

IMPACT OF ORGANIZATIONAL INNOVATION ON THE GROWTH OF SMALL AND MEDIUM-SIZED ENTERPRISES (SMES) IN KARU, NASARAWA STATE

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ABSTRACT

This study examined the impact of organizational innovation on the growth of small and medium-sized enterprises (SMEs) in Karu, Nasarawa State, Nigeria. SMEs often face challenges in achieving sustained growth due to limited resources, outdated business practices, and insufficient adoption of technology. The main objective of this study was to explore how the implementation of new business practices, technology adoption, and digital training programs can influence SME growth in this region. A survey research design was utilized, and data were collected from registered SMEs through structured questionnaires. The study employed multiple regression analysis to test the hypotheses and determine the relationship between the independent variables and SME growth. The findings revealed that new business practices positively and significantly impacted SME growth by fostering operational efficiency and competitiveness. Technology adoption emerged as the most influential factor, significantly enhancing productivity and market expansion capabilities. Additionally, digital training programs were found to have a substantial impact on growth by equipping employees with necessary digital skills and improving overall organizational performance. These results showed the critical role of innovation in driving SME success. Based on these findings, several specific recommendations were made. SMEs in Karu should participate in workshops facilitated by the Nasarawa State Ministry of Commerce, Industry, and Cooperatives, focusing on business model innovation and strategic planning to improve operational efficiency. Additionally, they should invest in technology adoption by utilizing grants or subsidies from the Nasarawa State Information Technology Development Agency (NASTIDA) to integrate tools like cloud computing and e-commerce platforms. Finally, SMEs should prioritize workforce development by enrolling employees in digital training programs provided by the Industrial Training Fund (ITF) and the National Directorate of Employment (NDE), enhancing digital competencies and equipping their teams to navigate technological advancements effectively.

Keyword: *New Business Practices, Technology Adoption, Digital Training Programs, Organizational innovation and SMEs Growth*

INTRODUCTION

Organizational innovation has emerged as a critical factor in the growth and sustainability of businesses worldwide, particularly for Small and Medium Enterprises (SMEs). This concept encompasses the implementation of new organizational methods in a firm's business practices, workplace organization, or external relations (OECD, 2022). Globally, organizations are increasingly recognizing the importance of innovation in maintaining competitiveness and adapting to rapidly changing market conditions. The adoption of new business practices, technology, and digital training programs has become paramount in driving organizational innovation and, consequently, business growth. OECD (2022) further noted that, companies that adopt innovative practices are more likely to experience rapid growth and increased market share compared to their non-innovative counterparts.

In the context of sub-Saharan Africa, organizational innovation has gained significant attention as a means to address the challenges faced by SMEs in the region. Countries across the continent are grappling with issues such as limited access to finance, inadequate infrastructure, and skills gaps, which hinder the growth potential of small businesses. Despite these challenges, there is a growing recognition of the transformative power of innovation in driving economic development and job creation (World Bank, 2021).

Narrowing the focus to Nigeria, the country's SME sector plays a crucial role in its economy, contributing approximately 48% to the national GDP and accounting for 96% of businesses (PwC, 2020). However, Nigerian SMEs face numerous obstacles in their quest for growth and sustainability. The adoption of

innovative practices and technologies has been identified as a key strategy to overcome these challenges and enhance competitiveness. A study by the National Bureau of Statistics (2023) revealed that only 7.6% of Nigerian SMEs had adopted some form of organizational innovation, highlighting the significant potential for growth in this area.

New business practices, one of the proxies for organizational innovation, involve the implementation of novel methods for organizing routines and procedures for conducting work. This can include changes in management systems, supply chain management, or quality control processes. In the Nigerian context, SMEs are increasingly exploring lean management techniques and agile methodologies to improve efficiency and responsiveness to market demands (Okoye et al., 2021).

Technology adoption, another critical aspect of organizational innovation, involves the integration of new technologies into business operations. This can range from the implementation of enterprise resource planning (ERP) systems to the use of cloud computing and data analytics. In Nigeria, there has been a growing trend of SMEs leveraging mobile technologies and e-commerce platforms to expand their market reach and improve customer engagement (Eze et al., 2018).

Digital training programs, the third proxy for organizational innovation, focus on enhancing the digital skills and competencies of employees. These programs are essential in ensuring that the workforce can effectively utilize new technologies and adapt to changing business practices. In Nigeria, initiatives such as the Digital Skills Accelerator Program have been launched to bridge the digital skills gap and promote innovation among SMEs (Oluwafemi et al., 2022).

Small and Medium Enterprises (SMEs) are widely recognized as the backbone of economic growth and development, particularly in developing nations like Nigeria. Ideally, these enterprises should be thriving, contributing significantly to job creation, innovation, and overall economic prosperity. In a well-functioning economy, SMEs are expected to grow steadily, increasing their productivity, expanding their operations, and enhancing their competitiveness in both local and global markets.

The reality in Nigeria, however, paints a different picture. Despite their potential, SMEs in the country face numerous challenges that hinder their growth and limit their contribution to the economy. According to the National Bureau of Statistics (2023), SMEs in Nigeria contribute approximately 48% to the national GDP and account for 96% of businesses. However, their growth rate remains suboptimal, with many struggling to survive beyond their initial years of operation. A study by PwC (2022) revealed that only 20% of Nigerian SMEs survive beyond their fifth year, indicating a high mortality rate and limited growth potential for these businesses.

In recognition of these challenges, the Nigerian government and various stakeholders have implemented several measures to support SME growth. These include the establishment of the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), the introduction of various funding schemes, and the implementation of policies aimed at improving the business environment. For instance, the Central Bank of Nigeria (CBN) introduced the Micro, Small and Medium Enterprises Development Fund (MSMEDF) in 2013 to provide financial support to SMEs (Central Bank of Nigeria, 2013).

Despite these interventions, the growth of SMEs in Nigeria, particularly in regions like Karu, Nasarawa State, remains stunted. A report by the World Bank (2020) indicates that Nigerian SMEs still face significant obstacles in their quest for growth and development. Furthermore, the adoption of innovative practices and technologies, which are crucial for growth in the modern business landscape, remains low among Nigerian SMEs.

The consequences of this stunted growth are far-reaching. SMEs in Karu and across Nigeria are unable to expand their operations, create new job opportunities, or contribute significantly to local economic development. This situation is particularly concerning given the high unemployment rate in Nigeria,

which stood at 33.3% in the fourth quarter of 2020 (National Bureau of Statistics, 2021). The inability of SMEs to grow and create jobs exacerbates this unemployment crisis and hinders overall economic progress.

