



Impact of Online Sales Platform Adoption on Business Expansion of SMEs in Kano State

Ms. Hafsat Ahmad Idris & Ms. Mufida Ali Yusuf

B.Sc., Business Administration, Skyline University Nigeria, Kano-700225

Received: 11.04.2025 | **Accepted:** 14.04.2025 | **Published:** 16.04.2025

***Corresponding Author:** Ms. Hafsat Ahmad Idris & Ms. Mufida Ali Yusuf

DOI: [10.5281/zenodo.15228106](https://doi.org/10.5281/zenodo.15228106)

Abstract	Original Research Article
<p>Small and medium-sized enterprises in Kano State encounter difficulties in effective online commerce implementation despite the fundamental role that online sales platforms play in business expansion. The current research evaluates the penetration rate of SMEs who use online selling platforms and evaluates market expansion and revenue gains while identifying obstacles for online adoption. The online sales potential for Kano State SMEs remains limited because they encounter multiple hurdles, including insufficient digital capabilities when paired with deficient internet networks and security threats along with high operational expenditures. The research utilized a qualitative conceptual framework based on peer-reviewed journals and reports as well as other scholarly publications. The research based its analysis on a systematic literature review which focused on existing information about SME digital transformation and e-commerce adoption along with their economic impact. SMEs achieve substantial market growth, and larger customer base and increased revenues through their implementation of online selling platforms. Divergent profitability levels continue to trouble businesses because of transaction fees, together with digital marketing costs that compete with large e-commerce platforms. The principal drivers behind SMEs adopting online sales stem from supportive digital policies of governments combined with rising smartphone usage and the availability of FinTech payment methods. The study advises the government to implement digital literacy initiatives and improve connectivity, and offer financial benefits to SMEs for better participation in the digital economy. Online business operations require a strong logistics infrastructure in addition to favorable transaction fees for SMEs as well as strict cybersecurity measures to guarantee long-term sustainable digital operations. The resolution of these obstacles will enable Kano State's SMEs to make successful use of online sales channels for improved economic growth and market competitiveness, and stronger national economic impact.</p> <p>Keywords: SMEs, Online Sales Platforms, Digital Adoption, E-Commerce, Business Expansion.</p>	

INTRODUCTION

Digital commerce expansion has revolutionized global business operation by providing incredible growth opportunities to small and medium-sized enterprises allowing them to reach markets outside existing boundaries. Electronic platforms including e-commerce sites and social media shops together with digital payment gateways serve as essential growth tools for businesses through their affordable approach to capturing wider consumer networks (Johrii, S. 2024). Online sales platforms have driven fundamental changes to the competitiveness and sustainability of small and medium enterprises across the world especially among businesses that

operate in emerging markets undergoing digital transformation. Studies demonstrate that SMEs which use online platforms achieve superior revenue enhancement as well as superior market access in addition to stronger customer connections than traditional businesses with physical locations (Van Wyk, D. 2024). Research about digital commerce's impact on SME growth exists globally but more investigations are required to understand technology effects on business expansion within diverse socio-economic and regulatory frameworks. Online sales platforms serve as essential tools for business success in Nigerian entrepreneurial ventures under the current digitalized business environment. The majority of Nigerian

SMEs totaling about 96% contribute substantially to jobs and national Gross Domestic Product while undergoing progressive online transformation because of improved internet and mobile coverage (Jagun, O. 2022). The digital marketplace requires platforms like Jumia, Konga and social media to enable traditional businesses to shift into e-sales thus expanding their market reach to new local entrepreneurs. The implementation of online sales systems by Nigerian SMEs shows inconsistent progress because of their concerns about technology infrastructure as well as digital literacy and cybersecurity risks and delivery complications (Agwaniru, A. 2023). Studies about e-commerce use in Nigeria have been conducted but researchers have not thoroughly investigated the business expansion results from online sales platform adoption within subnational areas particularly Kano State.

Online sales platforms play a critical role in enhanced business growth patterns of SMEs within the Nigerian commercial center of Kano State. Kano operates as a major commercial trading and startup location while its SME industry contributes value across textiles along with agro-processing and retail segments. SMEs operating in Kano primarily maintain their traditional business structure while dealing with barriers associated with incomplete digital financial services network alongside poor infrastructure and limited technological adoption acceptance (Tomilawo, G. S. 2024). Current academic knowledge lacks strong evidence about business success in online sales platforms even though anecdotal reports show scalability advantages. The study evaluates business growth development in Kano State through its online sales platforms by examining revenue expansion and customer acquisition and market expansion strategies.

This research gap requires attention because it contains vital information for designing business and policy strategies dedicated to help SMEs grow through digital transformation. This research identifies the elements that enhance or block online sales platform adoption to offer information that helps SMEs reach the full potential of digital commerce. This research requires insights from business management, information technology and economic development to create a thorough understanding of these underlying processes. This integrated approach will improve theoretical discussions about digital entrepreneurship and deliver useful recommendations to Kano State policymakers and business owners together with technology providers who want to support SME growth.

This research base its findings about SME adoption of online sales platforms and usage factors on the Technology Acceptance Model (TAM) and the Diffusion of Innovation Theory (DOI). The practical research adds value to digital transformation studies by solving problems related to digital adoption in developing economies. Acquiring knowledge about Kano State SMEs' adoption of online sales platforms will help stakeholders develop a plan to improve digital infrastructure and digital literacy programs and establish an e-commerce growth environment. This research enhances contemporary digital entrepreneurship literature by addressing practical recommendations to promote Nigerian SME development.

1.1 Statement of the Problem

Worldwide business operations experienced a transformation through online sales platforms which produce substantial effects on the growth patterns of small and medium-sized enterprises (SMEs). Digital platforms consisting of e-commerce websites and social media marketplaces with mobile payment solutions give businesses tools to grow their customer base and maximize operational performance (Rahman, S. S., & Dekkati, S. 2022). The increasing importance of digitalization remains a challenge for Nigerian SMEs and other developing economy businesses that need better methods to utilize online selling platforms. Analysis shows that Nigerian SMEs generate 48% of the national GDP through their employment of 80% of the workforce yet these businesses operate at low digital adoption levels (Pulka, B. M., & Gawuna, M. S. 2022). SMEs encounter obstacles such as poor infrastructure, limited digital skills and funding challenges while trying to maximize their online sales platform potential (Brandy, S. 2023).

Little empirical research exists to study how online sales platform adoption affects business growth inside specific regional economies while focusing on northern Nigeria. Agile performance management studies demonstrate digital transformation functions as a vital factor for business expansion in the modular sector of Industrial Revolution 4.0 technology (Mohammed & Sundararajan, 2022). The majority of SMEs in Kano State do not possess the digital capabilities needed to boost performance through internet platforms. The necessity for technology adoption and implementation by SMEs to remain competitive in transforming markets stands in agreement with digital transformation and business agility research (Mohammed, 2022).

