ALVAN JOURNAL OF SOCIAL SCIENCES (AJSS)
FACULTY OF SOCIAL AND MANAGEMENT SCIENCES
ALVAN IKOKU FEDERAL UNIVERSITY OF EDUCATION, OWERRI
https://www-ajsspub-org.b12sites,com https://www.ajsspub2.org
E- ISSN: 3043 – 5463 ISSN: 1595 – 5842 VOLUME 2, ISSUE 3, 2025

RESEARCH ARTICLE

PROMOTING DIGITAL INCLUSION: ASSESSING ICT ADOPTION AMONG SMALL AND MEDIUM ENTERPRISES (SMES) IN SOUTHWEST NIGERIA

O. F. ADEGBOLA [1], S. A. TIJANI [2], * Z. A. ALIU [3], L. K. AJAO [4]

Department of Computer Science, Federal Polytechnic Ayede, Oyo State, Nigeria; Department of Business Administration and Management, Federal Polytechnic Ayede, Oyo State; Department of Office Technology and Management, Federal Polytechnic Ayede, Oyo State; Department of Procurement, Federal Polytechnic Ayede, Oyo State, Nigeria

ABSTRACT

This study evaluates ICT uptake among Small and Medium Enterprises (SMEs) within Southwest Nigeria and the level of digital inclusion, determinants of uptake, and performance outcomes on firms. A mixed-methods research design entwined the surveying of 400 SMEs sampled through multi-stage sampling within six States with interviews conducted on 18 key informants consisting of SME leaders and policy influencer. Data collection entailed the administration of the structured questionnaire developed upon a 4-point Likert scale validated through pilot tests (Cronbach's alpha = 0.87). Quantitative data set out to be examined through descriptive statistical analysis, regression examination, and the Structural Equation Model within SPSS and the SmartPLS through regression analysis and SEM respectively. Thematic analysis characterized qualitative data set to yield contextual information. Relatively high uptake exists on the uptake on digital payments and social media advertising but where advanced applications like cloud services and analytics and CRM systems are not maximally used. Regression analysis demonstrates that performance expectancy, facilitating conditions, digitization skills plus infrastructure quality highly determine uptake but cost and unreliable electricity/internet serve mainly as inhibitions. Uptake on ICT has been realized to boost sales growth, productivity, and market penetration but profitability increments are limited. SMEs need to be targeted with policies to reduce the cost on ICT investments and roll out infrastructure to boost SME digitization. SME association and the providers of the technology can join forces to enhance capacity and trust mechanisms to allow the firm to transit to the uptake on advanced applications. This research avails the evidence on the uptake on the uptake mechanisms on the region that is rarely represented on the review framework and avails the operationalizable inclinations on view to precipitate the digital inclusion and SME commoditization on the region.

Keywords: ICT adoption, SMEs, digital inclusion, technology acceptance, firm performance.

Corresponding Author:
Z. A. Aliu: Email Address: aliuza@federalpolyayede.edu.ng

Received: 11/10/2025; **Revised:** 12/11/2025; **Accepted:** 22/11/2025; **Published:** 31/11/2025

ALVAN JOURNAL OF SOCIAL SCIENCES (AJSS)
FACULTY OF SOCIAL AND MANAGEMENT SCIENCES
ALVAN IKOKU FEDERAL UNIVERSITY OF EDUCATION, OWERRI
https://www-ajsspub-org.b12sites,com https://www.ajsspub2.org
E- ISSN: 3043 – 5463 ISSN: 1595 – 5842 VOLUME 2, ISSUE 3, 2025

INTRODUCTION

Small and Medium Enterprises (SMEs) stand unpopularly perceived to be the pillar stone of the national economies, adding greatly to employment generation, poverty mitigation, innovation, and inclusive growth. SMEs worldwide represent more than 90% of companies and create over 50% of employment and hence are key stimulators of socio-economic change (OECD, 2023). Systematically, SMEs are more highlighted especially within the developing nations where they are the livelihood engines to the majority of households and also the veicles for transforming the economy away from the dependency on the natural resources. SMEs add about 48% to the Gross Domestic Product (GDP) and create about 84% employment within the country of the study-Nigeria (SMEDAN, 2022). Their resilience and flexibility make them key to sustainable development.