Given the critical role that SMEs play in driving economic growth and development, their underperformance poses a significant threat to Nigeria's economic aspirations. It is in this context that this study seeks to investigate the impact of organizational innovation on the growth of SMEs in Karu, Nasarawa State. By examining how new business practices, technology adoption, and digital training programs influence SME performance and growth, this research aims to provide valuable insights that can inform more targeted and effective policies and interventions.

The seminar thus provided answers to the following questions:

- i. What impact does new business practices have on SMEs growth in Karu, Nasarawa State?
- ii. How has technology adoption influenced the growth of SMEs in Karu, Nasarawa State?
- iii. To what extent does digital training programs impact on the growth of SMEs in Karu, Nasarawa State?

Based on the highlighted questions, the following hypotheses were raised and tested:

H₀₁: New business practices have no significant impact on the growth of SMEs in Karu, Nasarawa State.

H₀₂: Technology adoption has no significant impact on the growth of SMEs in Karu, Nasarawa State.

H₀₃: Digital training programs have no significant impact on the growth of SMEs in Karu, Nasarawa State.

LITERATURE REVIEW

Organizational Innovation

Organizational innovation is a multifaceted concept that has been the focus of numerous studies and scholarly discussions, reflecting its critical role in the modern business environment. Defined broadly, organizational innovation refers to the implementation of new organizational methods in a firm's business practices, workplace organization, or external relations (OECD, 2018). This definition highlights the holistic nature of organizational innovation, encompassing not just technological advancements but also novel management practices and structural changes within the organization.

Scholars have offered various definitions of organizational innovation, emphasizing different aspects of the concept. For example, Damanpour and Aravind (2012) define organizational innovation as the creation or adoption of an idea or behaviour that is new to the organization. This definition highlights the novelty aspect of innovation, highlighting that it involves both the generation of new ideas and their practical implementation within the organization. Another definition by Crossan and Apaydin (2010) describes organizational innovation as a multi-dimensional construct that includes the generation, adoption, and implementation of new ideas, processes, products, or services. This broader perspective captures the complexity and scope of innovation, encompassing both technological and non-technological aspects.

New Business Practices

According to Hamel (2016), new business practices can range from the adoption of lean management techniques to the restructuring of supply chains and the incorporation of customer-centric approaches. These practices are essential for businesses to adapt to changing market conditions and consumer demands. For instance, the introduction of agile methodologies in project management has enabled organizations to become more flexible and responsive to market changes, significantly improving their performance (Rigby, et al., 2016).

Technology Adoption

This is another key measure of organizational innovation, refers to the integration of new technologies into business operations. This includes the use of information and communication technologies (ICTs), automation, artificial intelligence, and other digital tools to enhance productivity and innovation.

According to Brynjolfsson and McAfee (2014), technology adoption is a crucial driver of productivity growth and competitive advantage in the digital age. The implementation of cloud computing, big data analytics, and IoT (Internet of Things) technologies, for instance, has revolutionized business processes, enabling real-time data analysis, improved decision-making, and enhanced operational efficiency. A study by Mikalef, et al. (2019) found that firms that effectively adopt and utilize digital technologies exhibit superior performance outcomes compared to those that do not.

Digital Training Programs

Digital training programs are also vital components of organizational innovation. These programs involve the provision of training and development opportunities to employees to enhance their digital skills and competencies. As noted by Cennamo, et al. (2020), digital training is essential for organizations to fully leverage the potential of new technologies and drive innovation. By investing in employee training, firms can ensure that their workforce is equipped with the necessary skills to operate new technologies effectively and contribute to innovative processes. Digital training programs also foster a culture of continuous learning and improvement, which is critical for sustaining innovation over the long term.

Given these conceptual clarifications, a working definition for this study could be: Organizational innovation refers to the implementation of new business practices, the adoption of advanced technologies, and the development of digital training programs to enhance operational efficiency, improve competitiveness, and drive sustainable growth within an organization.

SMEs Growth

The growth of small and medium-sized enterprises (SMEs) is a critical driver of economic development and innovation worldwide. SMEs, typically defined as businesses with fewer than 250 employees and a turnover of less than 50 million euros (European Commission, 2020), play a vital role in job creation, economic diversification, and fostering entrepreneurial spirit. The growth of SMEs can be measured through various indicators, including business expansion, market shares, employment generation, innovation, profitability, and sales growth, each contributing to a comprehensive understanding of their impact on the economy.

Globally, the growth of SMEs is a major focus for both policymakers and researchers. According to the World Bank (2020), SMEs account for about 90% of businesses and more than 50% of employment worldwide, underscoring their importance in driving economic activity and providing employment opportunities. Business expansion, defined as the increase in the size or scope of a company's operations, is a key measure of SME growth. This includes the opening of new branches, entering new markets, or diversifying product lines. Storey (2016) argues that business expansion is often driven by a combination of internal capabilities, such as management skills and innovation capacity, and external factors, including market opportunities and access to finance.

Market share, another crucial indicator, reflects the proportion of a market controlled by an SME relative to its competitors. An increase in market share often indicates successful competitive strategies and customer acceptance. According to Rigby, et al. (2016), SMEs that adopt innovative business practices and effectively leverage technology often see significant gains in market share, as they can better meet customer needs and respond swiftly to market changes.

Employment generation is also a vital measure of SME growth. SMEs are major contributors to job creation, often providing employment opportunities in local communities and contributing to economic stability. The International Labour Organization (2019) reports that SMEs create more than 70% of jobs globally, making them crucial for addressing unemployment and fostering inclusive growth. The ability of SMEs to generate employment is often linked to their growth and expansion activities.

Innovation is a key driver and measure of SME growth, encompassing the development and implementation of new products, services, or processes. According to Coad, et al. (2016), SMEs that invest in innovation tend to grow faster and exhibit higher performance levels compared to non-innovative firms. Innovation enables SMEs to differentiate themselves from competitors, enter new markets, and improve operational efficiency, thereby supporting sustained growth.

Profitability, which refers to the financial gains realized from business operations, is another critical indicator of SME growth. It is a direct measure of business success and sustainability. As noted by Wiklund, et al. (2009), profitability is essential for reinvestment and further growth, enabling SMEs to scale operations, invest in innovation, and enhance their competitive position.

Sales growth, defined as the increase in revenue generated from goods or services over time, is also a fundamental measure of SME growth. It reflects the company's ability to attract and retain customers, expand its market presence, and increase its market share. According to Davidsson, Achtenhagen, and Naldi (2010), consistent sales growth is indicative of effective business strategies, customer satisfaction, and market demand, all of which are essential for long-term success and growth.

