

## Innovation Management Capabilities and Organizational Resilience as a Prerequisite for Sustainability of SMEs in Wukari Nigeria

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### Abstract

Although SMEs are widely recognized as drivers of economic growth, employment generation, and sustainable development, their long-term viability in semi-urban and rural contexts remains underexamined. This study investigates the influence of innovation management capabilities and organizational resilience on the sustainability of SMEs in Wukari Local Government Area, Taraba State, Nigeria. Using a survey research design, data were collected from 152 SME owners and managers and analyzed through regression analysis. The findings indicate that innovation management capabilities significantly improve SME sustainability ( $\beta = 0.642$ ,  $p < 0.001$ ), accounting for 37.8% of the variance, while organizational resilience also exerts a strong positive effect ( $\beta = 0.587$ ,  $p < 0.001$ ) on long-term business viability. The results further show that SMEs in Wukari rely primarily on product innovation and anticipatory resilience, but remain relatively weak in process innovation, service innovation, and adaptive resilience. Consistent with the Resource-Based View and Dynamic Capability perspectives, the study demonstrates that internally developed capabilities are critical for sustaining SMEs in dynamic and resource-constrained environments.

It concludes that SME sustainability in Wukari depends not only on strengthening innovation capacity but also on enhancing more adaptive and transformative forms of resilience. This study contributes to the SME sustainability literature by providing context-specific evidence from a semi-urban Nigerian setting and by identifying strategic priorities for SME owners, policymakers, and financial institutions seeking to improve innovation support and risk-management capacity.

**Keywords:** SME Sustainability; Innovation Management Capabilities; Organizational Resilience; Rural Entrepreneurship; Nigeria

## INTRODUCTION

In the contemporary business environment, organizations are increasingly embracing sustainable development practices, driven by both the tangible benefits they offer and mounting pressure from stakeholders and regulatory bodies to transition from strategic planning to implementation (Sy, 2016). However, progress remains insufficient, particularly among small and medium enterprises (SMEs), which constitute 99% of global businesses (ACCA, 2019; UN, 2018). While SMEs have been slower than large corporations to adopt sustainability initiatives, their inherent flexibility and agility make them uniquely positioned to implement sustainable practices effectively (World Bank, 2015). Their full participation is critical to achieving broader sustainability goals, yet many SMEs face challenges in integrating sustainability into their core operations due to resource constraints and a lack of structured innovation and resilience frameworks.

SMEs play a pivotal role across the three dimensions of sustainable development economic, social, and environmental though their contributions vary depending on context (Rishi et al., 2015). Economically, they drive growth, reduce poverty, and generate employment, particularly in underserved communities (Du Toit et al., 2010). In regions such as Africa, SMEs form the backbone of national economies (Asamoah, 2014), reinforcing their significance in long-term sustainability (Masocha & Fatoki, 2018). Despite their socioeconomic impact, many SMEs struggle to sustain growth amid market volatility, necessitating robust innovation management and organizational resilience to navigate disruptions and remain competitive.

The ability of SMEs to harness innovation management capabilities and cultivate resilience is increasingly vital for their survival and sustainable growth. Innovation capability defined as an organization's capacity to develop new products, services, or processes that enhance competitiveness (Rehman, 2019) enables SMEs to adapt to technological advancements and shifting consumer demands (Manafe, 2024). Simultaneously, organizational resilience the ability to withstand disruptions while maintaining core functions (Saad, 2021) ensures business continuity in the face of economic shocks (Chang, 2022). Together, these competencies allow SMEs to transform constraints into opportunities, ensuring long-term viability in dynamic markets.

A resilient organization sustains operations by leveraging innovative approaches in product development, processes, and market strategies (Olaleye & Herzallah, 2021). Resilience encompasses the capacity to recover swiftly from setbacks, adapt to new circumstances, and anticipate emerging trends (Alharthy & Sohaib, 2018). In today's volatile business environment, resilience is no longer optional but a strategic necessity, enabling firms to mitigate risks and capitalize on opportunities (Golgeci & Ponomarov, 2013). For SMEs, fostering resilience is closely tied to innovation, as creative problem-solving enhances their ability to navigate uncertainties.