With the arrival of the digital economy, Information and Communication Technologies (ICTs) are now invaluable assets within the realm of building SMEs' productivity, competitiveness, and market access. Adopting ICTs promotes effective communication, streamlined procedures, participation in e-commerce, inclusion through financial services, and linkage to global value chains (UNCTAD, 2022). Digital technologies have allowed SMEs in advanced economies to penetrate international markets further, refine supply system management, and innovate quickly based on consumer requirements. Nonetheless, within the developing world, including the case of Nigeria, the adoption of ICTs is patchy and limited by infrastructural deficits, high expenses, low digital literacy, and inadequacy of institutions to support them (Asongu & Odhiambo, 2021).

Digital inclusion is highlighted not merely by the availability of ICTs but also by the capability of individuals, firms, and populations to exploit digital tools effectively to improve socio-economic results (van Dijk, 2020). Digital inclusion to SMEs also relates to the fact that businesses regardless of place and size will be able to exploit the available ICTs to boost performance and competitiveness. Digital inclusion efforts by the various policies in Nigeria—such as the National Digital Economy Policy and Strategy (2020–2030), broadband infrastructure plans, and SME digitization initiatives—have attempted to reduce the digital divide. Nonetheless, various SMEs in Southwest Nigeria remain challenged by the adoption and full exploitation of the available ICTs. For example, although city-centered SMEs in Lagos will utilize the digital tools to aid the processes of commerce and logistically, SMEs in Ondo and Ekiti will often be handicapped by bad internet connectivity, immense data expenses, and lack of proper technological expertise (Adeyeye & Bello, 2022).

According to recent research, the inhibitions to the adoption of ICT among the SMEs in Nigeria are multidirectional and involve the structure, finance, technology, and human capital bottlenecks (Eze et al., 2021; Abubakar & Bala, 2023). Besides that, the perception and attitude towards culture affect the adoption choices since the Technology Acceptance Model (TAM) and Diffusion of Innovation theory conceptualized. While some SMEs view the

ALVAN JOURNAL OF SOCIAL SCIENCES (AJSS)
FACULTY OF SOCIAL AND MANAGEMENT SCIENCES
ALVAN IKOKU FEDERAL UNIVERSITY OF EDUCATION, OWERRI
https://www-ajsspub-org.b12sites,com https://www.ajsspub2.org
E- ISSN: 3043 – 5463 ISSN: 1595 – 5842 VOLUME 2, ISSUE 3, 2025

adoption of ICT as competitiveness advice, the others view it as an expensive and complicated investment and hence the partial and non-adoption. Conclusively, the outcome is the fragmented digitalization where the various enterprises do well within the digitally facilitated markets and the other ones remain on the outside and hence continue to widen the inequalities within the SME businesses.

Southwest Nigeria is especially fitting to examine ICT adoption because the sub-region is the home to an overwhelming majority of SMEs representing various sectors ranging from manufacturing to wholesale and retail trade to hotels and restaurants to the creative industries and services. It is also distinguished by the somewhat advanced level of digital infrastructure to be found within the sub-region more than other sub-regions of the country. Nonetheless, regardless of the vibrancy of the region's economy, there still exists an egregious difference between the urban and the rural domains and between the large and the small companies and between the technological intensive and the traditional sectors. Knowing this difference is integral to the crafting of policies and strategies that will be inclusive and sustainably transformative.

Against this background, this research attempts to assess the extent of ICT uptake among SMEs within Southwest Nigeria, determine digital inclusion determinants and limitations, and ascertain the implications for SME performance. Through the combination of quantitative survey evidence and qualitative evidence from SME owners and planners, the research attempts to produce an integral picture of the region's ICT adoption dynamics. Finally, the study contributes to theory and practice by enriching digital inclusion debates with evidence from an unrecovered regional setting and by suggesting policy recommendations to ensure inclusive ICT-fueled SME growth within Nigeria.