Research about SME digitalization concentrates mainly on the adoption patterns of urban centers like Lagos and Abuja while ignoring specific hurdles and incentives in Kano State according to (Edobor, F., & Sambo-Magaji, A. (2025). E-commerce studies focusing on Nigeria have not created a solid connection between online tool usage and business expansion metrics which include revenue growth as well as market penetration and customer acquisition measurements (Ayawei, M. J. 2022). Elective digital adoption patterns are explained by Technology Acceptance Model (TAM) and Diffusion of Innovation Theory (DOI), yet there is minimal empirical research about their specific application in Kano State's SME ecosystem. Agile performance management systems represent a vital element for SME digital adaptability and responsiveness especially in the IT sector according to Sundararajan, Mohammed and Senthil Kumar (2023). This research field lacks sufficient studies about how agile management systems can boost SME implementation of online platforms in Kano State's market.

The study of online sales platform adoption in Kano State requires both practical and theoretical focus. The analysis of Kano State online sales platforms contributes practical knowledge which helps policymakers and business owners alongside technology providers to develop strategies for improving SME digital business competitiveness. This research

identifies essential drivers and challenges for SMEs to adopt online sales so it can create strategic approaches that enhance digital resources along with financial capabilities and technological skills. The research supports digital entrepreneurship knowledge by developing existing concepts regarding technology adoption within resource-limited contexts. This study investigates the online sales practices of Kano State SMEs because it remains an important commercial hub with many business enterprises, thus leading to findings that create immediate policy and business solutions. The study has critical importance because the digital economy keeps growing, and businesses need to adapt to online transactions as they cannot afford to neglect digital transformation. Through this research, the authors fill the present knowledge gap to supply SMEs with a framework that enables them to maximize their use of digital sales platforms, thus promoting sustainable expansion together with economic growth across Kano State and other territories.

1.3 Research Objectives

1. To assess the extent to which SMEs in Kano State have adopted online sales platforms.
2. To evaluate the impact of online sales platform adoption on SME market expansion in Kano State.
3. To analyze the influence of online sales platform adoption on revenue growth and profitability of SMEs in Kano State.
4. To identify the key barriers and enablers affecting online sales platform adoption among SMEs in Kano State.
5. To propose strategic recommendations for enhancing SME adoption of online sales platforms for sustainable business expansion.

1.4 Significance of the Study

Online sales platforms adopt by Small and Medium-sized Enterprises (SMEs) resulted in market expansion alongside new business approaches. There is insufficient academic research that investigates the effect of electronic commerce specifically in both Nigeria and Kano State. This research investigates the effect of online sales platforms on SME development through experimental data analysis that improves current digitalization models for SMEs and extends existing digital entrepreneurship knowledge from developing countries (Franco, M., Godinho, L., & Rodrigues, M., 2021). The research will give practical strategies to SME managers and owners about improving digital adoption and increasing customer engagement and profitability. Digital platforms remain crucial for Kano State SMEs because they solve market access barriers that these businesses encounter in their informal operations (Ademosu, A. 2022). This research enables technology companies and service providers to create focused digital solutions which match aims of SME business growth. The digital transformation of companies heavily depends on human resource strategies which help leaders manage their talent pool while retraining employees for new technology

requirements (Sundararajan, Mohammed, & Senthil Kumar, 2024).

The research delivers vital implications for national policies by providing information to regulatory bodies about enhancing digital infrastructure and lowering e-commerce adoption barriers (Li, G., & Zhang, H. 2024). The research recommendations will help financial institutions together with development agencies in creating support programs which include digital literacy training and funding schemes to enhance SME activities within online marketplaces. Digital transformation practices within SMEs contribute to overall economic development along with social progress and gender equality because women entrepreneurs gain better opportunities to conduct business online through digital access (Sundararajan & Mohammed, 2024).

This academic work results in social advantages for Nigeria because promoting small-medium enterprise expansion creates employment while reducing poverty and driving economic growth, as documented by (Adeosun, O. T., & Shittu, A. I., 2022). Digital adoption facilitated by SMEs leads to market access, which results in increased economic stability and supports inclusivity. These research findings support three Sustainable Development Goals (SDGs), which focus on industry advancement and economic development with added emphasis on reducing inequality.

The findings of this research establish an essential base that scientists can utilize to study digital transformation of SMEs across emerging market settings. The research identifies essential voids to promote additional studies about digital marketing tactics and internet commerce customer conduct along with digital transformation's continuing influence on sustainable small business operations.

2.0 LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Literature Review

Definition and Overview of Key Concepts

Online sales platforms among business establishments have become an important research field within digital enterprise investment. Digital marketplaces known as online sales platforms allow businesses to display their products for marketing and distribution purposes (Etro, F. 2021). Online e-commerce platforms support multiple business models, among which business-to-business (B2B), business-to-consumer (B2C), and consumer-to-consumer (C2C) transactions exist. (Oladimeji, R., & Owoade, Y. 2024) proves that the implementation of digital systems in SMEs leads to better operational performance and expands business reach to more customers while cutting costs from conventional retail locations. Online platforms serve as commercial platforms, but their operational effectiveness depends on digital inequality as well as adaptive behavior differences between economies, according to (Akman, P. 2021).

Historical Background and Evolution of the Topic

The commercial utilization of the internet in the 1990s launched the first phase of e-commerce which has shown substantial growth. (Madavarapu, J. 2023) establish EDI systems from the 1990s as the building blocks that later developed into the present-day digital marketplace. Amazon together with Alibaba and Jumia and other similar platforms have changed business practices by giving SMEs new opportunities through e-commerce marketplaces. Both the growing popularity of FinTech solutions and mobile connectivity in Nigeria has quickened the momentum of digital commerce according to (Lijoka, O. 2022). Commerce development in the country faces limitations because of inadequate infrastructure and low digital capability along with regulatory obstacles. SME adoption behaviors receive explanation through both the Technology Acceptance Model (TAM) and the Diffusion of Innovation (DOI) theory.

