the model account for 45.9% of the total changes in SME performance. The adjusted R Square value (.520) considers both the number of predictors and the sample size for analysis. The model fit appears appropriate because the adjusted R square value shows similarity to the R square. The standard error of the estimate amounts to .857 when measuring the average difference between actual observations and model predictions. The value of the fit decreases as the number decreases.

Table 4.2
ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	38.898	2	19.449	26.506	.000[b]
	Residual	33.019	45	.734		
	Total	71.917	47			

a. Dependent Variable: SMEs' performance

b. Predictors: (Constant), Process improvement, technology adoption

The F-statistic (26.506, p = .000) evaluates whether the independent variables collectively have a significant impact on SMEs' performance. Since the p-value is less than 0.05, it indicates that the model is statistically significant, meaning that process improvement and technology adoption, together, significantly predict SME performance.

Table 4.3
Unstandardized Coefficients and Standardized Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	.451	.281		1.607	.115
	technology adoption	.161	.116	.165	1.391	.171
	Process improvement	.635	.119	.635	5.343	.000

a. Dependent Variable: SME performance

When process improvement and technology adoption are set to zero, the predicted SME performance equals .451 according to the Constant (B = .451, p = .115). The statistical value (.115) exceeds its threshold value of .05, thus making the significance level indeterminate. An increase of one unit in technology adoption leads to a .161-unit boost in SME performance, according to the findings (p = .171). In this model, the p-value (.171) exceeds 0.05 to indicate that technology adoption fails to produce statistically important influences on SME performance. A one-unit rise in process improvement leads to an increased SME performance of 0.635 units, according to the findings (p < .001). Statistical significance is very strong according to the p-value ("000"). The standardized beta metrics demonstrate which variables contribute most to predicting the outcome. The relationship between process improvement (.635) exceeds the relationship between technology adoption (.165).

5. Discussion of Results

The research examined the innovative performance of small and medium confectionery enterprises along with their operational output in Bida, Niger State, Nigeria. The statistical analysis presents crucial details about the way variables connect throughout the regression analysis and ANOVA procedure, together with the coefficient estimation method.

The analysis of the first hypothesis regarding technology adoption shows no significant relationship with confectionery SMEs' performance in Bida, Niger State because the technology adoption coefficient (B = 0.161, p = 0.171) fails to demonstrate statistical significance in this study. Research in this model indicates that technology adoption affects performance, but the strong p-value (> 0.05) implies the impact does not reach a statistically significant level. Several elements, like technological level and learning curves with new technologies and technology-business needs matching, could explain this effect. Relevant research parallels the findings of Galadanchi and Katsina (2024). The research results from Prakasa *et al.* (2022) support their study on innovation capability alongside business performance.

The research findings rejected the second hypothesis about process improvement having a null impact on confectionery SMEs' performance in Bida, Niger State because process improvement demonstrated a strong statistically reliable relationship with SMEs' performance (B = 0.635, p < 0.001). The analysis indicates that business process advancements that focus on operation optimization, workflow optimization, and efficiency enhancement directly contribute to enhanced SME performance. These results verify the research presented by Olu-Alonge (2025) as well as Quintero and Zúñiga. (2025).

5.1 Theoretical Implications

SMEs implement process innovations that profoundly affect their performance according to the RBV theory because they possess rare resources with unique combinations of valuable, imitable, inimitable, and non-substitutable qualities. Process improvement transforms workflows into optimized systems, which function as a vital internal capability that enables SMEs' business success. The lack of significant effect from technology adoption undermines the notion that technology serves as a strategic resource from an RBV perspective. For technology to function as a sustainable competitive advantage source, it needs to merge with the distinctive capabilities of individual firms,

including specialized human talents and well-designed processes. Research demonstrates that performance enhancement through resources depends on how strategy transforms its deployment into effective organizational factors. The research findings showed that the technology adoption effect depends on how organizations handle their technological readiness, together with their workforce adaptability and their individual business needs. Firms generate a competitive advantage when they properly integrate resources into their specific operational patterns and organizational capabilities, according to RBV theory.

5.2 Practical Implications

Small and medium enterprises need to work on procedural enhancement, together with process optimization, to boost their general operational capacity. Business Operators must provide staff training in both process enhancement and innovation best practices. The actual performance outcomes from technology adoption remain modest unless a new system directly supports the operational priorities of each SME. Businesses need to assess their existing requirements before new technology implementation to check compatibility with current systems and employee skill sets. The research shows that technology adoption has not demonstrated substantial improvements because employees need better training and proper tool utilization. Organizations of small and medium enterprises should fund training initiatives that develop worker capabilities for using modern technologies to optimize their potential advantages. The support of policymakers, together with industry stakeholders, should include specialized technology training programs while offering process improvement subsidies and advisory services to enhance the effective integration of technology in operations.

