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## THE IMPACT OF ICT PLATFORMS ON SURVIVAL OF MEDIUM-SCALED ENTERPRISES IN BAUCHI METROPOLIS

**Agatha Samson**

Department of Arts and Social Sciences Education  
Faculty of Education  
National Open University of Nigeria (NOUN)  
Abuja Headquarters, Nigeria

**Isah Yakubu Jibrin**

Department of Management and Information Technology  
Faculty of Management Science,  
Abubakar Tafawa Balewa University, Bauchi, Bauchi State Nigeria

### **ABSTRACT**

*The increasing reliance on Information and Communication Technology (ICT) platforms has significantly influenced the survival and growth of medium-scaled enterprises (MSEs). This study examined the impact of access to ICT infrastructure, ICT adoption, and policies regulating ICT on firm survival among Medium-Scaled Enterprises in Bauchi Metropolis. Using a quantitative approach, data were collected from registered MSEs and analysed using Spearman Rank Order Correlation and multivariate analysis. The findings revealed strong positive correlation between access to ICT infrastructure and firm survival. ICT adoption was also found to significantly enhance business agility, operational efficiency, and market expansion. Additionally, well-structured policies regulating ICT contributed to a secure and enabling environment that fosters digital transformation and business sustainability. The study recommended increased investment in ICT infrastructure, enhanced digital literacy training for entrepreneurs, and policy frameworks that encourage innovation while ensuring data security. These measures will enable MSEs to leverage ICT platforms for long-term growth and survival in an increasingly digital economy.*

**Keywords:** *ICT Adoption, Firm Survival, Medium-Scaled Enterprises, ICT infrastructure and ICT Policies*

### **1. Introduction**

Information and communication technology (ICT) systems have evolved into indispensable tools for improving operational efficiency, market reach, and decision-making capacity in the modern corporate environment. Soman et al. (2024) claimed that ICT platforms are used for various business operations including supply chain management, customer relationship management (CRM), and enterprise resource

planning (ERP), by medium-sized businesses (MSEs), which usually employ 50 to 250 people and significantly help in economic development. World Bank (2022) research shows that companies that use digital technologies see a 20–30% gain in production; nonetheless, many MSEs find it difficult with financial and infrastructure limitations. Understanding the function of ICT platforms in company survival is vital given that about 50% of medium-sized companies fail during their first ten years (OECD, 2021).

Adoption of ICT platforms is usually connected to enhanced company resilience, which helps companies to adjust to market changes and reduce risks connected with competitiveness and economic downturns (Hokmabad et al., 2024). Data analytics, artificial intelligence, and cloud computing are revolutionizing company operations and offering real-time insights to guide strategic decisions. MSEs who use ICT platforms are twice as likely to develop worldwide and sustain faster revenue growth than non-adopters, according to a McKinsey and Company (2021) survey. While medium-sized businesses generally lack the digital infrastructure or knowledge to properly use ICT, large corporations have great resources to include ICT solutions (Otokiti et al., 2022). This raises the issue of whether, especially in competitive and technologically advanced sectors, ICT adoption appreciably improves MSE survival rates.

With few empirical studies in growing body of literature acknowledges the importance of digital transformation, few empirical studies have directly examined the impact of ICT adoption on the survival of medium-sized businesses. Most researches in this area have traditionally focused on financial strength, leadership competence, and market competitiveness as the primary determinants of firm survival. For instance, Rizk and Balint (2020), in their study of SMEs across the Middle East and North Africa, emphasized that variables such as access to finance, profitability, and competitive strategy remain the dominant focus in survival analyses, with ICT adoption largely overlooked. Similarly, Ali and Madaki (2022) observed that most existing research on ICT usage tends to concentrate on either micro-enterprises or large corporations, while medium-sized businesses remain underrepresented. Their findings highlighted a noticeable gap in empirical data linking ICT investments to long-term business continuity among medium-sized firms. This lack of focused inquiry creates a significant research gap, especially given the rising relevance of digital tools in enhancing operational resilience and market adaptability. Recent disturbances like the COVID-19 epidemic, however, made clear how important digital platforms are to corporate continuity (Hokmabad et al., 2024).