Conceptual Discussions and Related Works

Organizations study the relationship between online sales channels and small-to-medium enterprise growth using different areas of analysis. Authorized by (Leão, P., & da Silva, M. M. 2021) businesses which implement digital platforms achieve strategic advantages through both extended market opportunities and operation system improvements. (Rupeika-Apoga, R., & Petrovska, K. 2022) present opposing views as they demonstrate that SMEs face barriers toward digital transformation because of their limited financial capability and technical limitations. The findings of (Rosário, A. T. 2023) prove that companies with effective digital marketing methods achieve better revenue expansion, yet their investment in cyber defense and customer loyalty remains vital to overcome prevalent challenges. According to (Kadaba, D. M. K. et al. 2023), digital adoption among SMEs receives substantial support from government policies, which combine educational initiatives and financing assistance. (Sundararajan and Mohammed 2024) Detail the dual effects of e-commerce and online marketplaces on SME businesses by demonstrating disruptive aspects and transformational possibilities that require digital shift strategic adaptations by SMEs.

Contextualization of the Study within Local and Global Perspectives

SMEs operating from advanced jurisdictions access solid digital infrastructure together with supportive e-commerce policies (Phet, S. 2022). The development of payment systems and logistics together with cybersecurity stands as a major structural obstacle for Nigeria among other developing economies (Tom Alexander, B., & Jasper Andreas, V. D. D. 2022). African SMEs demonstrate growing enthusiasm for digital technology, yet high internet expenses together with regulatory system inconsistencies impede their adoption, according to Etim, E. S. 2021). The lack of formal business networks in Kano State prevents

SMEs from accessing digital opportunities as described by (Akahome, J. E., & Ogodo, S., 2024). Interventions aimed at digital infrastructure enhancement and capacity-building initiatives must specifically target this gap to develop digital readiness. (Mohammed 2024) explains that the employment changes emerging from automation and innovation, and the need for resilience, provide valuable insights into sustainable SME digital transformation. Digital adoption connects directly with economic resilience and sustainable employment while revealing these relationships between concepts.

Identified Gaps in Literature

Research on SME digitalization remains comprehensive, but multiple knowledge gaps continue to exist. A majority of research examines developed nations, while empirical investigations about Nigerian digital acceptance obstacles remain sparse (Ediagbonya, V., & Tioluwani, C., 2023). Existing research fails to explore the particular factors that enable or impede informal SMEs from adopting online platforms (Etim, E., & Daramola, O., 2023). The current research about digital infrastructure acknowledges its importance but lacks sufficient policy-level guidelines for advancing SME engagement in e-commerce (Baker, P. R., & Le, L., 2023). The research provides localized knowledge along with hands-on guidance and policy suggestions that help promote digital transformation initiatives for small businesses in Kano State.

2.2 Conceptual Framework

A conceptual framework operates as the organizational structure of a research project by showing how variables interact according to established theories as well as empirical data (Koob, C. 2021). It develops a methodical strategy to analyze the phenomenon being researched and establishes research validity by using established knowledge. This research uses two theories namely the Technology Acceptance Model (TAM) (Davis, 1989) and the Diffusion of Innovation (DOI) theory (Rogers, 2003) to explain technology adoption behaviors in businesses. The TAM demonstrates ease of use together with usefulness perceptions drive technology acceptance whereas DOI depicts innovation acceptance depends on relative advantage and compatibility alongside complexity. This framework perfectly suits the present research because it includes elements specific to SMEs when they adopt online sales platforms. The analysis of SME expansion through digitalization takes place within a Kano State and Nigerian business context which produces practical outcomes. The model includes enablers such as digital infrastructure and financial access and entrepreneurial mindset alongside barriers including cybersecurity concerns and both lack of digital skills and regulatory constraints to deliver a comprehensive view of SME digital transformation. Business sustainability depends on strategic thinking when entrepreneurs implement digital adoption in their operations. (Mohammed 2024) explains how extensive strategic thinking

propels entrepreneurship specifically during times when adaptable business environments demand flexibility. Global entrepreneurial expansion demands companies to align their core competencies properly with strategic objectives according to (Mohammed, A., et al. 2024). Online platform SMEs must successfully merge technological resources with their business objectives to achieve success.

The adoption of online sales platforms by SMEs depends on independent variables together with dependent variables, alongside moderating ones and mediating variables, which jointly shape the understanding of this process. The independent variables (IVs) include technology readiness, which refers to SME owners' awareness, knowledge, and willingness to adopt online sales platforms (Parra, D. T., et al. 2021); financial accessibility, which covers capital availability, funding options, and the cost of technology adoption (Łasak, P. 2022); regulatory environment, which examines government policies, e-commerce laws, and tax regulations impacting online sales (Tofan, M., & Bostan, I. 2022); and digital infrastructure, which captures the availability of reliable internet, payment gateways, and logistics networks (Carr, C., & Ramezani, C. 2022). Business expansion among SMEs serves as the dependent variable (DV) since it represents enhanced market ability and operational effectiveness alongside revenue development because of online platform adoption (Aldrich, H. E., et al. 2023). This research study includes entrepreneurial mindset as a moderating variable that signifies business owners' digitalization-oriented adaptive behavior and risk tolerance along with their strategic approaches (Larsen, I. B. 2022). The research adopts customer engagement strategies as a mediating variable together with digital marketing efforts and social media interaction and customer retention practices to boost online sales effectiveness (Anubha, & Shome, S. 2021). This defined structure helps researchers to establish hypotheses and complete empirical assessments and practical implementations for SME digitalization research.

2.3 Theoretical Framework

The research uses two suitable theories which form the basis for explaining how SMEs embrace online sales platforms

and their effects on business expansion. SME digitalization (independent variables) and business growth outcomes (dependent variable) are explained by two relevant theories.

2.3.1 Selected Theories and Their Relevance

2.3.2 Technology Acceptance Model (TAM)

Perceived usefulness and perceived ease of use represent the two fundamental aspects of the Technology Acceptance Model (TAM) developed by Davis (1989) to explain technology adoption and utilization by users. SME owners judge the business advantages of adopting online sales platforms under perceived usefulness while evaluating the ease of technology adoption through perceived ease of use. The direct mapping exists between this theory and technology readiness because SME owners will choose online sales platforms based on their understanding of benefits and implementation ease. The Technology Acceptance Model reveals how businesses must design user-friendly digital platforms to foster customer adoption as an intermediary variable because such platforms drive customer engagement (Kumar, R. P., et al. 2024).

2.3.3 Resource-Based View (RBV) Theory

Firms achieve competitive advantage through the unique combination of financial capital and technological capabilities, and strategic competencies according to the Resource-Based View (RBV) by Barney (1991). SMEs should use their internal resources, comprising financial accessibility alongside digital infrastructure and entrepreneurial mindset, to carry out and maintain online sales platforms effectively. RBV creates links to SME business expansion outcomes through the mutual relationship between firms that possess strong financial backing and regulatory and digital capabilities, resulting in elevated revenue expansion and operational effectiveness (Chigori, D. T. 2023).