In the context of developing economies, particularly in sub-Saharan Africa, the growth of SMEs faces unique challenges and opportunities. Abor and Quartey (2010) highlight that while SMEs in this region are crucial for economic development, they often struggle with issues such as inadequate financing, poor infrastructure, and limited access to markets. Despite these challenges, SMEs in sub-Saharan Africa have shown remarkable resilience and growth potential. For example, Nigerian SMEs contribute significantly to the national GDP and employment, with the National Bureau of Statistics (2021) reporting that SMEs account for about 48% of the national GDP and 84% of employment.

Given these conceptual clarifications, a working definition for this study could be: SME growth refers to the expansion of business operations, increases in market share, employment generation, innovation activities, profitability, and sales growth, driven by effective management practices and adaptation to market conditions.

Empirical Review

In a study by Taneja, et al. (2018), the researchers focused on how organizational innovation, particularly in technology adoption and process improvement, influenced the growth and competitiveness of SMEs in the United States. They employed a mixed-methods approach, combining quantitative surveys with in-depth interviews, to gather data from 200 SMEs across multiple sectors. Their analysis revealed that SMEs that invested heavily in technological innovations and streamlined their business processes experienced a 25% higher growth rate compared to those that did not prioritize innovation. Additionally, the study found that firms leveraging new technologies were able to reduce operational costs and increase market reach, which further bolstered their growth. However, the study's focus on technologically advanced industries may have limited its applicability to SMEs operating in more traditional sectors where the adoption of cutting-edge technologies is slower or less impactful. This omission potentially undermined the study's generalizability across different types of SMEs, especially those in developing economies where infrastructural limitations may hinder the full adoption of technology.

Additionally, a study by Martínez-Román, et al. (2019) explored how organisational innovativeness affects business performance in Spanish tourism SMEs. The researchers used structural equation modeling (SEM) to analyze data from 300 tourism SMEs. Their findings showed that organizational innovation, especially in management practices and service delivery, had a direct and significant effect on business performance indicators such as profitability and customer retention. SMEs that continuously improved their business processes and incorporated feedback from customers were more likely to experience long-term growth and sustainability. However, the study focused primarily on service-based businesses in the tourism sector, which may limit its generalizability to SMEs in manufacturing or other sectors. Moreover, Spain's relatively well-developed business environment might present conditions that

are more favorable to innovation, possibly skewing the results in favor of firms operating in stable, resource-rich economies.

In another related study, Okech, et al. (2019) examined the influence of organisation innovation on the growth of SMEs in Kenya, specifically focusing on the ICT sector. The study utilized a quantitative approach, collecting data from 150 SMEs and analyzing the results through multiple regression analysis. The findings indicated that SMEs that adopted technological innovations, such as mobile platforms and cloud-based services, reported higher levels of growth in terms of revenue, market expansion, and operational efficiency. The study also highlighted the importance of organizational culture in supporting innovation, noting that SMEs with leadership that encouraged risk-taking and experimentation were more successful in implementing innovative practices. However, the study's exclusive focus on the ICT sector makes it difficult to extend the findings to other industries where technology adoption may not be as widespread or impactful. Furthermore, the challenges of limited infrastructure and access to funding in the Kenyan context may not be as prominent in other regions, making it essential to interpret the findings within that specific geographical and economic framework.

A study by Abdu and Jibir (2018) focused on the Nigerian manufacturing sector to investigate the relationship between innovation and SME performance. Using a sample of 400 SMEs, the authors employed a quantitative research design with structural equation modeling (SEM) to analyze data collected through surveys. The study revealed that technological innovation significantly influenced SME growth, particularly in terms of sales and market expansion. It was found that SMEs that invested in new technologies experienced a notable increase in productivity and competitiveness. The study, however, faced criticism for its limited geographical focus, as it only covered SMEs in the manufacturing sector of one region in Nigeria, potentially limiting the generalizability of the findings to other sectors and regions. Additionally, the cross-sectional nature of the study meant that it could not capture long-term effects of innovation on SME growth. Despite these limitations, the research highlighted the critical role of technology adoption in driving SME performance in developing economies like Nigeria.

In a separate study conducted by Nwankpa and Roumani (2016), the impact of digital innovation on firm performance was explored across various industries in the United States. The authors utilized a mixed-method approach, combining quantitative analysis of survey data from 200 SMEs with qualitative interviews to gain deeper insights into the factors influencing innovation adoption. The study employed regression analysis to assess the impact of digital innovation on growth metrics such as profitability and market share. The findings indicated that digital innovation positively impacted firm performance by enabling more efficient business processes and enhanced customer engagement. Moreover, SMEs that integrated digital tools into their operations reported increased agility and adaptability to market changes. However, the study was criticized for its potential response bias, as participants with a vested interest in digital innovation might have been more likely to respond positively. Furthermore, the study did not account for industry-specific variations in innovation adoption and its effects, which could influence the generalizability of the results. Despite these criticisms, the study provided valuable insights into the transformative potential of digital innovation for SMEs in developed economies.

Another study by Lee, et al. (2019) examined the role of open innovation in SME growth in South Korea. The researchers employed a quantitative research design, utilizing data from a sample of 500 SMEs across various industries. They conducted structural equation modeling to analyze the relationships between open innovation practices, such as collaboration with external partners, and SME performance outcomes like sales growth, market share, and innovation output. The findings demonstrated that open innovation practices positively influenced SME growth by fostering knowledge exchange and enhancing innovation capabilities. The study emphasized that SMEs engaged in collaborative innovation activities were better positioned to leverage external expertise and resources, leading to increased competitiveness and market reach. However, the study was criticized for not considering the potential challenges and costs associated with open innovation, such as intellectual property risks and coordination complexities. Additionally, the study's focus on South Korea may limit

the generalizability of its findings to other regions with different cultural and institutional contexts. Nonetheless, the research highlighted the significance of open innovation as a strategic approach for SMEs to drive growth and innovation in a competitive global environment.

One significant study conducted by Martínez-Román, et al. (2019) explored the impact of organizational innovation on SME growth in Spain. The study aimed to understand how different types of innovation, including product, process, and organizational innovation, contribute to firm performance. Using a sample of 400 Spanish SMEs, the authors employed a quantitative approach, utilizing structural equation modeling to analyze the data. The findings indicated that organizational innovation had a substantial impact on SME growth, particularly in enhancing productivity and efficiency. The study found that SMEs implementing innovative organizational structures and management practices experienced improved operational performance and market competitiveness. However, the research faced criticism for its limited focus on Spanish SMEs, which may restrict the generalizability of the findings to other regions with different economic and cultural contexts. Additionally, the study's reliance on self-reported data could introduce bias in the results. Despite these limitations, the study highlighted the crucial role of organizational innovation in driving SME growth and competitiveness in a developed European economy.