Firm survival in medium-sized enterprises constitutes a critical dependent variable in contemporary economic and developmental discourse, particularly in emerging economies where such businesses serve as engines of employment, innovation, and income generation. The importance of firm survival lies in its ability

to sustain local economies, maintain supply chains, and support national productivity over time. However, numerous challenges continue to threaten the sustainability of these enterprises. These include financial instability, inadequate access to digital infrastructure, limited capacity to adapt to market disruptions, and weak institutional support systems. The COVID-19 pandemic further exposed these vulnerabilities, where many medium-scale enterprises lacking digital resilience struggled to remain operational. This policy syndrome highlights the urgent need for digital transformation as a survival strategy. Extant literature and government interventions have recognized this, with recent studies emphasizing the value of ICT tools in enhancing business continuity. For instance, a Harvard Business Review (2022) report revealed that businesses that adopted ICT-enabled remote work and e-commerce during the pandemic exhibited a 35% higher survival rate compared to those that relied solely on traditional operations. Similarly, Brynjolfsson and McAfee (2021) stressed that digital capabilities enhance organizational agility, enabling faster responses to market disruptions. He et al. (2024) further demonstrated that SMEs with advanced ICT infrastructure recovered 40% faster post-pandemic than their digitally underdeveloped counterparts. While these studies highlight the relevance of ICT in crisis resilience, there remains a significant gap in empirical research that directly examines ICT adoption and firm survival specifically among medium-sized enterprises—especially in developing contexts such as Nigeria. Most existing research either generalizes across all MSMEs or focuses disproportionately on financial and leadership variables, leaving the role of digital capability in firm longevity underexplored. The study addresses this gap by engaging deeply with ICT as a determinant of firm survival in medium-sized enterprises, thus providing a more nuanced understanding of how digital tools contribute to organizational resilience. By doing so, the study generates actionable insights for policy stakeholders, reinforcing the need for tailored digital infrastructure investment policies, enterprise support schemes, and ICT training initiatives that can enhance the long-term viability of medium-scale businesses in volatile environments.

This paper adds to the increasing collections of research on how ICT platforms affect corporate sustainability by bridging the gap between digital transformation and firm survival literature. The results will offer insightful analysis for legislators trying to assist medium-sized businesses in their digital transformation as well as for business executives trying to maximize their digital initiatives. Furthermore, knowing the obstacles to ICT adoption will enable one to create focused interventions to improve digital resilience in MSEs, so guaranteeing their long-term survival and competitiveness in an economy going more and more digital.

The study was guided by the following objectives:

- i. To determine the relationship between access to ICT infrastructure and firm survival among Medium Enterprises in Bauchi Metropolis.

- ii. To examine the relationship between ICT adoption and firm survival among Medium Enterprises in Bauchi Metropolis.
- iii. To determine the relationship between policies regulating ICT and firm survival among Medium Enterprises in Bauchi Metropolis.

The paper also stated and tested the following null hypotheses:

- H<sub>01</sub>: There is no significant relationship between access to ICT infrastructure and firm survival among Medium Enterprises in Bauchi Metropolis.
- H<sub>02</sub>: There is no significant relationship between ICT adoption and firm survival among Medium Enterprises in Bauchi Metropolis.
- H<sub>03</sub>: There is no significant relationship between policies regulating ICT and firm survival among Medium Enterprises in Bauchi Metropolis.

## 2. Literature Reviews

### 2.1 Conceptual Issues

#### ICT Infrastructure and Firm Survival

Robust ICT infrastructure plays a pivotal role in enhancing firm survival, particularly in an increasingly digital and volatile business environment. ICT infrastructure encompasses hardware, software, networks, data storage systems, and platforms that support business operations and decision-making. Firms with well-established ICT systems can adapt more quickly to disruptions, improve process efficiency, and respond promptly to shifts in consumer demand (Brynjolfsson & McAfee, 2021). During the COVID-19 pandemic, for instance, firms that had already invested in digital tools such as cloud computing, virtual collaboration platforms, and e-commerce systems demonstrated greater operational resilience. He et al. (2024) found that SMEs with advanced ICT infrastructure recovered 40% faster than their counterparts with minimal digital integration. This highlights the importance of ICT infrastructure not just for competitiveness but as a fundamental resource for survival during crises and market shocks. In developing economies, including Nigeria, ICT infrastructure remains unevenly distributed, particularly among medium-sized enterprises.