Despite the recognized importance of innovation management capabilities and organizational resilience, SMEs in wukari struggle to institutionalize innovation management capabilities and organizational resilience due to limited resources, knowledge gaps, and inadequate strategic frameworks. Unlike large corporations with dedicated R&D and risk management departments, SMEs in wukari often operate with lean structures, making them more vulnerable to external shocks (Lengnick-Hall & Beck, 2011). However, their smaller size also affords them greater agility, allowing for faster decision-making and adaptability traits that can be leveraged to build resilience through innovation (World Bank, 2015). Bridging this gap is essential for enhancing SME sustainability in wukari local government area of Taraba state. For SMEs, in wukari to integrate innovation management with resilience strategies is not just beneficial but imperative for sustainable growth. This synergy allows them to respond proactively to market shifts, recover from crises, and maintain competitive advantage. This study explores the interplay between innovation management capabilities and organizational resilience, focusing on how these factors contribute to sustainable development of SMEs in wukari.

## **Statement of problem**

Despite growing recognition of the importance of sustainable business practices, SMEs in Wukari Local Government Area of Taraba State face significant challenges in implementing effective innovation management and organizational resilience strategies. While these capabilities are crucial for navigating market volatility and ensuring long-term viability (Chang, 2022), local SMEs struggle with practical implementation due to limited resources, inadequate infrastructure, and knowledge gaps. The absence of structured frameworks tailored to Wukari unique business environment leaves many SMEs vulnerable to disruptions, unable to fully capitalize on their inherent agility (World Bank, 2015) or translate innovative potential into sustainable growth.

Existing research has extensively documented the relationship between innovation management, organizational resilience, and SME sustainability in global (Golgeci & Ponomarov, 2013) and African contexts (Asamoah, 2014), but there remains a paucity of studies focusing specifically on Nigeria's semi-urban and rural SME ecosystems. While theoretical frameworks exist (Rehman, 2019; Saad, 2021), they often fail to account for the unique socioeconomic, cultural, and infrastructural realities of regions like Wukari. The literature particularly lacks empirical studies examining how innovation and resilience capabilities interact within resource-constrained, informal business environments characteristic of many Taraba State SMEs. This knowledge gap limits the applicability of existing models to Wukari local government context.

SMEs in Wukari presents distinct challenges and opportunities that differentiate it from both urban Nigerian business environments and the generalized African SME contexts frequently studied. The area's specific combination of agrarian economy, informal business structures, and limited access to technology creates a unique ecosystem where conventional innovation and resilience models may not directly apply. Furthermore, the potential synergies between indigenous knowledge systems and modern business resilience strategies remain unexplored in this context.

## **Research Questions**

1. To what extent does innovation management capability influence the sustainability of SMEs
2. To what extent does organizational resilience influence the sustainability of SMEs

## **Research Objective**

The major objective of this study is to examine innovation management capability and organizational resilience for sustainability of SMEs in wukari local t. The specific objectives are as followed.

1. To examine the extent at which innovation management capabilities influence sustainability of SMEs in Wukari
2. To determine the extent at which organizational resilience influence sustainability of SMEs in Wukari

## **Research Aim**

The major aim of this study is to critically evaluate pivot and significant literatures linking innovation capability management and organizational resilience in order to come up with suitable model from literature that will enhance the sustainability of small and medium scale enterprise.

This study explored descriptive research approach aim at elucidating clear empirical dimensions showing the relationship between innovation capability management and organizational sustainability on sustainability of SMEs

The objectives of this study are appropriate to draw reasonable recommendations from the study that would serve as a guide for policy makers and other industry players and SMEs in developing economy considering the disruptions in technology and new innovations.

## **Significance of the study**

Studies on innovation capability management and organizational resilience are critical to sustainability of SMEs in contemporary global economy. As such researchers and academicians would fine this study relevant as its form the bases for further research.