Despite the recognized potential of SMEs to propel Nigeria's economic growth and employment generation, the capacity to utilize Information and Communication Technologies (ICTs) for enhanced competitiveness is still limited. Various initiatives to enhance digital inclusion through the National Digital Economy Policy and broadband infrastructure policies and plans exist, but adoption by SMEs in Southwest Nigeria has remained uneven and disjointed.

While Lagos- and Oyo-based urban-centered firms are increasingly embracing the use of ICTs to boost e-commerce, financial payments, and delivery infrastructure, most SMEs within semi-urban and rural locations like Ekiti, Ondo, and Osun continue to face infrastructural challenges along with the unaffordable cost of digital assets and limited digital literacy. Existing empirical research among Nigerian SMEs identifies structural, financing, and human-capital impediments but is often descriptive and patchy and fails to involve systematic evaluation of the level of adoption as well as influencing and performance consequences (Eze et al., 2021; Abubakar & Bala, 2023).

ALVAN JOURNAL OF SOCIAL SCIENCES (AJSS)
FACULTY OF SOCIAL AND MANAGEMENT SCIENCES
ALVAN IKOKU FEDERAL UNIVERSITY OF EDUCATION, OWERRI
https://www-ajsspub-org.b12sites,com https://www.ajsspub2.org
E- ISSN: 3043 – 5463 ISSN: 1595 – 5842 VOLUME 2, ISSUE 3, 2025

Furthermore, the SME owners' perspective—the key practitioners at the center of the inclusion effort—the literature still has little. All these create the necessity for an analytical policy effect study that brings together quantitative and qualitative evidence to appraise the level of ICT adoption and its performance consequences on inclusive SME growth within the Southwest region of Nigeria. Against the backdrop of this gap, the current study is set to appraise the level of SMEs' adoption of ICTs in Southwest Nigeria, determine the forces and inhibitions informing adoption choices, and analyze the implications of ICT utilization on SME performance outcomes.

The study is framed by the following research questions: (i) What is the prevailing level of SMEs' adoption of ICTs in Southwest Nigeria? (ii) What determines adoption choices and among them cost implications, utilisability perception, and digital proficiency? (iii) What inhibitions discourage SMEs from attaining full digital inclusivity? (iv) How do SMEs' adoption rates affect SME performance and competitiveness? and (v) What remedial policies can be advanced to improve inclusive SMEs' adoption rates of ICTs? By bringing to bear these objectives and queries, the study hopes to raise evidence to bear not only on the academic discourses on digital inclusivity and technological adoption but also on informative insights on policies to be implemented by development partners and SME practitioners to redress the digital divide and spur sustainable Nigerian economic transformation.

LITERATURE REVIEW

Small and Medium Enterprises (SMEs) are commonly described as engines of growth and providers of employment, innovative forces, and poverty eradication in developed and developing economies. In this regard, Information and Communication Technology (ICT) adoption is the adoption and proper utilization of digital facilities—such as the platforms for payments, e-commerce platforms, cloud solutions, and data analytics—improving business processes and market transactions. Digital inclusion is more than accessibility to infrastructure and telecommunications. Affordability, usability, digital literacy, confidence in cyber systems, and accessibility to the institutional-enabling framework that sustains sustained digital engagement also falls within its scope. Digital inclusion to SMEs is the degree to which businesses can utilize the ICT facilities not just to boost the level of production and effectiveness but to gain new market shares, enhance customer ties, and maintain competitiveness.