#### ICT Adoption and Firm Survival

Adopting Information and Communication Technology (ICT) has emerged as a critical factor influencing firm survival in the modern business landscape. ICT adoption refers to the extent to which firms integrate digital technologies—such as enterprise resource planning (ERP), cloud computing, customer relationship management (CRM), and e-commerce platforms—into their operational and strategic processes. Empirical evidence shows that firms that adopt ICT are more likely to survive turbulent business cycles due to improved efficiency, cost reduction, and

market responsiveness (Adebayo & Ajayi, 2021). During economic disruptions like the COVID-19 pandemic, firms that utilized digital tools for remote operations, digital marketing, and online sales demonstrated stronger resilience and continuity than those that relied on traditional business models (Harvard Business Review, 2022). ICT adoption enables firms to access real-time data, automate business processes, and engage customers through multiple channels, all of which contribute to increased adaptability and long-term viability (Brynjolfsson & McAfee, 2021).

### **Policies Regulating ICT and Firm Survival**

Policies regulating ICT adoption significantly shape the environment in which firms operate, influencing their ability to survive, innovate, and compete in both local and global markets. Governments and regulatory bodies implement ICT-related policies to promote digital inclusion, enhance cybersecurity, improve infrastructure, and stimulate innovation. These policies often take the form of national digital strategies, ICT tax incentives, e-commerce regulations, broadband expansion programs, and public-private partnerships. In Nigeria, for instance, the National Digital Economy Policy and Strategy (2020–2030) aims to create a digital economy that supports inclusive growth and strengthens enterprise competitiveness (Federal Ministry of Communications and Digital Economy, 2020). Such policies can have a direct impact on firm survival, especially among medium-sized enterprises (MSEs), by reducing barriers to ICT adoption and enabling access to digital tools essential for productivity, market access, and resilience (Akinbami & Bello, 2022). However, inconsistent implementation, regulatory bottlenecks, and limited awareness among businesses often undermine the effectiveness of these policies.

### **Firm Survival**

Firm survival is the capacity of a company to keep running over time of obstacles such as rivalry, economic swings, technical upheavals, and changing consumer tastes (Salunkhe et al., 2023). It is an important indicator of the long-term sustainability, adaptability, and resilience of an organization. Companies that endure for long period of time often have creative business models, effective resource management plans, and strong competitive advantages (Suriyankietkaew, 2023). Both internal (such as financial stability, leadership, and technological adoption) and external (such as industry trends, government rules, and market conditions) elements affect a firm's survival.

For medium-sized businesses (MSEs), which usually have limited resources and fierce competition from bigger companies, firm survival is especially vital. To resist market uncertainty, these companies have to implement digital transformation plans, diversify their income sources, and establish close client relationships (Ndubisi et al., 2021). Improving MSE survival rates also depends critically on government

regulations, industrial networks, financial availability, and government policies (Kraus et al., 2023). The longevity and success of a company in the market ultimately depend on its capacity to change with the times, use technology, and keep a competitive advantage (Breznitz & Murphree, 2022).

### **Information Communication Technology**

Information and communication technology, or ICT, is the wide spectrum of technologies that enable information creation, storage, transmission, and exchange (Tiwari, 2022). Hardware (computers, mobile devices, networking equipment), software (applications, operating systems, cloud computing), and communication technologies (internet, mobile networks, fibre optics) together comprise ICT. The fast development of ICT has changed sectors, improved corporate operations, education, healthcare, and government (Shoraevna et al., 2021). In the present digital era, ICT is a major driver of social and economic progress as well as real-time data processing and automation help to provide seamless communication (Arinzeh, 2022).