5.3 Conclusion and Recommendations

The contributions of this research include an exploration into the small and medium confectionery enterprises (SMEs) innovative practices and their impact on business performance in Bida, Niger State, Nigeria. This, in turn, underscores that process improvement and technology adoption are important factors towards improving the efficiency, productivity, and general competitiveness of confectionery SMEs. Equipped with modern technologies and innovative processes, businesses were able to deliver improved product quality, improved operations, and improved customer satisfaction, and these factors have translated to enhanced profitability and growth.

The study also found that these challenges (financial constraints, limited managerial expertise, competition in the market) could prevent the full adoption of innovative practices. Although all SMEs know how important it is to innovate, Information Technology integration and process improvement are not equally impactful to their performance outcomes. The importance of streamlining the process, optimizing workflow, and making the business easier to run is evidenced by the fact that there is a statistically significant relationship between improved processes and business success. On the contrary, SMEs' performance does not show a statistically significant impact of technology adoption within the study. The use of technological tools and advancements is capable of being linked to business performance; however, it does not show in this scenario. This result could be explained by several factors, such as the degree to which technologies are integrated, the cost of implementing the technologies, resistance to change, and the extent of relevance of the chosen technologies over the functional needs of the business. Overall, the research suggests that even though innovation is important

for SMEs' performance growth, businesses should put more effort into process improvement strategies that lead to immediate and substantial business performance gains.

Furthermore, technology should be adopted strategically by aligning it with business goals as well as capacities, because this study only considers confectionery SMEs in Bida, Niger State, the generalizability of the findings to other industries in other regions may be restricted. Technology adoption and process improvement may have a different impact on performance depending on the business environment. The study also employed a cross-sectional research design to take into account process improvement and technology adoption at one point in time. An approach of longitudinal study approach can provide a better dynamic view of how these factors can influence SMEs' performance over time. Additionally, the findings of this research focused mostly on technological and process improvement, but also other factors may, to a certain extent, determine SMEs' performance, including market conditions, managerial competencies, and financial constraints.

In line with the findings, the study recommended that;

- SMEs in the confectionery sector should focus on optimizing their operations, including lean manufacturing techniques, supply chain management, and quality control measures, as well as customer satisfaction strategies. These improvements can enhance effective and efficient service delivery, reduce wastages, and increase productivity and business performance.
- Technology adoption alone does not significantly impact business performance; businesses should carefully select and integrate technologies that align with their operational needs. SMEs in the confectionery sector should focus on affordable and relevant technological solutions that address production, marketing, inventory management, and customer satisfaction challenges of their various forms of business.
- SMEs should invest in employee training programs to maximize the benefits of process improvements and technology adoption. Enhancing the workforce's technical skills will ensure smoother transitions and better utilization of new technologies to enhance business performance.
- SMEs in the confectionery sector should be encouraged to embrace a culture of innovativeness by investing more in R&D activities. Collaborations with academic institutions and industry experts can help businesses develop innovative strategies to remain leaders and gain competitive advantages in the market.

By implementing these recommendations, small and medium confectionery enterprises in Bida, Niger State will improve their overall business performance, achieve sustainable growth, and maintain competitiveness in an evolving market landscape.

5.4 Suggestions for Future Research

Further studies may involve more types of variables to enhance further analysis. Future research should also examine different industries and geographical areas to determine whether the impact of technology adoption and process improvements varies by the business field. Furthermore, studying the results of particular technologies employed in SMEs, such as Digital Marketing Tools, automation, AI, or ERP systems on their

productivity may also provide insightful findings, particularly whenever separating different degrees of technological absorption. Longitudinal studies would, finally, allow researchers to follow the effect of process improvement and technology adoption in the long term to learn more about the dynamics of its evolution and its influence on business performance over time.