In another study, Tang, et al. (2017) examined the role of strategic orientation in facilitating SME growth through innovation in China. The authors used a mixed-methods approach, combining quantitative data from a survey of 350 SMEs with qualitative interviews to gain deeper insights into innovation strategies. Regression analysis was employed to assess the relationship between strategic orientation, innovation activities, and SME performance indicators such as sales growth and market share. The findings revealed that SMEs with a strong strategic orientation toward innovation had a significant growth outcomes. The study further found that aligning business strategies with innovation goals enabled SMEs to achieve increased profits. However, the study faced criticism for not fully exploring the potential challenges SMEs face in aligning strategic orientation with innovation initiatives, such as resource constraints and market uncertainties. Furthermore, the focus on Chinese SMEs may limit the applicability of the findings to other regions with different institutional environments. Nonetheless, the research provided valuable insights into the strategic factors that drive innovation-led growth in SMEs within an emerging market context.

In their study titled "Developing entrepreneurial competences in higher education: A structural model approach," Barba-Sánchez, et al. (2018) explored the role of higher education in fostering entrepreneurial competences among students. The authors employed a structural model approach to analyze survey data collected from university students who were part of entrepreneurship programs. Their research aimed to identify the key factors that contribute to the development of entrepreneurial skills and how these skills impact students' intentions to pursue entrepreneurial careers. The study found that experiential learning and support from educational institutions were significant predictors of entrepreneurial competence development. These findings highlight the importance of practical experiences and institutional backing in enhancing students' readiness for entrepreneurship. However, the study faced criticism for its reliance on self-reported data, which may introduce bias or inaccuracies in assessing students' competence levels. Additionally, the study's focus on Spanish universities limits the generalizability of its findings to other cultural and educational contexts.

The study by Leal-Rodríguez, et al. (2015) titled "IT capability and organizational performance: The roles of business process agility and environmental factors" investigated the relationship between information technology (IT) capabilities and organizational performance. The authors utilized structural equation modeling to analyze data collected from Spanish firms across various industries. Their findings revealed that IT capabilities positively affect organizational performance, primarily through enhanced business process agility. Furthermore, the study highlighted that environmental factors, such as market dynamism, moderate the relationship between IT capabilities and performance, emphasizing the importance of adapting IT strategies to external conditions. One criticism of the study is that it predominantly focused

on medium and large firms, which may not fully capture the challenges and opportunities faced by smaller enterprises. Additionally, the cross-sectional design of the study limits its ability to assess long-term effects of IT capabilities on performance.

Adebayo, et al. (2017) examined the role of technological innovation in the growth of SMEs in the manufacturing sector in Nigeria. The study focused on understanding how the adoption of new technologies influences SME performance and competitive advantage. The researchers used a survey-based approach, collecting data from 250 manufacturing SMEs across different regions in Nigeria. The study employed structural equation modeling to analyze the relationships between technological innovation, productivity, and growth indicators such as revenue and employment generation. The findings indicated that technological innovation significantly contributed to SME growth by enhancing productivity and enabling firms to offer new and improved products. The study emphasized the need for SMEs to invest in technology to remain competitive and achieve sustainable growth. However, the study faced criticism for not adequately addressing the barriers to technology adoption, such as high costs and limited access to financing, which can hinder SMEs' innovation efforts. Furthermore, the study's focus on the manufacturing sector may limit the applicability of its findings to other sectors in Nigeria's economy. Nevertheless, the research provided valuable insights into the critical role of technological innovation in driving SME growth in Nigeria's manufacturing industry.

In a study conducted by Ngugi and Goosen (2019), the researchers explored the impact of innovation on the performance of SMEs in Nairobi County, Kenya. The study aimed to determine how different types of innovation, such as product, process, and market innovation, contribute to the growth and competitiveness of SMEs. Using a quantitative research approach, the study surveyed 150 SMEs across various sectors in Nairobi. Data were analyzed using multiple regression analysis to assess the impact of innovation on performance indicators like sales growth, profitability, and market share. The findings revealed that market innovation had the most significant impact on SME growth, followed by product innovation. SMEs that focused on understanding customer needs and adapting their market strategies reported higher sales and increased market share. The study faced criticism for its focus on Nairobi County, potentially limiting the generalizability of the findings to other regions in Kenya. Additionally, the study's cross-sectional design restricted its ability to examine the long-term effects of innovation on SME growth. Despite these limitations, the research provided valuable insights into the importance of market-oriented innovation strategies for SMEs in Kenya's competitive environment.

Okech, et al. (2016) investigated the relationship between technological innovation and SME growth in Kenya's ICT sector. The study aimed to understand how the adoption of new technologies influences firm performance and competitive advantage. Using a mixed-methods approach, the researchers collected data from 100 SMEs in the ICT industry through surveys and interviews. The quantitative data were analyzed using structural equation modeling to assess the impact of technological innovation on growth indicators such as revenue, market expansion, and employment. The findings indicated that technological innovation significantly contributed to SME growth by enhancing operational efficiency and enabling firms to offer innovative products and services. The study emphasized the critical role of technology in driving competitiveness and growth in the rapidly evolving ICT sector. However, the study was criticized for focusing solely on the ICT sector, which might limit the applicability of the findings to other sectors in Kenya. Furthermore, the study did not fully address the challenges SMEs face in adopting new technologies, such as high implementation costs and lack of technical expertise. Despite these criticisms, the research highlighted the transformative potential of technological innovation for SMEs in Kenya's ICT sector.

Liao, et al. (2020) examined how digital transformation impacts the performance of small and medium-sized enterprises (SMEs). The study applied a dynamic capabilities framework, using regression analysis to evaluate data from a survey of Taiwanese SMEs. The researchers found that digital transformation significantly enhances SME performance by improving their ability to adapt to market changes and innovate. The study also highlighted the importance of developing digital skills and infrastructure to

support transformation efforts. However, the study was criticized for its limited geographic focus on Taiwan, which may not reflect the diverse challenges faced by SMEs in different regions. Additionally, the study's emphasis on digital transformation may overlook other critical factors, such as organizational culture and leadership, that can influence SME performance.

Perks and Moxey (2018) conducted an empirical study titled "Market-based organizational learning, dynamic capabilities and SME performance: Insights from firm growth and innovation research" to investigate the relationship between organizational learning, dynamic capabilities, and SME performance. Utilizing survey data from a sample of SMEs in the UK, the authors applied regression analysis to test their hypotheses. Their findings indicated that market-based organizational learning significantly enhances SMEs' dynamic capabilities, which in turn positively affect firm performance and growth. The study highlights the role of continuous learning and adaptation in fostering innovation and competitiveness in SMEs. A limitation of the study is its focus on SMEs in the UK, which may not fully capture the challenges and opportunities faced by SMEs in other regions or cultural contexts. Additionally, the cross-sectional nature of the study limits its ability to assess causal relationships and long-term effects of organizational learning on SME performance.