### **Access to ICT Infrastructure**

Digital connectivity and economic development are greatly enabled by information and communication technology (ICT) infrastructure, which is therefore rather important. Broadband networks, mobile communication towers, fibre-optic cables, data centres, and cloud computing facilities (Nchake & Shuaibu, 2022) comprise ICT infrastructure. The degree to which people, companies, and governments might use ICT for development and creativity depends on the availability of these technologies. But because of differences in ICT infrastructure investment and deployment, digital gaps exist between urban and rural areas, developed and developing nations, and high- and low-income populations (Shoraevna et al., 2021).

Lack of suitable ICT infrastructure in some areas limits prospects for education, business growth, and access to basic services including e-health and e-government (Kurniawati, 2022). Digital transformation is challenging for many underdeveloped countries that suffer from unpredictable electrical supply, high ICT device expenses, and poor internet connection (Arvin et al., 2021). Through public-private partnerships (PPPs), subsidies for broadband development, and investments in developing technologies such as 5G and satellite internet, governments and private sector stakeholders significantly help to build infrastructure (Arinzeh, 2022).

### **ICT Adoption**

ICT adoption, according to Awad & Albaity (2022), is the degree to which governments, companies, and people incorporate digital technologies into their daily activities and decision-making processes. To increase efficiency and productivity, it uses computers, mobile devices, internet services, software apps, cloud computing,

artificial intelligence (AI), and automation technologies (Kurniawati, 2022). Among the several elements influencing ICT adoption are cost, digital literacy, organizational readiness, and government backing.

Particularly medium-scaled businesses enterprises (MSEs), companies use ICT to improve operations, increase customer involvement, and increase market reach (Kurniawati, 2022). For example, cloud-based solutions let companies safely save data and work remotely; digital marketing tools let them contact more people. Governments also use ICT, through e-governance platforms, digital identification systems, and online public services, to enhance service delivery. Adoption of ICT has difficulties, too, including cybersecurity concerns, opposition to change, and the great expense of digital transformation (Awad & Albaity, 2022).

Low digital literacy rates and poor ICT infrastructure impede general adoption in many developing nations. Governments and companies fund digital literacy initiatives, reasonably priced internet access, and ICT training to inspire uptake to handle this (Nchake & Shuaibu, 2022). Emerging technologies including artificial intelligence, blockchain, and the Internet of Things (IoT) are also influencing ICT adoption, therefore allowing more effective processes in sectors including healthcare, banking, and education (Arvin et al., 2021). Improving innovation, increasing economic competitiveness, and therefore expanding citizen quality of living all depend on the acceptance of ICT.

### **Policies Regulating ICT**

ICT policies and rules are implemented by governments and international organizations to guarantee fair use, cybersecurity, data protection, and fair access to digital technology (Adejuwon & Ojeagbase, 2023). These rules seek to guard consumers against online dangers, encourage ICT industry competitiveness, and advance ethical digital behaviours. Important areas of regulation are cybersecurity systems, data privacy rules, internet governance, and telecommunications legislation.

The General Data Protection Regulation (GDPR) of the European Union, which lays rigorous rules on data privacy and user permission, is among the most well-known ICT regulating laws (Bechara & Schuch, 2021). Other areas have created comparable rules, like the Data Protection and Privacy Policy systems of Africa and the Cybersecurity Information Sharing Act (CISA) of the United States. These rules assist guard people and companies against data leaks, cybercrimes, illegal access to private data, and hacking (Suppangkat et al., 2025).

Through spectrum policies, net neutrality assurance, and backing of digital inclusion initiatives, governments also control ICT. Policies supporting low-cost internet access, e-government services, and ICT investments, for instance, help drive digital transformation (Wang et al., 2024). On the other hand, too strict rules could impede IT industries' competitiveness and creativity. A balanced approach to ICT

policymaking guarantees that digital technologies remain safe, accessible, and helpful to all members of society while encouraging a competitive and innovative digital economy (Allahrakha, 2023).