References

Adam, N. A., & Alarifi, G. (2021). Innovation practices for survival of small and medium enterprises (SMEs) in the COVID-19 times: The role of external support. *Journal of Innovation and Entrepreneurship, 10*(1), 1–22. https://doi.org/10.1186/s13731-021-00156-6

Adeoye, I. A., Agbawodikeizu, J., & Egwakhe, A. J. (2019). Innovation adoption determinant and competitive advantage of selected SMEs in Ado-Ota, Ogun State, Nigeria. *International Journal of Advanced Engineering, Management and Science, 5*(4), 282–289. https://doi.org/10.22161/ijaems.5.4.7

Adesina, A. A., Iyelolu, T. V., & Paul, P. O. (2024). Optimizing business processes with advanced analytics: Techniques for efficiency and productivity improvement. *World Journal of Advanced Research and Reviews, 22*(3), 1917–1926. https://doi.org/10.30574/wjarr.2024.22.3.0634

Al Suwaidi, F., Alshurideh, M., Al Kurdi, B., & Salloum, S. A. (2021). The impact of innovation management in SMEs' performance: A systematic review. In *International Conference on Advanced Intelligent Systems and Informatics* (pp. 720–730). Springer. https://doi.org/10.1007/978-3-030-58669-0_64

Anzules-Falcones, W., & Novillo-Villegas, S. (2023). Innovation capacity, entrepreneurial orientation, and flexibility: An analysis from industrial SMEs in Ecuador. *Sustainability, 15*(13), 10321. https://doi.org/10.3390/su151310321

Ayoko, O. B. (2021). SMEs, innovation, and human resource management. *Journal of Management & Organization, 27*(1), 1–5. https://doi.org/10.1017/jmo.2020.31

Ayo-Balogun, A. O., Al'Hassan-Ewuoso, H. O., & Adepoju, O. O. (2024). Emerging technologies adoption and performance of SMEs in Ogun State, Nigeria. *Ilaro Journal of Humanities and Management, 4*, 1–15. https://fpihumanitiesjournal.federalpolyilaro.edu.ng/

Barney, J. (1991). Special theory forum the resource-based model of the firm: Origins, implications, and prospects. *Journal of Management, 17*(1), 97–98. https://doi.org/10.1177/014920639101700107

Carrasco-Carvajal, O., García-Pérez-de-Lema, D., & Castillo-Vergara, M. (2023). Impact of innovation strategy, absorptive capacity, and open innovation on SME performance: A Chilean case study. *Journal of Open Innovation: Technology, Market, and Complexity, 9*(2), 100065. https://doi.org/10.1016/j.joitmc.2023.100065

Cicea, C., Popa, I., Marinescu, C., & Ştefan, S. C. (2019). Determinants of SMEs' performance: Evidence from European countries. *Economic Research-Ekonomska Istraživanja, 32*(1), 1602–1620. https://doi.org/10.1080/1331677X.2019.1636699

Czvetkó, T., Kummer, A., Ruppert, T., & Abonyi, J. (2022). Data-driven business process management-based development of Industry 4.0 solutions. *CIRP Journal of Manufacturing Science and Technology, 36*, 117–132. https://doi.org/10.1016/j.cirpj.2021.11.005

Dutta, G., Kumar, R., Sindhwani, R., & Singh, R. K. (2021). Digitalization priorities of quality control processes for SMEs: A conceptual study in perspective of Industry 4.0 adoption. *Journal of Intelligent Manufacturing, 32*(6), 1679–1698. https://doi.org/10.1007/s10845-020-01554-1

Dimoso, R. L., & Utonga, D. (2024). A systematic review of digital technology adoption in small and medium-sized enterprises: Implications for performance in developing countries. *International Journal of Development and Management Review, 19*(1), 58–71.

Dossou-Yovo, A., & Keen, C. (2021). SMEs and the innovation management process: A multi-level process concept framework. *Technology Innovation Management Review, 11*(1), 45–56. https://doi.org/10.22215/timreview/1417

Duru, I. U., Ehidiamhen, P. O., & Chijioke, A. N. (2018). Role of entrepreneurial orientation in the performance of small and medium enterprises: Evidence from Federal Capital Territory, Abuja, Nigeria. *Asian Journal of Economics, Business and Accounting, 8*(2), 1–21. https://doi.org/10.9734/ajeba/2018/43876

Ebrahimi, P., Shirsavar, H. R. A., Forootani, F., Roohbakhsh, N., & Ebrahimi, K. (2018). Entrepreneurship and SMEs performance: Studying the mediating role of innovation and the moderating role of firm size. In *Competitiveness in Emerging Markets* (pp. 481–501). Springer. https://doi.org/10.1007/978-3-319-71722-7_24

Eliyana, A., Sutoyo, M. N., & Sumerta, I. K. (2024). Technology adoption in the measurement of innovation performance in SMEs: A systematic literature review. *Journal of Infrastructure, Policy and Development, 8*(8), 5138. https://doi.org/10.24294/jipd.v8i8.5138

Ezeh, M. O., Ogbu, A. D., & Heavens, A. (2023). The role of business process analysis and re-engineering in enhancing energy sector efficiency. *Energy Reports, 9*, 11222–11231. https://doi.org/10.1016/j.egyr.2023.09.017

Galadanchi, H. A., & Katsina, Q. (2024). Innovative capability and performance of SMEs in Nigeria: A review of literature. *International Journal of Entrepreneurship, Technology and Innovation, 1*(1), 18–31.

Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review, 33*(3), 114–135. https://doi.org/10.2307/4116666421.

Hartono, A. (2018). Do innovation barriers drive a firm to adopt open innovation? Indonesian firms' experiences. *Academy of Strategic Management Journal*, 17(6).

Hernandez-Perlines, F., Ibarra Cisneros, M. A., Ribeiro-Soriano, D., & Mogorrón-Guerrero, H. (2020). Innovativeness as a determinant of entrepreneurial orientation: Analysis of the hotel sector. *Economic Research-Ekonomska Istraživanja*, 33(1), 2305–2321. https://doi.org/10.1080/1331677X.2019.1696698

Hoque, A. S. M. M., Siddiqui, B. A., Awang, Z. B., & Baharu, S. M. A. T. (2018). Exploratory factor analysis of entrepreneurial orientation in the context of Bangladeshi small and medium enterprises (SMEs). *European Journal of Management and Marketing Studies*, 3(2). https://doi.org/10.5281/zenodo.129331

Kastelli, I., Dimas, P., Stamopoulos, D., & Tsakanikas, A. (2024). Linking digital capacity to innovation performance: The mediating role of absorptive capacity. *Journal of the Knowledge Economy*, 15(1), 238–272. https://doi.org/10.1007/s13132-023-01196-2

Manaf, N. A. B. A., bin Ku Ariffin, K. H., Nasution, M. D. T. P., & Rossanty, Y. (2021). Do innovativeness, proactiveness, and risk-taking affect business performance? Entrepreneurial insights of FAMA's entrepreneurs. *International Journal of Business Economics*, 3(1), 1–19.

Migdadi, M. M. (2022). Knowledge management processes, innovation capability and organizational performance. *International Journal of Productivity and Performance Management*, 71(1), 182–210. https://doi.org/10.1108/IJPPM-11-2019-0533

Miller, D. (2019). The resource-based view of the firm. In *Oxford Research Encyclopedia of Business and Management*, 1(1). https://doi.org/10.1093/acrefore/9780190224851.013.123

Mohammed, N., Mohammed, U. D., & Ahmed, A. (2018). Entrepreneurial orientation and small and medium enterprises performance in the Federal Capital Territory of Nigeria. *Global Journal of Governance and Society (GJGS)*, 2(1).

Muhtadi, A., Sujana, W., & Widnyana. (2021). The effect of education and job training on employee performance with motivation and work ability as intervening variables at the airport personnel of PT. JAS International Airport Branch I, Gusti Ngurah Rai Bali. *International Journal of Contemporary Research and Review*, 12(6), 20409–20419. https://doi.org/10.15520/ijcrr.v12i06.901

Murali, S. (2018). The impact of human capital development initiatives on employee performance of IT executives: Case study of Bangalore, India. *International Journal of Management*, 9(3), 1–13.

Nura, M., Naala, I., Abdullahi, H. G., Hilman, H., Shahmir, S. A., & Okwudili, V. I. (2019). Exploring the effect of entrepreneurial social networks on human capital and the performance of small and medium enterprises. *International Journal of Business and Technopreneurship*, 9(1), 1–14.

Ogunwale, O., Areghan, I., Alalade, Y. S., & Omosebi, T. (2024). Use of technology and financial literacy on SME practices and performance. *International Journal of Social Sciences and Management Review*, 7, 234–243. https://doi.org/10.37602/IJSSMR.2024.7109

OECD. (2010). *SMEs, entrepreneurship and innovation*. OECD Studies on SMEs and Entrepreneurship. https://doi.org/10.1787/9789264080355-en

OECD. (2016). *OECD science, technology and innovation outlook 2016*. OECD Publishing. https://doi.org/10.1787/sti_in_outlook-2016-en

Olaleye, B. R., Lekunze, J. N., Sekhampu, T. J., Khumalo, N., & Ayeni, A. A. W. (2024). Leveraging innovation capability and organizational resilience for business sustainability among small and medium enterprises: A PLS-SEM approach. *Sustainability*, 16(21), 9201. https://doi.org/10.3390/su16219201

Olu-Alonge, B. A. (2025). Innovation practices, sustainable development and performance: A study of small and medium enterprises in Southwestern Nigeria. *RUN Journal of Management*, 1(1).

Olughor, R. J. (2015). Effect of innovation on the performance of SME organizations in Nigeria. *Journal of Management*, 5(3), 90–95.