The empirical focused of this study will establish a guiding principle for further research proving and empirical link between innovation capability management, organizational resilience and sustainability of SMEs

This study will provide relevant understanding and recommendations that are significant to the industry.

## Literature review

### Concept of sustainability

Sustainability is the ability to meet social and economic needs without causing harm to the environment, as highlighted by Drexhage and Murphy (2012) and Mullens (2018). Business sustainability, according to Akadiri and Fadiya (2013), involves the key elements and operational aspects of a firm. It also refers to maintaining stable business conditions, where a company continues to grow, implements strategies for long-term survival, and innovates in products and services (Mullan, 2018; Cosbey et al., 2012). Over the past two decades, organizational sustainability has gained significant attention from both academics and business leaders, as noted by Aninkan and Oyewole (2014) and Eccles, Ioannou, and Serafeim (2012). Long-term success hinges on sustainability, which not only enhances short-term financial performance but also positively influences employee engagement, knowledge sharing, and creativity (Hart & Milstein, 2003; Spreitzer, Porath, & Gibson, 2003).

Sustainable businesses must balance efficiency across three key areas: financial, ecological, and societal (Hart & Milstein, 2003). To achieve sustained growth, firms need a holistic strategy that integrates economic, social, and environmental considerations (Drexhage & Murphy, 2012). Business sustainability (BUSS) requires policies that align profitability with social and environmental responsibilities (Olaleye et al., 2024). Governments have increasingly prioritized environmental conservation, social welfare, and economic development. Recognizing the importance of innovation, many companies are enhancing their modernization efforts to maintain competitiveness and long-term viability (Drexhage & Murphy, 2012; Hart & Milstein, 2003).

In pursuing sustainability, businesses should expand their focus beyond shareholder value to consider broader impacts on society, the environment, and their workforce (Meng, 2015). Adopting sustainable practices yields multiple benefits, including higher profits, improved product quality, greater customer satisfaction, and stronger organizational commitment. Additionally, companies gain a better brand reputation, eligibility for government incentives, cost savings from eco-friendly supply chains, and reduced expenses related to environmental compliance (Drexhage & Murphy, 2012; Hart & Milstein, 2003). Ultimately, sustainability is not just an ethical imperative but also a strategic advantage that drives long-term success.

## **Concept of innovation capability**

Innovative capabilities play a crucial role in driving exceptional company performance and maintaining competitiveness in dynamic industries (Ostermann et al., 2022; Saunila & Ukko, 2014). To adapt to rapidly changing markets, businesses must continuously enhance their innovation capabilities, especially when facing intense competition (Teece, 2007; Olaleye, 2023). Innovation capacity refers to an organization's ability to consistently transform knowledge into novel outcomes (Saunila, 2020), while organizational innovation capability involves generating new ideas that enhance firm and stakeholder value (Yang et al., 2019). Additionally, a firm's innovation capacity depends on factors that shape its innovation management strategies (Le et al., 2019). Entrepreneurs play a key role by encouraging employees to expand knowledge systems through innovation, fostering a culture of continuous improvement (Ballor & Claar, 2019).

Businesses achieve higher innovation levels by leveraging a combination of skills, a concept supported by empirical research across various industries (Nascimento et al., 2024; Daniel et al., 2017; Schiavi et al., 2020). According to Zawislak et al. (2012), innovation relies on people, systems, and processes that convert existing knowledge into marketable products and services. In turbulent environments, innovation is not just beneficial but essential for survival. Companies thrive by developing technologically advanced products through research and development (R&D) efforts (Lin et al., 2010; Atalay et al., 2013). When organizations integrate sustainability into R&D, they create products that are not only competitive but also environmentally responsible, socially conscious, and resource-efficient (Li et al., 2018; Durge & Sangle, 2020). Studies, such as Rauter et al. (2019), confirm a strong link between sustainability and innovation.