### **ICT Platforms and Firm Survival in the Medium Scaled Enterprises**

Adoption of Information and Communication Technology (ICT) platforms has grown to be a critical determinant of medium-sized businesses enterprises (MSEs) (Ngwu et al., 2023) survival and expansion. These businesses must use ICT platforms to improve their resilience since they often deal with operational inefficiencies, market competitiveness, and resource restrictions (Arinzeh, 2022). Cloud computing, enterprise resource planning (ERP), e-commerce platforms, customer relationship management (CRM), and digital payment solutions—all of which enhance company operations, decision-making, and market access—all of which ICT platforms include—Wang et al., 2024). Combining these technologies will help MSEs maximize operations, lower expenses, and stay competitive in a society going more and more digital.

Improving corporate agility and adaptation is one of the main ways ICT platforms help to ensure firm existence. Medium-scaled businesses have to be fast in response to consumer expectations, changes in the market, and technology developments (Suppangkat et al., 2025). Digital channels let companies automate processes, enhance supply chain management, and simplify communication, therefore enabling more flexible and effective operations. Furthermore, supporting data analytics and artificial intelligence (AI)-driven insights, which enable MSEs to make educated strategic decisions, ICT platforms business. Businesses that ignore ICT run the danger of losing their market share to more tech-savvy rivals that use digital technologies to improve customer involvement and efficiency.

## **2.2 Theoretical Review and Framework**

### **Resource-Based View (RBV) Theory**

The theory was developed on earlier work by Edith Penrose (1959). RBV argues that a company's capacity to acquire, grow, and properly apply special internal resources determines both its competitive edge and long-term survival. These resources have to be valuable, rare, inimitable, and non-substitutable (VRIN criteria) if they are to give a lasting competitive edge. Recent research has built on this idea and combined it with dynamic capabilities to better grasp how companies fit new surroundings. For example, a systematic review by Kero and Bogale (2023) synthesizes empirical research on RBV and dynamic capacities across several sectors, therefore stressing the need for these frameworks in attaining sustained competitive advantage.

Examining RBV's use in supply chain management, Komakecha et al. (2024) contend that matching RBV with dynamic capabilities will improve a company's

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resilience and adaptability. McGahan (2021) also provides fresh methods for comprehending stakeholder involvement in companies by combining RBV insights into the new stakeholder theory.

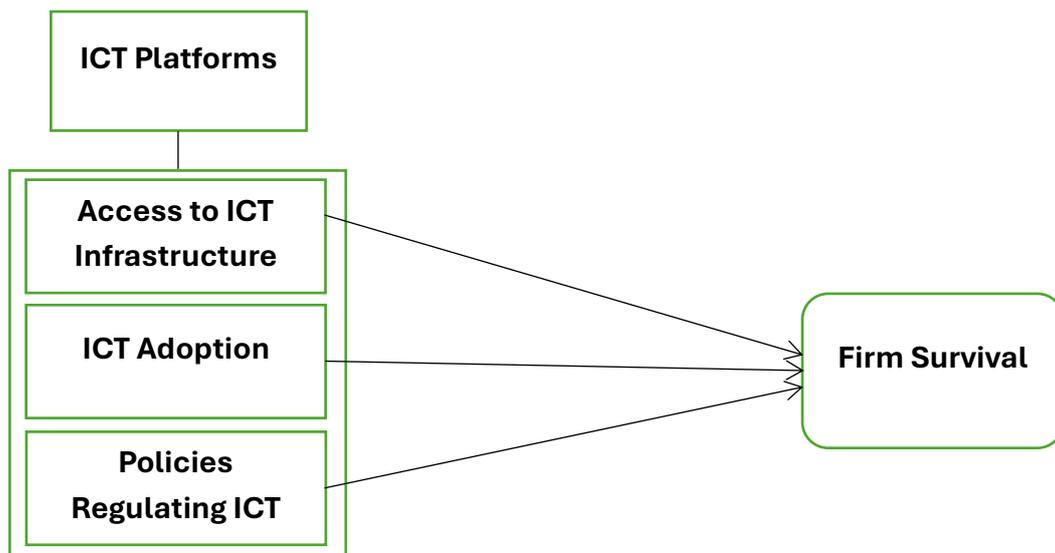
These modern points of view highlight how companies with better resources such as advanced ICT platforms, skilled human capital, and innovative capabilities, are more likely to attain greater efficiency, market differentiation, and resilience in dynamic company environments (Yang et al., 2024).