Olufemi, A. (2018). Impact of the human capacity building on small and medium enterprises in Lagos, Nigeria. *Journal of Small Business and Entrepreneurship Development*, 6(2), 15–27. https://doi.org/10.15640/jsbed.v6n2a2

Omowole, B. M., Olufemi-Philips, A. Q., Ofadile, O. C., Eyo-Udo, N. L., & Ewim, S. E. (2024). Barriers and drivers of digital transformation in SMEs: A conceptual analysis. *International Journal of Frontline Research in Multidisciplinary Studies*, 5(2), 19–36.

Onyenma, U. O. (2019). Innovativeness and performance of small and medium enterprises in Rivers and Bayelsa States of Nigeria. *International Journal of Business & Law Research*, 7(4), 107–113.

Otache, I. (2024). Innovation capability, strategic flexibility and SME performance: The roles of competitive advantage and competitive intensity. *African Journal of Economic and Management Studies*, 15(2), 248–262.

Penrose, E. (1959). *The theory of the growth of the firm* (Vol. 27, Issue 2). Oxford University Press. https://doi.org/10.1093/qje/27.2.137

Perera, L. S., & Samarakoon, S. M. A. K. (2021). Effect of entrepreneurial orientation on SMEs' innovation performance in Sri Lanka. *Asian Journal of Advanced Research and Reports*, 15(2), 55–63.

Prakasa, Y., Sujoko, A., Aziz, N. A., & Muttaqin, A. (2022). Absorptive capacity and innovation capability: Assessing the impact on SMEs' performance in the new normal era. *Jurnal Ekonomi Bisnis Dan Kewirausahaan*, 11(3), 325.

Quintero Sepúlveda, I. C., & Zúñiga Collazos, A. (2025). Innovation capabilities, innovation strategies and performance: An empirical analysis in SMEs. *Technology Analysis & Strategic Management*, 37(1), 19–34.

Russo, M. V., & Fouts, P. A. (1997). A resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal*, 40(3), 534–559.

Saunila, M. (2020). Innovation capability in SMEs: A systematic review of the literature. *Journal of Innovation & Knowledge*, 5(4), 260–265.

Simić, M., Slavković, M., & Aleksić, V. S. (2020). Human capital and SME performance: Mediating effect of entrepreneurial leadership. *Management: Journal of Sustainable Business and Management Solutions in Emerging Economies*, 25(3), 23–33.

Prasanna, R. P. I. R., Jayasundara, J. M. S. B., Naradda Gamage, S. K., Ekanayake, E. M. S., Rajapakshe, P. S. K., & Abeyrathne, G. A. K. N. J. (2019). Sustainability of SMEs in the competition: A systemic review on technological challenges and SMEs' performance. *Journal of Open Innovation: Technology, Market, and Complexity*, 5(4), 100.

Rasheed, K., Saad, S., Ammad, S., & Bilal, M. (2023). Integrating sustainability management and lean practices for enhanced supply chain performance: Exploring the role of process optimization in SMEs. *Engineering Proceedings*, 56(1), 154.

Singh, D. S. M., & Hanafi, N. B. (2020). Innovation capacity and performance of Malaysian SMEs. *International Journal of Academic Research in Business and Social Sciences*, 10(2), 665–679.

SMEDAN. (2022). *Survey report on micro, small, and medium enterprises (MSMEs) in Nigeria*. Small and Medium Enterprises Development Agency of Nigeria.

Thoudam, P., Anwar, I., Bino, E., Thoudam, M., Chanu, A. M., & Saleem, I. (2022). Passionate, motivated and creative yet not starting up: A moderated-moderation approach with entrepreneurship education and fear of failure as moderators. *Industry and Higher Education*, Article 09504222221120779. https://doi.org/10.1177/09504222221120779

Twalini, Z. C., & Isaac, D. M. (2017). Impact of innovation on the performance of small and medium-scale enterprises in Gwagwalada. *Abuja International Journal of Entrepreneurial Development, Education and Science Research*, 4(1), 31–45.

Yudha, P. (2019). Exploring the impact of social capital on entrepreneurial orientation and business performance: Study on members of MSMEs communities in Malang. *Profit: Jurnal Administrasi Bisnis*, 12(1), 20–31.

Zaato, S. G., Ismail, M., Uthamaputhran, S., & Owusu-Ansah, W. (2020). The impact of entrepreneurial orientation on SMEs' performance in Ghana: The role of social capital and government support policies. *Jurnal Manajemen dan Kewirausahaan (Journal of Management and Entrepreneurship)*, 22(2), 99–114.

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