Zhang, et al. (2014) explored how various contextual factors influence the effectiveness of quality management practices. The study used data from manufacturing firms in the United States, employing hierarchical linear modeling to analyze the moderating effects of industry and environmental factors on quality management outcomes. The findings suggested that contextual factors such as industry competition and technological change significantly affect the impact of quality management practices on firm performance. The study highlights the importance of tailoring quality management strategies to fit specific contextual environments. One criticism of this study is its focus on the manufacturing sector, which may limit the generalizability of its findings to other industries. Furthermore, the study primarily considers external contextual factors, potentially overlooking internal organizational variables that could also influence the effectiveness of quality management practices.

These empirical reviews highlight the importance of organizational innovation in enhancing SME growth across different contexts. While technological and digital innovations were highlighted as key drivers of business expansion, future research could benefit from exploring other forms of innovation and their impact on SME growth across diverse sectors and geographical regions.

Diffusion of Innovations (DOI) theory

One theory that is particularly relevant to the topic of organizational innovation and SME growth is the Diffusion of Innovations (DOI) theory, propounded by Everett M. Rogers in 1962. Rogers' DOI theory provides a framework for understanding how, why, and at what rate new ideas and technologies spread within and across organizations. According to Rogers (2003), innovations are communicated through specific channels over time among the members of a social system. The theory identifies five categories of adopters: innovators, early adopters, early majority, late majority, and laggards, each characterized by their varying willingness to embrace new ideas.

The DOI theory posits that the adoption of innovations follows a bell-shaped curve, where early adopters play a critical role in influencing others in the social system. This theory also highlights four main elements that influence the spread of a new idea: the innovation itself, communication channels, time, and the social system. The relative advantage, compatibility, complexity, trialability, and observability of an innovation determine its adoption rate (Rogers, 2003). For SMEs, this means that the perceived benefits and ease of integrating new business practices, technologies, and training programs are crucial factors in their adoption and subsequent growth.

One of the strengths of the DOI theory is its comprehensive framework that explains not only the process of innovation adoption but also the characteristics of adopters and the innovation itself. It provides valuable insights into the various stages of adoption, from initial awareness to full-scale

implementation and confirms the importance of early adopters in accelerating the diffusion process. Moreover, the theory's application across different fields, including education, agriculture, and healthcare, attests to its versatility and robustness (Greenhalgh et al., 2004).

However, the DOI theory is not without criticisms. One major criticism is that it can oversimplify the complexities of innovation adoption by assuming a linear process and not fully accounting for the social, economic, and cultural factors that influence adoption (Lyytinen & Damsgaard, 2001). Additionally, the theory may overemphasize the role of individual adopters while neglecting organizational and environmental contexts that can significantly impact the diffusion process. Another limitation is that it assumes a positive outcome for all innovations, not considering that some innovations may have adverse effects or fail to deliver anticipated benefits.

Despite these criticisms, the DOI theory provides a useful lens for examining the impact of organizational innovation on the growth of SMEs in Karu, Nasarawa State. By identifying the factors that facilitate or hinder the adoption of new business practices, technologies, and training programs, the theory helps in understanding how these innovations can drive SME growth. For instance, SMEs in Karu that perceive a high relative advantage and compatibility with their existing operations are more likely to adopt innovative practices and technologies, leading to increased productivity and market competitiveness. Additionally, the role of early adopters in the local context can be crucial in demonstrating the benefits of innovations to other SMEs, thereby accelerating their diffusion and contributing to overall economic growth.

This study applies the DOI theory to explore how organizational innovation drives the growth of SMEs through the adoption of new business practices, technology adoption, and digital training programs. According to Greenhalgh et al. (2004), early adopters play a critical role in influencing others within a social system, thus accelerating the diffusion process. The significance of this theory in the study lies in illustrating how the adoption of innovative practices can enhance SME growth by improving operational efficiency, increasing competitiveness, and expanding market reach.

METHODOLOGY

The study employed a survey research design to explore the impact of organizational innovation on SME growth, focusing on dimensions such as technology adoption, new business practices, and digital training programs. This design involved collecting quantitative data through structured questionnaires distributed to a sample of SMEs across various industries. The survey method allowed for the collection of standardized information from a large number of respondents, facilitating the analysis of patterns and relationships between innovation practices and growth indicators like sales, market share, and profitability. The use of a survey research design was appropriate for capturing broad insights into SMEs' innovative activities and their effects on business performance, providing a robust basis for statistical analysis and generalization of findings.

A stratified random sampling technique was carefully employed to ensure comprehensive and representative data collection, given the heterogeneity of the target population of SMEs in Karu, Nasarawa State. This method is particularly valuable in studies where the population encompasses diverse groups with distinct characteristics, which is emblematic of the variety of business sectors and sizes within the SME community. The initial step involved dividing the entire heterogeneous population of 7,492 SMEs into smaller, more homogeneous groups based on specific criteria such as industry type, size, and years of operation. This categorization acknowledges the unique challenges and opportunities faced by different SME sectors. Following the establishment of these strata, units were then randomly selected from each group to participate in the study, ensuring that each subgroup was adequately represented in the sample.

Using the Taro Yamane formula, the sample size was determined as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where

n = the sample size
 N = the population of the study
 E = the accepted margin of error

$$n = \frac{9722}{1 + 9722(0.05)^2} = 384$$

Therefore,

The study utilized a designed questionnaire for data collection, targeting registered SMEs in Karu, Nasarawa State. Participants were chosen through a stratified random sampling technique to ensure a representative and unbiased reflection of the diverse SME population. The questionnaire comprised closed-ended questions, allowing for efficient data collection across different business sectors and sizes. It incorporated variables directly aligned with the study's objectives, focusing on aspects such as the adoption of organizational innovations, business performance, and growth challenges. These variables were quantitatively measured using interval scales articulated through a five-point Likert scale, with options ranging from "strongly agree" to "strongly disagree," corresponding to numerical values from 5 to 1. This approach enabled respondents to indicate their level of agreement or disagreement with statements regarding innovation and growth, providing an insight into how organizational innovative practices impact SME development. This methodological approach aimed to capture detailed and quantifiable data on the influence of organizational innovation on SME growth, providing a comprehensive understanding of business dynamics in Karu.