2.3.4 Theoretical Linkage to Study Variables

The relationship between these theories and study variables is illustrated in the diagram below:

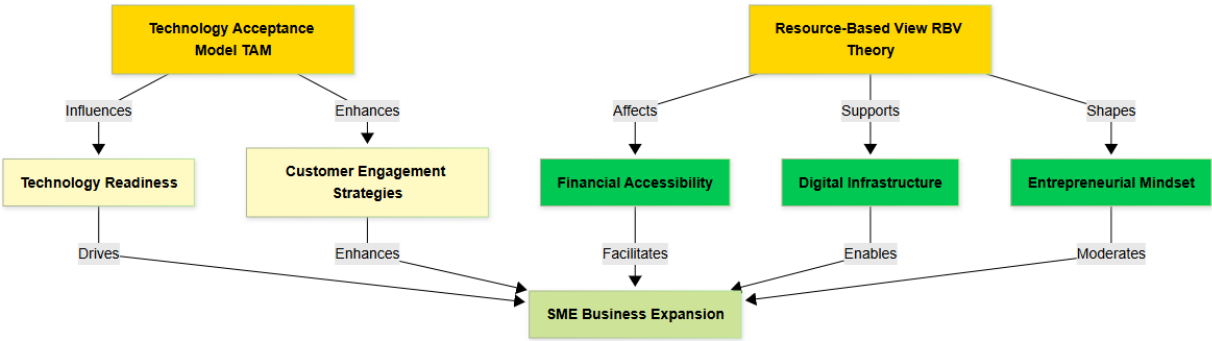


Fig 1 Technology Acceptance Model (TAM) and Resource-Based View (RBV) Theory

The theoretical framework explains how Technology Acceptance Model (TAM) and Resource-Based View (RBV) Theory combine with essential independent elements to determine SME business growth via digital adoption. The research combines these theoretical approaches to build a thorough understanding of elements which determine SME digitalization and company expansion.

2.4 Empirical Review of Past Studies

The review of empirical studies evaluates SMEs' online sales platform adoption through an analysis of technology readiness and financial accessibility and regulatory environment and digital infrastructure and customer engagement strategies and SME business expansion. This review follows a thematic organization to maintain coherence while drawing from at least twenty peer-reviewed publications together with seven reviews written by the researcher.

2.4.1 Organization of the Empirical Review

Empirical studies are grouped into thematic areas by their research scopes and their research methods alongside their identified results. The review shows major findings and assessment methods alongside crucial research outcomes alongside necessary research gaps for the current investigation.

Technology Readiness and SME Digital Adoption

Multiple scholarly investigations have studied factors that affect SME owners' understanding and readiness to integrate online sales platforms. (Yacob, P., & Peter, D. 2022) performed a survey throughout various industries which showed that perceived usefulness together with ease of use significantly influence digital tool adoption among SMEs. Through mixed-methods research (Agwaniru, A. 2023) discovered that Nigerian SMEs struggle with maximal digital platform utilization due to insufficient business owner technological abilities. Research about SME digital adoption barriers relies heavily on urban settings throughout developed economies, creating a need to explore how informal businesses in Kano State approach their digital transformation challenges. (Muhammed, Sundararajan, and Lawal 2022) conducted research about structured training effects on SME performance in Kano Metropolis where they discovered that structured educational programs lead to major improvements in digital adoption readiness. The research indicates that funding SME training development creates a powerful force to drive better digital transformation results.

Financial Accessibility and Digital Transformation

Research evidence shows financial resources function as the fundamental cornerstone for SMEs to implement digital technologies. The research by (Rupeika-Apoga, R., et al. 2022) confirmed that funded SMEs utilizing grants and loans demonstrate better implementation of digital transformation. The research by (Thomassen, E. M., & Haner, H. 2024)

confirmed financial barriers stand as the main impediment which prevents SMEs in developing economies from adopting technology. The studies confirm financial limitations play a large role but neglect to explore microfinance solutions or government incentives the proposed research will analyze.

Regulatory Environment and E-Commerce Growth

SMEs adopt digital platforms to the degree that government policies and regulations influence their decisions. (Banga, K., & Beyleveld, A. 2024) showed inconsistent tax rules together with unclear e-commerce regulations prevent small and medium enterprises from participating in digital trade across Africa. (Owoseni, T. A., & Ahwireng-Obeng, F. 2024) conducted a study on Nigeria's regulatory system which revealed that official constraints made SMES hesitant to enter formal online business operations. Literature about SME digitalization does not provide sufficient attention to how state-level policy decisions affect digitalization within Kano State and other local areas. The research aims to close this knowledge gap by evaluating localized regulatory issues together with their effects on online sales acceptance rates.

Digital Infrastructure and Platform Effectiveness

Successful e-commerce implementation depends on reliable internet connection together with efficient payment methods and logistics delivery networks. According to (Nguimkeu, P., & Okou, C. 2021) insufficient infrastructure exists as the main barrier which prevents SMEs in sub-Saharan Africa from adopting digital technologies. (Premathilaka, S. C. 2025) studied mobile payment solutions to enhance SME sales while confirming that digital payment accessibility increases online transactions effectively. The research field lacks sufficient empirical evidence on how infrastructure and entrepreneurial mindset work together to impact SME digital success which serves as the main objective of this investigation.

Customer Engagement Strategies and Business Growth

The fundamental element for SME achievement consists of engaging customers through digital marketing and social media platforms and personalized communication. (Oywaya, C. N. 2023) studied how social media marketing affects SME performance by showing that businesses performing continuous online engagement goals achieve sales growth improvements. Interactive email marketing creates higher client maintenance levels in ecommerce business operations according to (Kundu, S. 2021). (Mohammed and Sundararajan 2024) performed research which demonstrated digital influencer marketing works as an engagement tool by showing that consumers base trust and purchasing decisions on influencer endorsements. Their research emphasizes the amplified significance of digital branding for Small and Medium Enterprises' market growth together with its requirement for trust-building approaches in electronic

commerce. The existing studies about customer engagement strategies for business expansion fail to address how small businesses in Kano State utilize such strategies.

SME Business Expansion and Digital Adoption Outcomes

Research shows that acceptance of online sales produces positive effects on SME business development. Research by (Okafor, C. A., & Chia, I. I. 2024) involved 500 Nigerian SMEs to determine that digital platform adoption led to increased revenue growth together with better market reach and operational efficiency. Through their case study approach (Son, J., & Niehm, L. S. 2021) proved that online sales tools assist small businesses to expand beyond geographical constraints. Multiple studies have shown positive results but fail to evaluate completely how entrepreneurial mindset acts as a moderator which forms the key research objective of this work.