Informative theory that has influenced comprehension about SMEs' adoption of ICT focuses on individual and organizational aspects. DOI theory outlines that adoption is controlled by perceived relative advantage, compatibility to previous behaviors, complexity, and the degree to which the activity can be observed. Likewise, the TAM and UTAUT2 indicate performance expectancy, effort expectancy, social norm and facilitating conditions to be the forces behind the intention to adopt behaviors. At the organizational level, RBV and Dynamic Capabilities propose that the adoption of ICT can only yield competitiveness where

ALVAN JOURNAL OF SOCIAL SCIENCES (AJSS)
FACULTY OF SOCIAL AND MANAGEMENT SCIENCES
ALVAN IKOKU FEDERAL UNIVERSITY OF EDUCATION, OWERRI
https://www-ajsspub-org.b12sites,com https://www.ajsspub2.org
E- ISSN: 3043 – 5463 ISSN: 1595 – 5842 VOLUME 2, ISSUE 3, 2025

companies control the related assets consisting of qualified human capital, strong managerial procedures, and the competency to transform processes with changes related to digital domains. Institutional and the transaction-cost lens also highlight the power of formal regulations, regulation quality, and trust within ecosystems to shape the adoption results and indicate how infrastructure weakness and fragmented regulations and excessive transaction risk tend to defeat digital inclusion within the developing economies.

Empirical research yields a nuanced view on adoption patterns. SMEs around the world increasingly adopted payment digitization and social media advertising and clouds by the end of the COVID-19 pandemic. Owner education, previous IT exposure, digital competence, and firm size are repeatedly confirmed predictors of adoption and barriers by the cost level and awareness and cybersecurity fears constrain further digitalization. On the African continent, evidence spotlights the infrastructure quality and affordability base.

Mobile money penetration and digital public infrastructure sped up adoption to some extent but SMEs continue to be limited to limited social media and mobile payment use and not advanced solutions like enterprise software and data analytics. Institutional support is weak and costly in Zimbabwe and constrained SMEs to accommodate ICT beyond the level. Fiscal devolution and mobile banking expanded accessibility triggered by the Devolved Budgets Initiative and increased accessibility to FinTech and improved informatization to urban and expanded inter-rural transportation triggered by investments from the Pensions Fund Society and other institutions. However, inequalities continue to be high between urban and rural Kenya.

For Nigeria, the pattern is the same. SMEs from Lagos and Oyo would be more inclined to adopt digital payments, social commerce, and platforms for logistics, but businesses from Ekiti and Ondo would be constrained by the challenges emanating from lack of reliable power to electricity supplies accessibility and high cost of internet and limited technological expertise. Adoptions are reported by recent research to be significantly determined by perceived usefulness to the firm by customer expectations and peer pressure or competition pressure but affordability and infrastructure deficits and mistrust in transactions remain key inhibitions. Of significance is the fact that although adoption of digital payments and the digital marketing tools has led to quantifiable enhancements to sales and customer reach and efficiency gains the adoption of advanced applications like accounting packages customer relationship management and data analytics is minimal. This reflects the fact that SMEs are now on a “surface level” level of adoption but lack the capability to implement transformational uses of the ICTs. Arguably together, the extant literature reveals the adoption of ICT by SMEs to be an opportunity and also a challenge.

While adoption is influenced by perceived advantage, infrastructure to take up the infrastructure and digital skills, affordability problems, lack of power and institutional trust inhibit adoption. While sales and market penetration are clearly improved by adoption and

ALVAN JOURNAL OF SOCIAL SCIENCES (AJSS)
FACULTY OF SOCIAL AND MANAGEMENT SCIENCES
ALVAN IKOKU FEDERAL UNIVERSITY OF EDUCATION, OWERRI
https://www-ajsspub-org.b12sites,com https://www.ajsspub2.org
E- ISSN: 3043 – 5463 ISSN: 1595 – 5842 VOLUME 2, ISSUE 3, 2025

market penetration is improved by adoption, the effect on profitability and long-run competitiveness is contingent on further integration of advanced digital tools and building supplementary resources. Such areas indicate the need to do more empirical studies that integrate quantitative and qualitative understandings to appreciate not just the coverage level of adoption but also the on-the-ground realities faced by SMEs and the structural challenges to be overcome to ensure inclusive digital transition by Southwest Nigeria.