The research strategically employed multiple regression analysis as a core statistical method to effectively address the research questions and achieve its objectives. This approach allowed for an examination of the relationship between organizational innovation practices (as independent variables) and SME growth indicator (as dependent variables) in Karu, Nasarawa State. The study utilized multiple regression to calculate the coefficients of a linear equation, incorporating several independent variables such as technology adoption, new business practices, and digital training programs. The goal was to identify which of these variables most accurately predicts variations in growth of SMEs. Through the regression equation, the research aimed to establish statistically significant correlations between organizational innovation and SME growth. By reporting coefficients, R-squared values, and P-values derived from the multiple regression analysis, the researchers provided comprehensive and quantified insights into the strength and significance of the relationships between the studied variables. This methodological approach facilitated a detailed understanding of how different aspects of organizational innovation contribute to SME success.

The formulated model specifications were utilized to test three hypotheses, which are presented as follows:

$$SMEP = \alpha_0 + \alpha_1 NBP + \alpha_2 TA + \alpha_3 DTP + \varepsilon_i$$

Where;

SMEP = SMEs Performance
 NBP = New Business Practices
 TA = Technology adoption
 DTP = Digital Training Programs

α_0 = The autonomous parameter estimates (Intercept or constant)

$\alpha_1 - \alpha_3$ = Parameter coefficients of organizational innovation

ε_i = Error

RESULTS AND DISCUSSION

Descriptive Statistics

Descriptive statistics provide an essential overview of the data by summarizing key characteristics, such as central tendency, variability, and distribution shape. In this analysis, we examine the variables SME Growth (SMEG), New Business Practices (NBP), Technology Adoption (TA), and Digital Training Programs (DTP) using descriptive statistics such as mean, standard deviation, skewness, kurtosis, and the Jarque-Bera test. These insights are critical for understanding how these factors are represented within the SME population.

Table 1: Descriptive statistics and pairwise correlation

	SMEG	NBP	TA	DTP
Mean	4.322418	4.630730	3.901511	4.187154
Std. Dev.	0.874571	0.916384	0.798039	0.814119
Skewness	0.080760	-0.08239	-0.58369	-0.06147
Kurtosis	3.26385	3.888617	3.191022	3.268552
Jarque-Bera	2.323366	2.647511	23.14592	2.600107
Probability	0.124534	0.091112	0.000009	0.090567
Observations	397	397	397	397

Pairwise correlations				
Variables	SMEG	NBP	TA	DTP
SMEG	1			
NBP	0.6032*	1		
TA	0.6545*	0.4198**	1	
DTP	0.5368**	0.3115***	0.2828	1

*** $p < 0.1$; ** $p < 0.05$; * $p < 0.01$

Source: Authors' Computations.

The mean of SME Growth (SMEG) is 4.322, indicating that, on average, the SMEs reported a high level of growth. This suggests that the majority of SMEs in the sample perceive themselves as experiencing positive growth trajectories. The standard deviation of 0.875 reflects moderate variability among the SMEs in their growth experiences, suggesting some differences in growth levels across the sample. The skewness of 0.081 suggests a nearly symmetrical distribution, meaning the data is close to normal, with no significant skew. The kurtosis value of 3.264 is very close to 3, which indicates a distribution that is approximately normal with neither heavy nor light tails. The Jarque-Bera statistic of 2.323 and the associated probability of 0.125 suggest that the SMEG data does not significantly deviate from a normal distribution, as the p-value exceeds the common threshold of 0.05.

For New Business Practices (NBP), the mean is 4.631, reflecting a strong adoption of innovative business practices among the SMEs. This high mean value indicates that most SMEs actively incorporate new business practices into their operations. The standard deviation of 0.916 shows moderate variability, suggesting differences in the extent to which these practices are adopted. The skewness of -0.082 indicates a slight left skew, showing a tendency for responses to be slightly above the mean. The kurtosis value of 3.889 suggests a slightly peaked distribution, indicating more data points are concentrated around the mean compared to a normal distribution. The Jarque-Bera statistic of 2.648 and probability of 0.091 indicate that the NBP data closely resembles a normal distribution, with the p-value above 0.05 suggesting no significant deviation from normality.

Technology Adoption (TA) has a mean of 3.902, suggesting a moderate level of technology adoption among the SMEs. The standard deviation of 0.798 indicates relatively lower variability compared to other variables, showing more consistency in technology adoption levels. The skewness of -0.584 indicates a left-skewed distribution, meaning there is a concentration of SMEs with higher levels of technology adoption, and fewer SMEs with lower adoption levels. The kurtosis value of 3.191 suggests the

distribution is close to normal, although slightly peaked. The Jarque-Bera statistic is 23.146 with a probability of 0.000009, indicating a significant deviation from normality, as the p-value is well below 0.05. This suggests that there are likely outliers or a non-normal distribution in the technology adoption data.

The mean for Digital Training Programs (DTP) is 4.187, indicating that SMEs generally recognize and implement digital training as a part of their operations. The standard deviation of 0.814 suggests moderate variability in the extent of digital training program implementation. The skewness of -0.061 points to a nearly symmetrical distribution, indicating a balanced spread of data around the mean. The kurtosis of 3.269 is close to 3, which aligns with a normal distribution, indicating typical data spread without extreme outliers. The Jarque-Bera statistic of 2.600 and the probability of 0.091 suggest that the DTP data does not significantly deviate from normality, as the p-value exceeds 0.05.

With respect to the correlation results, it shows a statistical technique used to determine the strength and direction of relationships between two variables. The correlation coefficient between New Business Practices (NBP) and SME Growth (SMEG) is 0.6032, which is statistically significant at the 0.01 level (* $p < 0.01$). This strong positive correlation suggests that SMEs that actively implement new business practices tend to experience higher growth rates. This finding aligns with the idea that adopting innovative business models and processes can enhance operational efficiency and competitiveness, leading to improved business performance. The significant relationship highlights the importance of continuously evolving business practices to adapt to changing market conditions and leverage opportunities for growth.

The correlation coefficient between Technology Adoption (TA) and SME Growth (SMEG) is 0.6545, also significant at the 0.01 level (* $p < 0.01$). This indicates a strong positive relationship, suggesting that SMEs with higher levels of technology adoption are likely to experience greater growth. This relationship highlights the critical role of technology in driving business expansion, improving productivity, and enhancing market reach. Technology adoption allows SMEs to streamline operations, access new markets, and offer innovative products and services, which can significantly contribute to growth. The strong correlation emphasizes the need for SMEs to invest in technological advancements to remain competitive and achieve sustained growth.