Service innovation is another critical aspect of innovation capability, focusing on improving service delivery and customer support (Sundbo & Gallouj, 2000). Enhanced service offerings lead to greater customer satisfaction and value (Hanaysha et al., 2022; Hanaysha & Hilman, 2015; Fernández, 2018). Research consistently shows that innovation strengthens business sustainability, performance (Rauter et al., 2019), and competitive positioning (Expósito & Sanchis-Llopis, 2019; Walker, 2014). Additionally, process innovation advancements in operational methods, tools, and technologies enables businesses to deliver faster, higher-value solutions to customers (Lawson & Samson, 2021).

Process innovation also contributes to environmental sustainability by helping companies meet regulatory standards and reduce ecological impact (Rauter et al., 2019). By refining internal processes, firms can enhance efficiency while aligning with sustainability goals. Ultimately, innovation in products, services, and processes not only drives business success but also ensures long-term viability in an increasingly competitive and environmentally conscious marketplace. Companies that prioritize innovation across these dimensions position themselves for sustained growth and resilience in evolving industries.

### **Concept of organizational resilience**

Organizational resilience is essential for business success in volatile environments. Originating from the Latin word *resilire*, meaning "to bounce back," resilience refers to a firm's ability to recover from sudden disruptions (Nielsen et al., 2023). It encompasses anticipating threats, managing crises effectively, and adapting to changing conditions (Duchek et al., 2020). Resilient organizations not only recover from immediate shocks but also transform their business models for long-term sustainability (Li et al., 2021). This dynamic process involves leveraging resources to maintain operations during adversity (Nielsen et al., 2023), often analyzed through the lens of Dynamic Capabilities (DC) theory, which emphasizes adaptive processes to navigate market shifts (Forliano et al., 2023; Su & Junge, 2023).

In recent years, organizational resilience has gained prominence as a key factor in surviving disruptions (Annarelli & Nonino, 2016; Baghersad & Zobel, 2021). Businesses operate in unpredictable environments, facing external challenges like economic crises, pandemics, regulatory changes, and technological disruptions (Virakul, 2015), as well as internal risks such as operational failures (Demmer et al., 2011). Resilience enables firms to endure and thrive by dynamically adjusting to these challenges (Granig & Hilgarter, 2020). It is not merely about survival but also about seizing opportunities for competitive advantage, making it a strategic priority in today's uncertain world (Annarelli & Nonino, 2016).

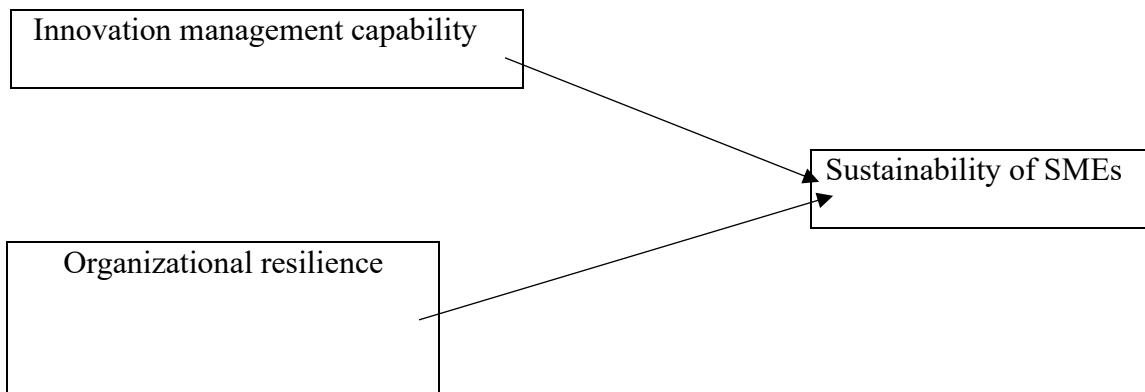
Research identifies several core components of organizational resilience: anticipation, adaptability, flexibility, and recoverability (Andersson et al., 2019; Duchek et al., 2020). Anticipation involves proactive planning to mitigate risks, while adaptability ensures responsiveness to unforeseen changes (Zighan & Ruel, 2021). Flexibility allows firms to pivot operations swiftly, and recoverability focuses on restoring stability post-disruption (Koronis & Ponis, 2018). Resilience operates as a continuous process, spanning pre-disruption

preparedness to post-crisis recovery (Duchek et al., 2020). Companies may adopt a static approach (preventing threats) or a dynamic approach (responding to disruptions in real-time), with the latter proving critical in fast-changing environments (Shepherd & Williams, 2022).