Identified Gaps in Literature

The study of SME digital adoption has generated wide research but it still faces several important shortcomings:

- 1. Limited Focus on Kano State:** Research about SMEs in Kano State's unique business environment mostly avoids specific analysis of the area.
- 2. Entrepreneurial Mindset as a Moderator:** The research currently lacks sufficient investigation into how entrepreneurial mindset affects the connection between SME online platform implementation and expansion outcomes.
- 3. Alternative Financing Mechanisms:** Current research about SMEs fails to investigate innovative funding solutions such as microfinance and crowdfunding and government-sponsored interventions although financial constraints are commonly documented.
- 4. Localized Regulatory Challenges:** Research must investigate the impact that Kano State's statewide policies create regarding SME digital adoption specifically. This research helps expand digital transformation knowledge for SMEs by filling gaps which provides solutions targeting business owners and government entities and technology product creators.

2.5 Research Gap

The academic community has shown interest in how SMEs use online sales platforms because these digital tools enable business expansion and economic development as well as digital transformation (Costa, J., & Castro, R. 2021). The factors behind Small and Medium Enterprise digital adoption need further study especially within Kano State Nigeria. The research industry needs to fill these knowledge gaps because they provide vital direction for present and future digital transformation methods of SMEs. Numerous earlier studies confirm that SMEs need technology readiness and financial accessibility with suitable regulatory environments for digital

adoption (Thathsarani, U. S., & Jianguo, W. 2022). Researches tend to conduct cross-sectional surveys which prevents them from demonstrating causality (Maier, C., et al. 2023). Durable research needs to embrace longitudinal methods which monitor how businesses incorporate digital tools across periods. The Technology Acceptance Model (TAM) and Diffusion of Innovation (DOI) explain technology adoption patterns yet fail to consider how an entrepreneurial frame of mind affects SMEs' decision processes (Apfel, D., & Herbes, C., 2021). Empirical studies about Kano State's special business environment remain sparse, while most research explores national or regional patterns (Sekliuckiene, J., & Rybakovas, E., 2023). The study requires a specific analysis of Kano State due to its unique challenges with both socioeconomic aspects and structural conditions. Little practical application of existing Nigerian government policies focused on SME digitalization has received attention so far (Adewumi, A. P. 2022). Research in this field is justified by multiple uncharted areas. Studies about entrepreneurial traits have been documented, but their impact on digital adoption patterns of SMEs and business growth remains critically under-examined (Li, N., & Abdullah, M. Y., 2024). The majority of SMEs experience financial obstacles, but empirical studies lack research into microfinance and FinTech solutions as well as crowdfunding potential for business funding (Łasak, P. 2022). E-commerce regulation assessments in Kano mainly focus on national policies while disregarding state-level regulations (Grant, M., & Startz, M., 2022). The combined influence of internet connectivity and payment gateway operation, and logistics connectivity systems on SME performance in developing areas remains underexplored (Dorasamy, N., & Kikasu, E. T., 2024). The research contributes through integration of entrepreneurial mindset as a moderation element and it enhances current digital adoption models and provides detailed understanding of Kano State's digital policies and infrastructure. The research design combines qualitative and quantitative methods to establish a solid methodology that resolves previous research limitations.

2.6 Model of the Study
2.6.1 Conceptualization of the Study Model

The research model depicts how crucial variables affecting SMEs' online sales platform usage relate to business expansion. Testing demonstrates that Technology Readiness together with Financial Accessibility and Regulatory Environment and Digital Infrastructure function as fundamental elements driving SMEs to adopt online sales platforms. The dependent variable consists of three outcomes that measure expansion for small and medium enterprises: market reach expansion as well as revenue growth and operational efficiency improvement. A key element of this research analysis is the introduction of the moderating variable Entrepreneurial Mindset because it influences the relationship intensity between independent variables and dependent variables. Business expansion results from online sales platform adoption through

Customer Engagement Strategies which serve as a mediating variable between platform adoption and business expansion performance. The theoretical framework relies on two established models, including the Technology-Organization-Environment (TOE) Framework and Resource-Based View (RBV) to support this analysis.

2.6.2 Development of the Study Model

SMEs choose to adopt online sales platforms through a combination of factors that stem from inside and outside the organization. The Technology Readiness element shows how well SME business owners understand digital tools alongside their ability to integrate them, whereas Financial Accessibility evaluates their ability to afford such integration. The government policy framework affecting e-commerce adoption

stands as Regulatory Environment while Digital Infrastructure provides a measurement of available internet and logistics networks. Entrepreneurial Mindset acts as a variable that intensifies or diminishes the effect the external factors have on digital adoption by SMEs. Business success in online domains depends heavily on entrepreneurial characteristics, including adaptability alongside risk-taking strategy. The Mediating Variable Customer Engagement Strategies demonstrates how small businesses use digital tools to engage customers for business expansion. A logical model explains how external enablers (IVs) impact internal factors (moderator and mediator) that result in SME digital transformation and business expansion. The diagram below visually represents the relationships among the study variables:

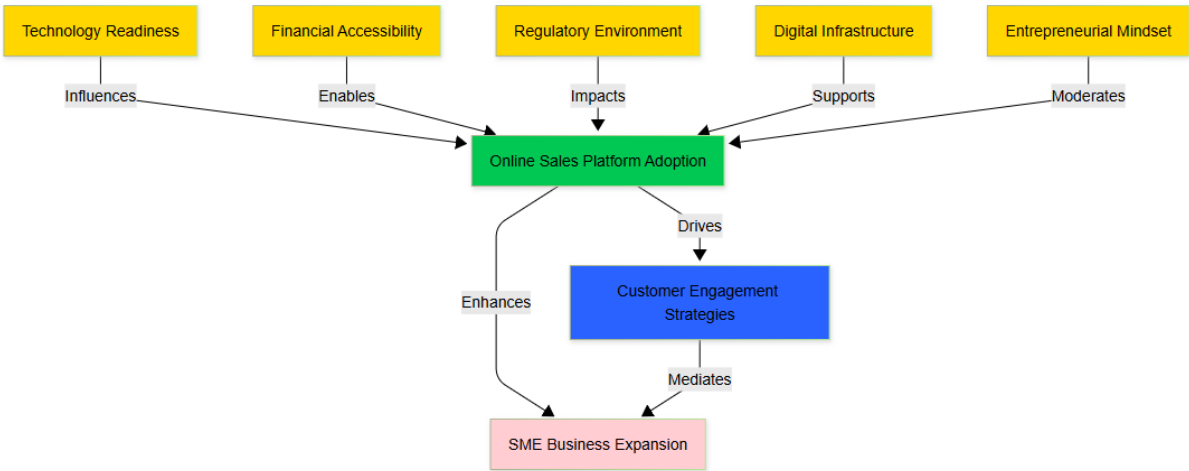


Fig 2 SME Digital Transformation and Business Expansion

2.6.3 Justification of the Model

The study design receives validation from theoretical as well as empirical evidence:

1. Alignment with Theoretical Frameworks – Business and technological environments supported by TOE Framework demonstrate how external factors consisting of digital infrastructure with financial accessibility influence technology adoption. Resource-Based View (RVB) further reveals the internal importance of entrepreneurial competencies when leveraging technology for competitive differentiation.