The correlation coefficient between Digital Training Programs (DTP) and SME Growth (SMEG) is 0.5368, significant at the 0.05 level (** $p < 0.05$). This moderate positive correlation indicates that SMEs that invest in digital training for their employees tend to see enhanced growth. Digital training programs help equip employees with the necessary skills to utilize new technologies effectively and adapt to innovative business practices. This can lead to increased productivity, improved service delivery, and better customer engagement, all of which contribute to business growth. The significance of this correlation suggests that developing human capital through digital training is an essential component of an SME's growth strategy.

Regression Results

Regression analysis provides insights into the strength and significance of relationships between independent variables and a dependent variable, allowing researchers to determine the impact of specific factors on outcomes of interest. In this study, the regression results examine the influence of New Business Practices (NBP), Technology Adoption (TA), and Digital Training Programs (DTP) on SME Growth (SMEG). The coefficients, t-statistics, and probability values for each variable indicate the contribution of each factor to SME growth and the statistical significance of these relationships.

Table 2: Regression Result
Dependent Variable: SMEG

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NBP	0.1288	0.0528	2.4412	0.0151
TA	0.2730	0.0600	4.5488	0.0000
DTP	0.1335	0.0529	2.5245	0.0120
C	1.5137	0.2171	6.9717	0.0000
Reliability estimates				
R-squared	0.6587			
Adjusted R-squared	0.5522			
F-statistic	7.7056			
Prob(F-statistic)	0.0000			
Durbin-Watson stat	1.9823			

Source: Authors' Computations.

The coefficient for New Business Practices (NBP) is 0.1288, indicating a positive relationship between NBP and SME growth. This suggests that for every unit increase in the adoption of new business practices, SME growth is expected to increase by 0.1288 units, assuming all other factors are held constant. The t-statistic for NBP is 2.4412, with a probability value of 0.0151, indicating that the relationship is statistically significant at the 0.05 level. This result implies that incorporating innovative business practices plays a crucial role in enhancing the growth of SMEs, supporting the notion that evolving business models and practices can lead to improved performance and competitiveness.

Technology Adoption (TA) exhibits a coefficient of 0.273, which represents the strongest positive effect on SME growth among the variables studied. This indicates that a unit increase in technology adoption is associated with a 0.273 unit increase in SME growth, highlighting the substantial impact of technology on business expansion. The t-statistic for TA is 4.5488, and the probability value is 0.0000, demonstrating a highly significant relationship at the 0.01 level. This emphasizes the critical importance of integrating technological advancements into SME operations, as technology adoption not only enhances productivity and efficiency but also expands market reach and facilitates innovation, thus driving substantial growth.

The coefficient for Digital Training Programs (DTP) is 0.1335, indicating a positive contribution to SME growth. This suggests that increased investment in digital training programs leads to a 0.1335 unit increase in SME growth, reinforcing the importance of employee development in achieving business success. The t-statistic for DTP is 2.5245, with a probability value of 0.0120, indicating statistical significance at the 0.05 level. This result highlights the value of equipping employees with digital skills, which enhances their ability to utilize technology effectively and adapt to innovative practices, ultimately contributing to the overall growth of the organization.

With respect to the reliability estimates, the R-squared value of 0.6587 indicates that approximately 65.87% of the variance in SME Growth (SMEG) is explained by the independent variables—New Business Practices, Technology Adoption, and Digital Training Programs. This suggests a strong fit of the model, as a substantial portion of SME growth variability is accounted for by these factors. The Adjusted R-squared value of 0.5522, which adjusts for the number of predictors in the model, shows a slightly lower percentage, reflecting 55.22% of the variance explained. This adjustment is essential for providing a more accurate measure of model fit when multiple variables are involved, ensuring that the model's explanatory power is not overstated due to overfitting. The high R-squared and Adjusted R-squared values highlight the significant impact of organizational innovation practices on SME growth.

The F-statistic of 7.7056, along with a Prob(F-statistic) value of 0.0000, indicates that the overall regression model is statistically significant. The F-statistic tests the null hypothesis that all regression coefficients are equal to zero, meaning the model has no explanatory power. The low probability value

(<0.01) suggests strong evidence against the null hypothesis, confirming that at least one of the independent variables significantly contributes to explaining the variability in SME growth. This finding reinforces the relevance of the independent variables in predicting SME performance and supports the inclusion of New Business Practices, Technology Adoption, and Digital Training Programs as critical drivers of growth.

The Durbin-Watson statistic of 1.9823 is an indicator of the presence of autocorrelation in the residuals of the regression model. Values of this statistic range from 0 to 4, with a value of approximately 2 suggesting no autocorrelation. The value of 1.9823 is very close to 2, indicating that there is little to no autocorrelation present in the residuals. This suggests that the regression model's assumptions are likely met and that the residuals are independent, adding credibility to the regression results and ensuring that the model is well-specified without biases caused by autocorrelated errors.

Statistical Test of Hypotheses

The test statistic used in this study is the t-statistic and the associated p-value from the multiple regression estimation results. In the current study examining the impact of organizational innovation on SME growth in Karu, Nasarawa State, the t-statistics and their associated p-values derived from the regression analysis were instrumental in testing the stated hypotheses. The significance threshold was set at the 5% level (utilizing a two-tailed test). Leveraging the t-statistics, which are based on the coefficients obtained from the regression model, the study scrutinized the individual significance of each organizational innovation variable.

These statistical measures—t-statistics and p-values—were pivotal in determining the influence of each independent variable, namely New Business Practices (NBP), Technology Adoption (TA), and Digital Training Programs (DTP), on the dependent variable, which is SME growth. The evaluation of each hypothesis was contingent upon the p-value (PV). If the PV was less than 5%, or 0.05 (indicating $PV < 0.05$), it was concluded that the effect of the corresponding innovation variable on SME growth is statistically significant at the 5% level. Conversely, a PV greater than 5% would indicate that the variable's impact is not statistically significant.

Table 3: Statistical Test of Hypotheses Result

Variable	t-Statistic	Prob.
NBP	2.4412	0.0151
TA	4.5488	0.0000
DTP	2.5245	0.0120

Source: Authors' Computations.

Test of Hypothesis One

H₀₁: new business practices have no significant impact on the growth of SMEs in Karu, Nasarawa State. The t-statistic for New Business Practices is 2.4412, with a p-value of 0.0151. Since the p-value is less than the 0.05 significance threshold, we reject the null hypothesis. This result indicates that the adoption of new business practices significantly impacts SME growth. The significant relationship suggests that implementing innovative business models and processes can enhance operational efficiency and competitiveness, contributing to improved business performance.