Ultimately, resilient organizations are better positioned to capitalize on opportunities and sustain competitiveness (Barghersad & Zobel, 2021). By integrating resilience into their strategic framework, firms can transform challenges into growth avenues, ensuring long-term viability. Whether through robust risk planning or agile crisis response, resilience fosters stability and innovation, enabling businesses to navigate uncertainty while maintaining operational continuity (Lisdiono et al., 2022). As global disruptions grow in frequency and complexity, resilience transitions from a reactive measure to a proactive organizational imperative.

### Conceptual framework

The conceptual framework the relationship between innovation management capabilities, organizational resilience and sustainability of SMEs



### Empirical review

Garrido-Moreno et al., (2024) examines the role of service innovation and organizational resilience in enhancing business performance using a sequential two-stage mixed-methods approach. First, a quantitative study was conducted to test the proposed research model using structural equation modelling (SEM) analysis with a sample of 343 service companies in Spain. Second, a qualitative analysis was performed with 12 interviews with managers to provide additional insights and a detailed understanding of the phenomenon. The results confirm innovation and resilience as key dynamic capabilities to

address a changing business landscape and remain competitive. Our findings also reveal the strategic importance of digital tools (social media platforms) and external networks as drivers of service innovation. Managers can use these findings to leverage social media to engage in collaborative networks, enhance innovation and resilience, and succeed in turbulent markets.

Olaleye et al., (2024) investigate the effect of innovation capability on business sustainability in Nigerian small and medium-sized enterprises (SMEs), with organizational resilience, sustainable competitive advantage, and environmental dynamism as mediators in succession. A quantitative approach was adopted to collect data from 401 employees in SMEs in the Lagos Metropolitan Area of Nigeria. We conducted the analysis of the collected data using the partial least squares approach (PLS-SEM). This research establishes that innovation capabilities are beneficial for ensuring business sustainability. The findings further corroborate the importance of sustainable competitive advantage and environmental dynamism for business sustainability. Finally, the results show that environmental dynamism is important for helping business owners sustain their businesses and increase their innovation capabilities.

ALAKE, et al., (2024) investigate the connection between SMEs' business models and their pursuit of sustainability. To enable the study's main goals be achieved, three hypotheses were developed. The study's goal was explained using the Resource Based View Theory, Dynamic Capability Theory, and Institutional Theory. By combining purposive and convenience random selection approaches, the researchers performed a field survey of 420 SME operators in Nigeria in order to meet this goal. Smart PLS 3.0 was utilized in the study to evaluate the information gathered. Specifically, they assessed the extent and strength of the correlations between these constructs using path coefficients, t-statistics, R-square values, and p-values. The study discovered that in order to increase their resilience, SMEs must actively adapt to fast-paced and competitive environments using their internal strengths. This indicates that SMEs must assess the value of innovation models in relation to their specific line of business. The study emphasizes the significance of the network interaction between technological innovation, business model innovation, and SMEs' resilience. The capacity to use technology, which is essential for boosting SMEs' resilience, strengthens this link.

### **Theoretical Framework**

This study is anchored on two key theoretical perspectives Resource-Based View (RBV) Theory and Dynamic Capability Theory to explain how innovation management

capability (IMC) and organizational resilience (OR) contribute to the sustainability of SMEs in Wukari Local Government Area, Taraba State, Nigeria.