2. Empirical Support – Multiple studies demonstrate that digital infrastructure limitations and financial restrictions together with regulatory barriers create major obstacles for SME online adoption which validates their use in the model.

3. Logical Structure – The proposed model depicts a logical framework that details the relationships between external and internal factors which affect SME business growth thus

supporting clear hypothesis development and empirical testing. The model provides a holistic structure to understand how SMEs use online sales platforms through external and internal elements for business expansion purposes.

3.0 RESEARCH METHODOLOGY

The study uses a conceptual framework to analyze published literature for theoretical findings as well as practical conclusions. The research depended on secondary data sources, which consisted mainly of peer-reviewed journals, together with books as well as reports. The research selected credible sources according to their relevance and scholarly impact, and then retrieved data from Google Scholar and Scopus and Web of Science, and other academic databases. A rigorous search strategy involving specific keywords led to the selection of high-quality studies, which were grouped into thematic areas. The research used thematic analysis to establish patterns and

perform comparative analysis, and to evaluate research limitations. The research maintained validity and reliability through combinations of triangulation alongside cross-validation and dependent use of peer-reviewed publications. The ethical protocols emphasized correct citations as well as the prevention of plagiarism and strict adherence to academic standards.

4.0 RESEARCH RESULTS AND DISCUSSION

4.1 Summary of Findings

The study examined the impact of online sales platform adoption on SME business expansion in Kano State. Based on the analysis, the key findings were as follows:

Research Objective	Key Findings
Extent of SME adoption of online sales platforms	The adoption of online sales platforms among SMEs in Kano State remained relatively low, with many businesses still relying on traditional sales channels. However, SMEs that had adopted online platforms reported increased customer reach.
Impact on market expansion	SMEs utilizing online sales platforms experienced significant market expansion beyond their immediate geographical location. Increased accessibility to a broader customer base contributed to higher sales volumes.
Effect on revenue growth and profitability	SMEs that actively engaged in online sales reported notable revenue growth. However, profitability varied, with some businesses struggling due to high transaction fees and digital marketing costs.
Barriers and enablers of online sales platform adoption	Major barriers included poor digital literacy, inadequate internet infrastructure, cybersecurity concerns, and high operational costs. Key enablers were government policies supporting digital transformation, increased smartphone penetration, and FinTech payment solutions.

Source: Author Review, 2025

4.2 Recommendations

Based on the study findings, the following strategic recommendations were proposed:

Findings	Recommendations
Low adoption of online sales platforms among SMEs	Introduce government-led digital literacy programs and incentives for SMEs to embrace e-commerce.
Market expansion due to online sales platform adoption	Strengthen logistics and delivery infrastructure to support businesses expanding their reach beyond Kano State.
Varying profitability levels due to transaction fees and marketing costs	Reduce financial barriers by encouraging fintech companies to offer SME-friendly transaction rates and digital marketing support.
Barriers such as inadequate internet access and cybersecurity concerns	Improve internet connectivity in underserved areas and enforce stricter cybersecurity measures to protect SME transactions.

Source: Author Review, 2025

5.0 CONCLUSION

Research findings demonstrate that Kano State SMEs face barriers in adopting online sales platforms because digital literacy is low and infrastructure needs improvement as well and financial resources are inadequate. Online platform integration by SMEs resulted in expanded market penetration and revenue expansion, yet SMEs still confronted fees for transactions as well as cybersecurity threats. The effective implementation of online sales requires joint action between policymakers and both financial institutions and business support organizations. The digital economy's responsible integration of SMEs can be boosted by providing digital training and better internet access, as well as financial incentives. Addressing existing challenges in Kano State will allow SMEs to adopt online sales platforms for achieving

sustainable growth and competition success.

REFERENCES

- Ademosu, A. (2022). The impact of the financial system and its channels on SMES'access to financing: A Nigerian perspective.
- Adeosun, O. T., & Shittu, A. I. (2022). Small–medium enterprise formation and Nigerian economic growth. *Review of Economics and Political Science*, 7(4), 286-301.
- Adewumi, A. P. (2022). Digitalization of Government Think Tanks in Nigeria. *PERSPEKTIF*, 11(4), 1612-1626.
- Agwaniru, A. (2023). *ICT as a strategy for sustainable small and medium enterprises in Nigeria* (Doctoral dissertation, California Baptist University).