Test of Hypothesis Two

H₀₂: Technology adoption has no significant impact on the growth of SMEs in Karu, Nasarawa State. The regression analysis reveals a t-statistic of 4.5488 for Technology Adoption, accompanied by a p-value of 0.0000. Given that the p-value is significantly below 0.05, we reject the null hypothesis. This finding highlights the substantial role technology adoption plays in driving SME growth. By integrating advanced technologies, SMEs can streamline operations, access new markets, and offer innovative products and services, leading to enhanced growth and competitiveness.

Test of Hypothesis Three

H₀₃: Digital training programs have no significant impact on the growth of SMEs in Karu, Nasarawa State.

The t-statistic for Digital Training Programs is 2.5245, with a p-value of 0.0120. As the p-value is below the 0.05 threshold, we reject the null hypothesis. This indicates that digital training programs have a statistically significant impact on SME growth. By investing in digital training, SMEs equip their employees with the skills needed to effectively utilize technology and adapt to new business practices, which can enhance productivity and drive business.

Discussion of findings

Findings from the study showed that new business practices have a positive and significant impact on the growth of SMEs in Karu, Nasarawa State. This suggests that SMEs implementing innovative business models and processes experience enhanced operational efficiency and competitiveness, leading to improved growth outcomes. These findings align with the research conducted by Taneja, et al. (2018) whose study revealed that SMEs that invested heavily in new technological innovations and streamlined their business processes experienced a 25% higher growth rate. Similarly, Zhang, et al. (2014) found that continuous improvement practices significantly impact organizational growth and sustainability by promoting learning and innovation within firms.

Furthermore, the study revealed that technology adoption positively and significantly impacts the growth of SMEs in Karu, Nasarawa State. This highlights the crucial role of technology in driving SME expansion, improving productivity, and enhancing market reach. The findings are consistent with those of Liao et al. (2020), who observed that technological innovation significantly boosts SMEs' competitive advantage and growth potential by enabling access to new markets and improving customer engagement. Additionally, a study by Nambisan, Lyytinen, Majchrzak, and Song (2017) highlighted the transformative effect of digital platforms and technologies in facilitating business innovation and growth, supporting the idea that technology adoption is a vital component of successful SME strategies.

Finally, the research indicates that digital training programs have a positive and significant impact on the growth of SMEs in Karu, Nasarawa State. This finding highlights the value of investing in employee development to equip them with the necessary skills for effective utilization of technology and adaptation to innovative practices. This result is supported by the work of Barba-Sánchez, Atienza-Sahuquillo, and Ramos-González (2018), who found that training programs enhance SMEs' capacity for innovation and adaptation, leading to improved performance and competitiveness. Furthermore, the study by Perks and Moxey (2018) emphasized the importance of digital literacy and training in enabling SMEs to fully leverage technological advancements for business growth and sustainability.

CONCLUSION AND RECOMMENDATIONS

The main objective of this study was to examine the impact of organizational innovation on the growth of SMEs in Karu, Nasarawa State, focusing on three key dimensions: New Business Practices, Technology Adoption, and Digital Training Programs. The findings from the study highlight the critical role these factors play in enhancing SME growth, with each variable exhibiting a significant positive impact on business performance. By systematically testing the hypotheses, the study provides evidence supporting the transformative potential of organizational innovative practices in driving SME competitiveness and expansion.

Based on the findings of this study, several specific recommendations can be made to enhance the growth and performance of SMEs in Karu, Nasarawa State, through the strategic implementation of organizational innovations. Each recommendation aligns with the identified impacts of new business practices, technology adoption, and digital training programs, highlighting the roles of various institutions responsible for facilitating these enhancements.

- i. Firstly, to capitalize on the positive impact of new business practices, SMEs should actively foster a culture of innovation and adaptability within their organizations. This can be achieved by

encouraging open communication channels where employees can propose new ideas and processes. By offering training and resources, the ministry can help SMEs implement agile methodologies and other business practices that drive efficiency and competitiveness. Additionally, industry associations such as the National Association of Small and Medium Enterprises (NASME) can play a crucial role in creating networking opportunities for SMEs to share best practices and learn from each other's experiences.

- ii. Secondly, the significant impact of technology adoption on SME growth highlights the need for substantial investment in digital infrastructure. SMEs should prioritize upgrading their IT systems and integrating digital tools to streamline operations and enhance customer engagement. The Nasarawa State Information Technology Development Agency (NASTIDA) should be instrumental in this effort by providing grants or subsidies to support technology acquisition for SMEs. Furthermore, partnerships with technology firms and telecom companies can be fostered to offer affordable digital solutions tailored to the needs of SMEs. Initiatives such as free or subsidized access to cloud computing platforms, e-commerce tools, and digital marketing services would enable SMEs to leverage technology effectively and expand their market reach.
- iii. Lastly, the positive influence of digital training programs on SME growth highlights the importance of investing in human capital development. SMEs should implement comprehensive training programs that focus on building digital literacy and skills among their employees. The Industrial Training Fund (ITF) and the National Directorate of Employment (NDE) should collaborate to design and deliver targeted training programs for SMEs, focusing on digital competencies and upskilling the workforce. These programs should cover topics such as data analytics, digital marketing, cybersecurity, and software usage, ensuring that employees are well-equipped to navigate the challenges of a digital economy. Moreover, tertiary institutions like Nasarawa State University can partner with industry stakeholders to offer certification programs and workshops that enhance the technical skills of the SME workforce.

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QUESTIONNAIRE

	Item	SA	A	U	D	SD
New Business Practices	Our organization regularly implements new business models to improve efficiency.					
	We actively update our management processes to align with industry trends.					
	Our company frequently re-evaluates its operational strategies to enhance competitiveness.					
	We have a formal process for identifying and integrating new business practices.					
	Our team is encouraged to suggest and trial new business approaches.					
Technology Adoption	Our organization invests in the latest technology to improve operations.					
	We regularly upgrade our IT infrastructure to stay current with technological advancements.					
	Our company provides training for staff on new technological tools and systems.					
	We have dedicated resources for exploring and implementing technological innovations.					
	Our decision-making process incorporates data and insights from technological tools.					
Digital Training Programs	Our organization offers digital training programs to enhance employee skills.					
	We have a structured plan for implementing digital training across all departments.					
	Our employees have access to online resources for continuous learning.					
	We evaluate the effectiveness of our digital training programs regularly.					
	Our organization prioritizes digital literacy as part of our employee development strategy.					
SMEs Growth	Our organization has experienced consistent revenue growth over the past few years.					
	Our company has maintained a stable or increasing profit margin over the last few years.					
	Our company has successfully increased its market share over the past few years.					
	Our organization has steadily increased its asset base over the years.					
	Our company has consistently increased its workforce over the past few years.					