RBV's fundamental presumptions are resource homogeneity, which implies that companies have special resources not evenly distributed across sectors; and resource immobility, meaning that these resources are difficult to transfer or replicate, so providing firms with a continuous advantage (Sun, He, Yue, & Lin, 2024). RBV has been attacked, meanwhile, for its unclear definition of resources, lack of empirical measurability, and inability to describe how companies evolve their resources over time. Critics further contend that the theory ignores the impact of external market forces, rivalry, and technological upheavals on company performance while relying too much on internal issues (Guo et al., 2023).

RBV is especially pertinent to the research of ICT Platforms and Firm Survival in Medium-Scaled Enterprises (MSEs) since ICT platforms are strategic resources that can enhance business operations, increase efficiency, and generate competitive advantage (He et al., 2024). MSEs that use ICT solutions such cloud computing, enterprise resource planning (ERP), and digital marketing can achieve operational efficiency, cost reduction, and market expansion, thereby enhancing their resilience against competition and economic volatility (Karim, Nahar, & Demirbag, 2022). Since ICT adoption satisfies the VRIN criteria—offering unique, difficult-to-replicate benefits—the RBV framework essentially justifies the role of ICT platforms in improving company survival and long-term sustainability (Caldeira & Ward, 2023).

The Resource-Based View (RBV) theory assumes that firms possess unique internal resources (resource heterogeneity) and that these resources are difficult to transfer or replicate across firms (resource immobility). These assumptions make RBV highly applicable to this study, which explores how ICT platforms influence the survival of medium-sized enterprises (MSEs). By adopting advanced digital solutions such as cloud computing, enterprise resource planning (ERP), and digital marketing, MSEs can gain operational efficiency, reduce costs, and expand into new markets. These platforms meet the VRIN criteria—being valuable, rare, inimitable, and non-substitutable—and therefore qualify as strategic resources. When firms effectively deploy such ICT capabilities, they increase their chances of adapting to environmental shocks, outperforming competitors, and sustaining long-term operations. Thus, RBV provides a compelling framework to explain how internal technological resources drive resilience and firm survival in today's dynamic business environment.

Despite its strengths, RBV faces several criticisms that this study acknowledges. Researchers have criticized RBV for offering vague definitions of what constitutes a strategic resource and for failing to provide measurable criteria to assess such resources empirically (Guo et al., 2023). Critics also argue that RBV focuses too narrowly on internal capabilities, often neglecting external forces such as market turbulence, rapid technological shifts, and competitive threats. However, this study addresses these weaknesses by aligning RBV with insights from dynamic capabilities theory. By doing so, it captures how firms develop, adapt, and reconfigure ICT resources in response to environmental changes. This approach not only strengthens the explanatory power of RBV but also enhances its relevance to policy. Specifically, it supports evidence-based policymaking aimed at promoting digital infrastructure investments and capacity-building programs for MSEs. By grounding the study in a refined RBV framework, this research offers both theoretical insights and practical policy contributions that advance the discourse on digital transformation and firm sustainability.



**Figure 1: Framework Showing Relationship between Study Variables**

### 2.3 Empirical Review

Adeola and Evans (2023) conducted a panel data analysis across 24 African countries to investigate the link between digital policy frameworks, innovation, and enterprise sustainability. Drawing on secondary data from the World Bank, the International Telecommunication Union (ITU), and national ICT policy databases, their study found that inclusive and well-structured ICT policies significantly enhanced firm survival rates. Particularly in countries with proactive regulatory environments,

firms—especially medium-sized enterprises—were better equipped to withstand external shocks and adapt through innovation. The researchers emphasized that ICT policies that promote infrastructure, skills development, and affordability played a critical role in firm longevity.