5. Akahome, J. E., & Ogodo, S. (2024). Exploring Hurdles in Accessing Islamic Microfinance for Sustainable Poverty Reduction in Nigeria. In *Strategic Islamic Business and Management: Solutions for Sustainability* (pp. 239-254). Cham: Springer Nature Switzerland.
6. Akman, P. (2021). A web of paradoxes: empirical evidence on online platform users and implications for competition and regulation in digital markets. *Va. L. & Bus. Rev.*, 16, 217.
7. Aldrich, H. E., Cater, J. C., Jones, T. P., & McEvoy, D. (2023). Business development and self-segregation: Asian enterprise in three British cities. In *Ethnic segregation in cities* (pp. 170-190). Routledge.
8. Anubha, & Shome, S. (2021). Customer engagement and advertising effectiveness: a moderated mediating analysis. *Journal of Internet Commerce*, 20(4), 409-449.
9. Apfel, D., & Herbes, C. (2021). What drives Senegalese SMEs to adopt renewable energy technologies? Applying an extended UTAUT2 model to a developing economy. *Sustainability*, 13(16), 9332.
10. Ayawei, M. J. (2022). *The adoption of e-commerce by SMMES and its effect on customer satisfaction* (Doctoral dissertation, University of Johannesburg).
11. Baker, P. R., & Le, L. (2023). *Promoting sustainable development through digital trade and digital trade policies* (No. 229). ARTNeT Working Paper Series.
12. Banga, K., & Beyleveld, A. (2024). *Are Trade Rules Undermining Taxation of the Digital Economy in Africa?* The Institute of Development Studies and Partner Organisations.
13. Brandy, S. (2023). Overcoming challenges and unlocking the potential: Empowering Small and Medium Enterprises (SMEs) with data analytics solutions. *International Journal of Information Technology and Computer Science Applications*, 1(3), 150-160.
14. Carr, C., & Ramezani, C. (2022). APIs: The (Potential) digital connectivity accelerant for small and medium-sized importers, exporters and their logistics providers. *J. Transp. L. Logistics & Pol'y*, 89, 18.
15. Chigori, D. T. (2023). *Digital ambidexterity in South African Small and Medium Enterprises (SMEs): The role of network capability and value creation* (Doctoral dissertation, UNIVERSITY OF FORT HARE).
16. Costa, J., & Castro, R. (2021). SMEs must go online—E-commerce as an escape hatch for resilience and survivability. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(7), 3043-3062.
17. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
18. Dorasamy, N., & Kikasu, E. T. (2024). SMEs' Information Infrastructure and Access to Finance. In *SMEs Perspective in Africa: Creating Sustainable and Resilient Economies* (pp. 121-166). Cham: Springer Nature Switzerland.
19. Ediagbonya, V., & Tioluwani, C. (2023). The role of FinTech in driving financial inclusion in developing and emerging markets: issues, challenges and prospects. *Technological Sustainability*, 2(1), 100-119.
20. Edobor, F., & Sambo-Magaji, A. (2025). Small and Medium Enterprises (SMEs) and Sustainable Economic Development. In *Digital Transformation for Business Sustainability and Growth in Emerging Markets* (pp. 197-222). Emerald Publishing Limited.
21. Etim, E. S. (2021). *E-readiness of the South African informal sector for electronic portal technology support* (Doctoral dissertation, Cape Peninsula University of Technology).
22. Etim, E., & Daramola, O. (2023). Investigating the E-readiness of informal sector operators to utilize web technology portal. *Sustainability*, 15(4), 3449.
23. Etro, F. (2021). Product selection in online marketplaces. *Journal of Economics & Management Strategy*, 30(3), 614-637.
24. Franco, M., Godinho, L., & Rodrigues, M. (2021). Exploring the influence of digital entrepreneurship on SME digitalization and management. *Small Enterprise Research*, 28(3), 269-292.
25. Grant, M., & Startz, M. (2022). *Cutting out the middleman: The structure of chains of intermediation* (No. w30109). National Bureau of Economic Research.
26. Jagun, O. (2022). SME Sustainability Goals and Development. *Management and Leadership for a Sustainable Africa, Volume 2: Roles, Responsibilities, and Prospects*, 116.
27. Johrii, S. (2024). How Does the Proliferation of E-Commerce Influence Consumer Expenditure Patterns, And What Factors Contribute to The Effectiveness of E-Commerce Strategies in Stimulating Consumer Spending in The Digital Age. *EPH-International Journal of Business & Management Science*, 10(1), 1-9.
28. Kadaba, D. M. K., Aithal, P. S., & KRS, S. (2023). Government initiatives and digital innovation for Atma Nirbhar MSMEs/SMEs: To achieve sustainable and inclusive economic growth. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 8(1), 68-82.
29. Koob, C. (2021). Determinants of content marketing effectiveness: Conceptual framework and empirical findings from a managerial perspective. *PloS one*, 16(4), e0249457.
30. Kumar, R. P., Banerjee, A., Al-Salti, Z., & Ananda, S. (2024). Technology acceptance model and customer engagement: mediating role of customer satisfaction. *Journal of Financial Services Marketing*, 29(3), 1062-1076.
31. Kundu, S. (2021). *Digital Marketing Trends and Prospects: Develop an effective Digital Marketing strategy with SEO, SEM, PPC, Digital Display Ads & Email Marketing techniques. (English Edition)*. BPB Publications.
32. Larsen, I. B. (2022). Fostering an entrepreneurial mindset: A typology for aligning instructional strategies with three dominant entrepreneurial mindset

- conceptualizations. *Industry and Higher Education*, 36(3), 236-251.
33. Łasak, P. (2022). The role of financial technology and entrepreneurial finance practices in funding small and medium-sized enterprises. *Journal of Entrepreneurship, Management and Innovation*, 18(1), 7-34.
 34. Łasak, P. (2022). The role of financial technology and entrepreneurial finance practices in funding small and medium-sized enterprises. *Journal of Entrepreneurship, Management and Innovation*, 18(1), 7-34.
 35. Leão, P., & da Silva, M. M. (2021). Impacts of digital transformation on firms' competitive advantages: A systematic literature review. *Strategic Change*, 30(5), 421-441.
 36. Li, G., & Zhang, H. (2024). The Efficiency and Challenges of E-Commerce Logistics in Enhancing Market Access for Agricultural Products in Rural China. *Law and Economy*, 3(2), 31-43.
 37. Li, N., & Abdullah, M. Y. (2024). Innovation and Risk-Taking in Small and Medium Enterprises (SMEs): How Cultural and Environmental Factors Influence Business Growth in China. *Uniglobal Journal of Social Sciences and Humanities*, 3(2), 376-386.
 38. Lijoka, O. (2022). Significant effect of fintech on the growth of SMEs in Rivers State Nigeria.
 39. Madavarapu, J. (2023). *Electronic Data Interchange Analysts Strategies to Improve Information Security While Using EDI in Healthcare Organizations*. University of the Cumberlands.
 40. Maier, C., Thatcher, J. B., Grover, V., & Dwivedi, Y. K. (2023). Cross-sectional research: A critical perspective, use cases, and recommendations for IS research. *International Journal of Information Management*, 70, 102625.
 41. Mohammed, A. (2022, March 25). Emerging trends of business transformation. Paper presented at the One-Day Hybrid International Conference on Digital Transformation of Business, Manel Srinivas Nayak Institute of Management (MSNIM) in association with Limkokwing University Malaysia.
 42. Mohammed, A. (2024, March 5–7). Automation, innovation, and resilience: Securing sustainable livelihoods through evolving employment dynamics in agriculture. Paper presented at the *International Conference on Responsible Production and Consumption (ICRPC): Agricultural Sustainability and Food Security*, School of Management Studies, University of Hyderabad (UoH), Hyderabad, India.
 43. Mohammed, A. (2024, May 17). Comprehensive strategic thinking and entrepreneurship. Paper presented at the *International Conference on Strategic Planning Towards Creativity, Innovation, and Sustainability for Business Development*, St. Peter's College of Engineering & Technology, Avadi, Chennai, India.
 44. Mohammed, A., & Sundararajan, S. (2022). An agile performance management system for achieving sustainable Industry 4.0: Conceptual study. In *Proceedings of the One-Day Hybrid International Conference on Sustainability in Industry 4.0* (pp. 43–51). MSNIM Mangaluru & Limkokwing University Malaysia. ISBN: 978-93-5813-722-4.
 45. Mohammed, A., & Sundararajan, S. (2024). The impact of influencer marketing on consumer trust and purchase decisions: A cross-platform analysis. *RVIM International Journal of Management Research*, 16(2), 6-20.
 46. Mohammed, A., Amina, I., Mahe, A., & Ahmad, B. N. (2024). Aligning core competencies with strategic objectives: A critical factor for global entrepreneurial expansion. In *Proceedings of the National Conference on Paradigm Shift in Business Management: Emerging Trends and Competitive Strategies* (pp. 148–164). Department of Business Administration (PG). ISBN: 978-81-971227-6-7.
 47. Muhammed, A., Sundararajan, S., & Lawal, T. (2022). The effect of training on the performance of small and medium-sized enterprises (SMEs) in Kano Metropolis. *Seybold Report*, 17(6), 45-62.
 48. Nguimkeu, P., & Okou, C. (2021). Leveraging digital technologies to boost productivity in the informal sector in Sub-Saharan Africa. *Review of Policy Research*, 38(6), 707-731.
 49. Okafor, C. A., & Chia, I. I. (2024). Digital Strategies and Operational Efficiency of Small Businesses in North Central Nigeria. *INTERNATIONAL JOURNAL OF CAPACITY BUILDING IN EDUCATION AND MANAGEMENT*, 6(3), 17-34.
 50. Oladimeji, R., & Owode, Y. (2024). Navigating the digital frontier: empowering SMBs with transformational strategies for operational efficiency, enhanced customer engagement, and competitive edge. *Journal of Scientific and Engineering Research*, 11(5), 86-99.
 51. Owoseni, T. A., & Ahwireng-Obeng, F. (2024). Institutional Constraints Affecting Small Businesses in South Africa. *British Journal of Multidisciplinary and Advanced Studies*, 5(2), 26-44.
 52. Oywaya, C. N. (2023). *The influence of social media marketing on the performance of online based small and medium enterprise in Nairobi County, Kenya* (Doctoral dissertation, University of Nairobi).
 53. Parra, D. T., Talero-Sarmiento, L. H., Ortiz, J. D., & Guerrero, C. D. (2021, June). Technology readiness for IoT adoption in Colombian SMEs. In *2021 16th Iberian Conference on Information Systems and Technologies (CISTI)* (pp. 1-6). IEEE.
 54. Phet, S. (2022). Law Concept in ASEAN Economic Community–A Study of e-Commerce Legal Modernization.
 55. Premathilaka, S. C. (2025). Impact of Digital Payment Systems on Credit Access for Business Clans in SME Sector in Sri Lanka. *Sri Lanka Journal of Marketing*, 10(2).
 56. Pulka, B. M., & Gawuna, M. S. (2022). Contributions of SMEs to employment, gross domestic product, economic