### **The Resource-Based View (RBV) theory**

The RBV theory (Barney, 1991) posits that firms achieve competitive advantage by leveraging unique, valuable, rare, and inimitable (VRIO) resources. For SMEs in Wukari, innovation management capability and organizational resilience function as strategic resources that enhance sustainability. Innovation Management Capability (IMC): SMEs with strong IMC can develop new products, services, and processes (Rehman, 2019), allowing them to differentiate from competitors and adapt to market changes (Manafe, 2024). Similarly, Organizational Resilience (OR): Resilience enables SMEs to absorb shocks, recover quickly, and sustain operations (Saad, 2021). It acts as a defensive resource, helping SMEs mitigate risks in volatile environments (Golgeci & Ponomarov, 2013). SMEs that effectively deploy IMC and OR as strategic resources will achieve long-term sustainability by maintaining competitive advantage despite resource constraints.

The theory emphasizes that a firm's unique resources and capabilities are fundamental to achieving competitive advantage and superior performance. For SMEs, innovation management capabilities and organizational resilience can serve as critical strategic resources. For sustainability and continuously competitiveness and enhance their operational capacities. resilience functions as a valuable organizational resource, cultivated through risk management practices, operational redundancies, and customer base diversification, enabling SMEs to withstand market disruptions.

### **Dynamic Capability Theory**

Dynamic Capability Theory (Teece, Pisano, & Shuen, 1997) extends RBV by emphasizing adaptability in changing environments. It suggests that firms must continuously reconfigure resources to sustain competitiveness. SMEs with strong innovation management can reconfigure processes to meet evolving demands (Olaleye & Herzallah, 2021). Resilient SMEs anticipate disruptions, adapt strategies, and recover swiftly (Duchek et al., 2020). SMEs in Wukari must integrate IMC and OR to navigate economic shocks, regulatory changes, and technological disruptions, ensuring business continuity and sustainable growth.

The Theory highlights the importance of sustaining long-term success, particularly for SMEs navigating volatile markets. According to this perspective, innovation management capabilities and resilience are key enablers of sustainability, allowing SMEs to adjust to

environmental and competitive shifts. As noted by Ufua et al. (2021), SMEs can foster agility by innovating their business models and leveraging on technological advancement, which provides the tools needed to implement these innovations. Resilience further strengthens sustainability, as SMEs that diversify operations and embed risk mitigation strategies are better positioned to seize emerging opportunities while mitigating threats.

Collectively, the RBV, Dynamic and Capability theories provide a robust framework for understanding how SMEs can integrate innovation management capability and organizational resilience for sustainability to thrive.

## **METHODOLOGY**

This study adopted a survey research design. The study examines the 165 SMEs in wukari local government of Taraba state. The sampling techniques utilized for the study is simple random sampling. Data for the study were collected through primary source, utilizing the questionnaires to get appropriate information. Regression analysis was utilized to determine the relationship that exist between innovation management capabilities and organizational resilience on the sustainability of SMEs in wukari local government of Taraba state.

## **RESULTS AND DISCUSSION**

The analysis of data collected from SMEs in Wukari Local Government Area of Taraba State yielded significant insights into the relationship between innovation management capabilities, organizational resilience, and business sustainability. Out of the 165 questionnaires distributed to SME owners and managers, 152 were successfully retrieved and validated for analysis, representing a response rate of 92.1%. This robust response rate enhances the reliability of the findings and provides a comprehensive representation of the SME ecosystem in Wukari. Demographic data revealed that the majority of respondents (63%) were male, while 37% were female, with most participants (72%) falling within the age bracket of 25-45 years. Additionally, 58% of the surveyed SMEs had been in operation for 3-10 years, indicating a reasonably established business community despite the challenging operating environment.