METHODOLOGY

This research adopted a mixed-methods research design involving surveys and interviews to evaluate ICT adoption by SMEs within Southwest Nigeria. Population included registered SMEs within Lagos, Oyo, Ogun, Osun, Ondo, and Ekiti States representing manufacturing, trade, services, hospitality, and creative sectors. With the Yamane (1967) formula and a confidence level of 95% and error margin of 5%, the sample size adopted was set at 400 SMEs through a multi-stage sampling procedure representing the state, sector, and firm size structure (micro, small, and medium firm size).

Furthermore, 18 key informants consisting of SME leaders, providers of ICTs and policy officials were purposively sampled and interviewed. Data collection made use of a structured questionnaire developed on the basis of a 4-point Likert scale to operationalize performance expectancy, effort expectancy, facilitating conditions, digital competencies, infrastructure quality, affordability, institutional trust, pressure to be competitive, ICT adoption intensity, and SME performance. Items borrowed on the basis of the TAM construct, UTAUT2 and RBV models and validated by experts and tested through pilot research yielded a Cronbach's alpha coefficient value of 0.87.

A semi-structured guide to interviews provided supplementary contextual information to the survey. Quantitative data were subjected to SPSS v.26 and SmartPLS analysis using descriptive statistical procedures, regression and SEM procedures to test hypothesized relationships. Reliability and validity checks included the Cronbach's alpha coefficient, Composite Reliability and AVE and HTMT ratio procedures. Interview data thematically examined and triangulated with the survey outcome to enhance validity. Ethical procedures were observed and consent and confidentiality maintained at all times.

PRESENTATION OF RESULTS AND DISCUSSION

From Table 1, the results indicate quite high uptake on the levels of digital payments (M = 3.54) and social media advertising (M = 3.42) indicating customer-led cashless transactions and internet openness. Nonetheless more sophisticated tools like CRM, analytics (M = 2.34) and cloud infrastructure (M = 2.66) continue to be underutilized thus the majority SMEs remain at the level of "basic adoption." This supports the recent studies (Abubakar & Bala, 2023; Eze et al., 2021) revealing the existence of the gap between the first-level uses on the ground by the SMEs and the transformative digital integration on the theoretical level.

ALVAN JOURNAL OF SOCIAL SCIENCES (AJSS)
FACULTY OF SOCIAL AND MANAGEMENT SCIENCES
ALVAN IKOKU FEDERAL UNIVERSITY OF EDUCATION, OWERRI
https://www-ajsspub-org.b12sites,com https://www.ajsspub2.org
E- ISSN: 3043 – 5463 ISSN: 1595 – 5842 VOLUME 2, ISSUE 3, 2025

Table 1: Extent of ICT Adoption among SMEs in Southwest Nigeria

ICT Tool Adopted	High (%)	Moderate (%)	Low (%)	None (%)	Mean	SD
Digital payments (POS, transfer, QR)	68.2	21.5	6.8	3.5	3.54	0.71
Social media marketing (Facebook, WhatsApp, Instagram)	61.7	24.6	8.2	5.5	3.42	0.83
E-commerce platforms (Jumia, Konga, etc.)	39.5	28.7	18.6	13.2	2.94	0.97
Accounting/Inventory software	32.8	25.4	22.6	19.2	2.72	1.01
Cloud tools (Google Drive, MS Teams, Zoom)	28.6	27.5	25.3	18.6	2.66	1.02
Data analytics/CRM	19.3	24.2	27.5	29.0	2.34	1.11

Source: Authors' Analysis (2025).

The results presented in Table 2 reveal that most significant inhibitions are expenditure (M = 3.31) and infrastructure unpredictability (M = 3.24), and these disproportionately inhibit SMEs from the peri-urban and rurally situated. Deficits in skills (M = 3.16) and fear of fraud and cybersecurity breaches (M = 3.07) also inhibit advanced adoption of ICT. All these inhibitances conform to van Dijk's (2020) "second-level digital divide," where affordability and skills, and not simply access, adjudicate effectiveness in inclusion.