- growth and development. *Jalingo Journal of Social and Management Sciences*, 4(1), 1-18.
57. Rahman, S. S., & Dekkati, S. (2022). Revolutionizing Commerce: The Dynamics and Future of E-Commerce Web Applications. *Asian Journal of Applied Science and Engineering*, 11(1), 65-73.
 58. Rogers, E. M. (2003). *Diffusion of innovations*. Simon and Schuster.
 59. Rosário, A. T. (2023). Security in digital marketing: Challenges and opportunities. *Confronting Security and Privacy Challenges in Digital Marketing*, 206-233.
 60. Rupeika-Apoga, R., & Petrovska, K. (2022). Barriers to sustainable digital transformation in micro-, small-, and medium-sized enterprises. *Sustainability*, 14(20), 13558.
 61. Rupeika-Apoga, R., Bule, L., & Petrovska, K. (2022). Digital transformation of small and medium enterprises: Aspects of public support. *Journal of Risk and Financial Management*, 15(2), 45.
 62. Sekliuckiene, J., & Rybakovas, E. (2023). The quest for regionalization of global value chains in a pandemic global business environment. *Inžinerinė ekonomika*, 34(2), 230-239.
 63. Son, J., & Niehm, L. S. (2021). Using social media to navigate changing rural markets: The case of small community retail and service businesses. *Journal of Small Business & Entrepreneurship*, 33(6), 619-637.
 64. **Sundararajan, S., & Mohammed, A. (2024).** A comparative study on gender equality and women empowerment in India vs. Nigeria. *Scholarly Research Journal for Interdisciplinary Studies*, 42(67). ISSN: 2278-8808.
 65. Sundararajan, S., & Mohammed, A. (2024). Disruptive dynamics and transformational opportunities: An in-depth exploration of e-commerce and online marketplaces. *ISAR Journal of Economics and Business Management*, 2(1), 1–4. ISAR Publisher. ISSN (Online): 2584-0169.
 66. Sundararajan, S., Mohammed, A., & Senthil Kumar, S. (2023). A perceptual study on the impact of agile performance management system in information technology companies. *Scandinavian Journal of Information Systems*, 35(1), 3–38. <https://doi.org/10.5281/SJIS.77516>
 67. **Sundararajan, S., Mohammed, A., & Senthil Kumar, S. (2024).** A study on HR strategies for managing talents in a global perspective. *ISRG Journal of Economics, Business & Management (ISRGJEBM)*, 2(1), 15–21. <https://zenodo.org/records/10547775>
 68. Thathsarani, U. S., & Jianguo, W. (2022). Do digital finance and the technology acceptance model strengthen financial inclusion and SME performance? *Information*, 13(8), 390.
 69. Thomassen, E. M., & Haner, H. (2024). *Overcoming Financial Barriers for Sustainable Development: A Focus on Tanzanian SMEs* (Master's thesis, Handelshøyskolen BI).
 70. Tofan, M., & Bostan, I. (2022). Some implications of the development of E-commerce on EU tax regulations. *Laws*, 11(1), 13.
 71. Tom Alexander, B., & Jasper Andreas, V. D. D. (2022). E-Commerce in Nigeria: A qualitative study on challenges in the Nigerian E-Commerce landscape and solution approaches.
 72. Tomilawo, G. S. (2024). *Information Technology Strategies to Sustain Customer Satisfaction During Disaster-Related Disruptions* (Doctoral dissertation, Walden University).
 73. Van Wyk, D. (2024). *Exploring the perceived impact of using online and traditional marketing channels by marketing agencies for SMEs in South Africa* (Doctoral dissertation, North-West University (South Africa)).
 74. Yacob, P., & Peter, D. (2022). Perceived benefits of sustainable digital technologies adoption in manufacturing SMEs. *International Journal of Innovation and Technology Management*, 19(04), 2250012.