**Regression analysis**

**Table 1. Coefficients Table**

| Hypotheses              | Variables                                | Beta | Standardize Coefficients |         | Decision |
|-------------------------|--|------|--------------------------|---------|----------|
|                         |  |      | T-value                  | p-value |          |
| H <sub>01</sub>         | Employers branding                       | .642 | 5.742                    | .001    | Rejected |
| H <sub>02</sub>         | Employees involvement in decision making | .587 | 3.791                    | .001    | Rejected |
| F Value                 | 26.101                                   |      |                          |         |          |
| F Sig                   | .001                                     |      |                          |         |          |
| R <sup>2</sup>          | .378                                     |      |                          |         |          |
| Adjusted R <sup>2</sup> | .368                                     |      |                          |         |          |
| Durbin-Watson           | 1.735                                    |      |                          |         |          |

**Source.** SPSS Output, Field Survey (2025)

The regression analysis conducted to test the first hypothesis revealed a significant positive relationship between innovation management capabilities and sustainability of SMEs in Wukari ( $\beta = 0.642$ ,  $p < 0.001$ ,  $R^2 = 0.378$ ). This indicates that 37.8% of the variation in business sustainability can be attributed to innovation management capabilities, suggesting a strong influence of innovation on the long-term viability of local enterprises. The F-statistic ( $F = 26.1$ ,  $p < 0.001$ ) further confirms the statistical significance of this relationship, leading to the rejection of the null hypothesis (H01).

Similarly, the second hypothesis demonstrated a significant positive relationship between organizational resilience and sustainability of SMEs in Wukari ( $\beta = 0.587$ ,  $p < 0.001$ ,  $R^2 = 0.378$ ). This suggests that 37.8% of the variance in business sustainability can be explained by organizational resilience, with the F-statistic ( $F = 26.1$ ,  $p < 0.001$ ) confirming the statistical significance of this relationship. Consequently, the null hypothesis (H02) was rejected.

These findings align with previous research by Olaleye et al. (2024), who established that innovation capabilities significantly benefit business sustainability, and Garrido-Moreno et al. (2024), who confirmed innovation and resilience as key dynamic capabilities for maintaining competitiveness in turbulent markets. The results also corroborate ALAKE et al.'s (2024) assertion that SMEs must actively adapt to competitive environments using their

internal strengths to enhance resilience. However, the present study extends these findings by highlighting the specific context of Wukari, where product innovation appears to have greater prominence than service or process innovation, and anticipatory resilience outweighs adaptive and transformative resilience in supporting business sustainability.

## **CONCLUSION**

In conclusion, this research contributes to understanding the role of innovation management capabilities and organizational resilience in fostering SME sustainability in the specific context of Wukari. The findings not only confirm the theoretical relationships proposed by Resource-Based View and Dynamic Capability theories but also highlight the unique patterns of innovation and resilience that characterize the local business environment. By leveraging their strengths in product innovation and anticipatory resilience while addressing gaps, SMEs in Wukari can enhance their sustainability and contribute more effectively to local economic development, employment generation, and poverty reduction, ultimately advancing broader sustainable development goals.

## **Recommendations**

SME owners and managers in Wukari should develop more balanced innovation portfolios that encompass not only product innovation but also process and service innovations. This could involve establishing formal mechanisms for capturing customer feedback, benchmarking against competitors, and systematically exploring new technologies or methods that could enhance operational efficiency or service delivery.

Second, while maintaining their strength in anticipatory resilience, local businesses should invest in building adaptive and transformative resilience capabilities to better respond to unexpected disruptions. This could include cross-training employees, developing contingency plans, establishing flexible supplier relationships, and creating mechanisms for rapidly reconfiguring business models when necessary.

## **Suggestion for further studies**

limitations that suggest directions for future research. First, the cross-sectional design captured relationships at a single point in time, limiting insights into how innovation capabilities and resilience evolve over time. Longitudinal studies would provide more nuanced understanding of these dynamics.

Second, the quantitative approach, while providing statistical robustness, limited the depth of understanding regarding the contextual factors influencing innovation and resilience in Wukari. Future studies could adopt mixed-methods approaches that combine statistical analysis with qualitative insights from interviews or case studies.

Third, the study focused broadly on SMEs without distinguishing between sectors or size categories. Sector-specific analyses would reveal how innovation and resilience manifest differently across industries, while size-based comparisons would illuminate how resource constraints affect capability development at different stages of business growth.

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