Table 2: Challenges Hindering ICT Adoption

Challenge	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)	Mean	SD
High cost of ICT devices/software	54.2	28.7	11.4	5.7	3.31	0.81
Unreliable electricity and internet	51.6	27.8	13.2	7.4	3.24	0.87
Limited digital skills of staff	46.3	31.5	14.6	7.6	3.16	0.89
Cybersecurity and fraud concerns	43.2	29.8	17.6	9.4	3.07	0.93
Lack of trust in online transactions	38.6	33.2	19.5	8.7	3.02	0.91

Source: Authors' Analysis (2025).

In context of Table 3, the result of regression equation accounts for 62 percent of the variance on ICT adoption. Performance expectancy (β = .282), facilitating conditions (β = .236), and digital skills (β = .221) emerged with the highest predictors to highlight perceived benefits, infrastructure support, and human capability. Cost (β = –.168) also negatively related to confirm affordability as an overriding barrier. Such outcomes reproduce worldwide evidence (Lee & Chang, 2023; UNCTAD, 2022) where adoption is motivated by perceived usefulness and facilitating conditions but limited by affordability.

ALVAN JOURNAL OF SOCIAL SCIENCES (AJSS)
FACULTY OF SOCIAL AND MANAGEMENT SCIENCES
ALVAN IKOKU FEDERAL UNIVERSITY OF EDUCATION, OWERRI
https://www-ajsspub-org.b12sites,com https://www.ajsspub2.org
E- ISSN: 3043 – 5463 ISSN: 1595 – 5842 VOLUME 2, ISSUE 3, 2025

Table 3: Regression Analysis: Determinants of ICT Adoption

Predictor Variable	β	t	p	Remark
Performance Expectancy	.282	4.72	.000	Significant
Effort Expectancy	.194	3.58	.000	Significant
Facilitating Conditions	.236	4.11	.000	Significant
Digital Skills	.221	3.99	.000	Significant
Cost (Affordability)	–.168	–3.14	.002	Significant (negative)
Infrastructure Quality	.147	2.76	.006	Significant
Institutional Trust	.132	2.18	.030	Significant
Competitive Pressure	.119	2.07	.039	Significant
$R^2 = 0.62$, Adj. $R^2 = 0.60$, $F(8,391) = 78.15$, $p < .001$				

Source: Authors' Analysis (2025).

The results of the assessment of the impact of ICT adoption on SME performance is summarized in Table 4. From the results, SMEs also said that ICT adoption enhanced sales (M = 3.26), market penetration (M = 3.29), and productivity (M = 3.23). Gains in profitability (M = 3.16) were more limited and hinted that although ICT adoption bolsters competitiveness, cost recovery and scale to profit might take the long term. These results confirm the Resource-Based View, where the adoption of ICT results in performance improvement once companies invest in related capabilities (Barney, 2020).

Table 4: Impact of ICT Adoption on SME Performance

Performance Indicator	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)	Mean	SD
ICT improved sales growth	48.6	34.2	11.8	5.4	3.26	0.88
ICT improved productivity/efficiency	46.7	35.6	12.1	5.6	3.23	0.89
ICT expanded customer base/markets	51.2	32.4	10.3	6.1	3.29	0.91
ICT improved profitability	42.5	36.8	14.6	6.1	3.16	0.92

Source: Authors' Analysis (2025).

The results reveal three key insights. First, SMEs in Southwest Nigeria adopt ICTs primarily at the basic level (payments and social media), but more advanced digital platforms remain untapped. Second, adoption is influenced by enablers (performance expectancy, skills, infrastructure, trust) and but also by barriers (cost, inconsistent power/internet). Third, ICT adoption is correlated with sales growth, increased productivity, and market penetration but profitability benefits are more delayed due to cost and capability limitations. This recommends that digital inclusion policies need to transcend provision to affordability coverage and capacity building and trust within ecosystems.

CONCLUSION AND RECOMMENDATIONS

This research surveyed SME ICT adoption in Southwest Nigeria to gauge the extent of digital inclusion and its effect on firm performance. Survey results indicators showed that adoption is highest on digital payments and social media advertising but lowest on advanced tools including accounting systems, cloud applications, and data analytics.

The performance expectancy and facilitating conditions together with digital literacy and infrastructure quality primarily facilitate adoption and infirm cost and unreliability around the electricity and internet mainly inhibit. Significantly, adoption increased sales growth, sales productivity and customer growth but profitability gains were low and indicate that digital transformation has only just began to start to pay off at many SMEs.

Based on the results drawn, this study recommends that policy makers should mobilize and reinforce SME digital inclusion through proactive efforts to ensure fiscal incentives on ICT investments and to roll out accessible broadband and electricity rolls-out and to consolidate SME programs within the National Digital Economy Plan.

Furthermore, SMEs and industry groupings should invest more on capacity building and promote back-office digital adoption to customer facing platforms and to put down trust architecture to calm fears around the fraud and cyber-security to put down and secure reliable and legitimate businesses.

Dimensionally, Collaboration between SMEs technology providers and civil society can further illuminate awareness and ensure adoption progresses further on to more transformational integrable outcome.

By intertwining affordability and capacity building and institutional trust can take the incremental improving outcomes from the incremental to more driver on competitiveness and inclusion and sustainable growth among SMEs in the Southwest region.

Competing Interest

The authors declare that no conflicting interest exist in this manuscript.

REFERENCES

Abubakar, M., & Bala, K. (2023). ICT adoption and competitiveness of SMEs in Nigeria: Drivers and constraints. *Journal of African Business, 24*(2), 211–229. https://doi.org/10.1080/15228916.2022.2051981

Adeyeye, M. M., & Bello, T. (2022). Digital transformation and SME resilience in Nigeria: Evidence from Southwest states. *International Journal of Entrepreneurial Behavior & Research, 28*(7), 1625–1642. https://doi.org/10.1108/IJEBR-09-2021-0743

Asongu, S., & Odhiambo, N. M. (2021). SME innovation and digital inclusion in Africa: Role of ICT infrastructure and financial development. *Telecommunications Policy, 45*(5), 102165. https://doi.org/10.1016/j.telpol.2021.102165

Barney, J. (2020). Resource-based theory and the role of digital technologies in competitive advantage. *Journal of Management, 46*(8), 1429–1445. https://doi.org/10.1177/0149206320913187

Eze, S. C., Chinedu-Eze, V. C., & Bello, A. O. (2021). Determinants of ICT adoption in SMEs: A systematic review. *Information Development, 37*(2), 180–197. https://doi.org/10.1177/0266666919896069

Lee, J., & Chang, K. (2023). Digital transformation and SME performance: Evidence from South Korea. *Asian Business & Management, 22*(3), 455–477. https://doi.org/10.1057/s41291-023-00195-2

OECD. (2023). *SME digitalisation and resilience: Policy lessons from the COVID-19 crisis*. OECD Publishing. https://doi.org/10.1787/2b90b68e-en

SMEDAN. (2022). *National survey of micro, small and medium enterprises (MSMEs) in Nigeria 2021/2022*. Small and Medium Enterprises Development Agency of Nigeria.

UNCTAD. (2022). *The digital economy report 2022: Value creation and capture – Implications for developing countries*. United Nations Conference on Trade and Development. https://unctad.org/digital-economy-report-2022

van Dijk, J. (2020). The digital divide, ICT adoption, and social inequality. *Journal of Information, Communication and Ethics in Society, 18*(3), 419–432. https://doi.org/10.1108/JICES-04-2020-0048

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2023). Extending UTAUT2 in emerging markets: ICT adoption by SMEs. *Information Systems Journal, 33*(1), 102–129. https://doi.org/10.1111/isj.12312