In a Nigerian context, Akinbami and Bello (2022) employed a mixed-methods approach combining structured questionnaires and semi-structured interviews with 450 SME operators and 20 ICT policy stakeholders across Lagos, Abuja, and Kaduna. Their findings revealed a widespread lack of awareness among SMEs regarding national ICT policy initiatives. Despite the Nigerian government's efforts to create enabling digital policies, the study noted that high implementation costs, limited digital literacy, and poor infrastructure hindered adoption. However, firms that accessed and complied with regulatory digital support schemes recorded improved operational efficiency and higher survival rates, reinforcing the importance of policy reach and stakeholder engagement.

Similarly, Tetteh and Amponsah (2021) assessed the impact of ICT regulatory policies on SME performance in Ghana using a quantitative cross-sectional survey of 300 firms in Accra and Kumasi. Through a structured questionnaire administered to SME managers, they discovered that ICT policy incentives—such as tax rebates and expanded broadband infrastructure—encouraged higher digital adoption and improved firm sustainability. The study concluded that consistent government policy support was a determinant of not just digital transformation but also firm longevity in an increasingly competitive business environment.

Ahmed and Yusuf (2020) explored the influence of government ICT interventions on the continuity of medium-sized enterprises in Northern Nigeria, using descriptive survey methods and regression analysis. They collected data from 200 MSEs in Kano and Kaduna through structured questionnaires and analysis of public policy documents. The results showed that although interventions like subsidized internet access and digital skills training were available, poor implementation and bureaucratic inefficiencies reduced their impact. Nevertheless, medium-sized enterprises that had access to these supports demonstrated a 28% higher survival rate than those without, indicating the potential of well-executed ICT policies to foster firm resilience.

Finally, Abubakar and Bello (2022) employed a qualitative case study approach involving in-depth interviews with 30 SME owners and five ICT policy analysts in Abuja and Jos. Their study focused on the practical regulatory environment affecting ICT adoption in SMEs within the ICT and retail sectors. The findings highlighted the importance of regulatory clarity and access to government incentives as major drivers of digital technology uptake. However, the researchers also noted that many policies lacked stakeholder input during their design and rollout, which led to limited buy-in and reduced overall effectiveness. This study underscores

the need for participatory policy development processes that align regulatory goals with on-the-ground business realities.

### 3. Methodology

This study adopts simple random sample method in collection of data. The study was carried out among MEs in Bauchi state registered with Small and Medium Enterprise Development Agency of Nigeria, SMEDAN totaling 1,734. The Krejcie and Morgan table was used to arrive at 315 respondents as the sample size. Primary data were gathered using specially created questionnaires that were administered to the selected MEs. Inferential statistics was used in this study's data analysis to draw conclusions and inferences. SPSS 23.0 was used to analyze the data that was collected. The study employed the Spearman Rank Order Correlation to test for direct relationship.

### 4. Data Analysis and Result Presentation

**Table 1** Correlation Matrix for the Relationship Between Firm Survival and Measures of Performance

			Firm Survival	Access to ICT Infrastructure	ICT Adoption	Policies Regulating ICT
Spearman's rho	Firm Survival	Correlation Coefficient	1.000	.805**	.853**	.863**
		Sig. (2-tailed)	.	.000	.000	.000
		N	217	217	217	217
	Access to ICT Infrastructure	Correlation Coefficient	.805**	1.000	.872**	.848**
	Sig. (2-tailed)	.000	.	.000	.000	
	N	217	217	217	217	
	ICT Adoption	Correlation Coefficient	.853**	.872**	1.000	.860**
	Sig. (2-tailed)	.000	.000	.	.000	
	N	217	217	217	217	
	Policies Regulating ICT	Correlation Coefficient	.863**	.848**	.860**	1.000
	Sig. (2-tailed)	.000	.000	.000	.	
	N	217	217	217	217	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Field Survey

Table 1 shows the result of correlation matrix obtained for dimensions of ICT platforms and firm survival in the medium scaled enterprises in Bauchi state. Also displayed in the table is the statistical test of significance (p - value), which decides whether the hypothesis is accepted or rejected and generalize the findings of the study.

***H<sub>01</sub>: There is no significant relationship between access to ICT infrastructure and firm survival among Medium Enterprises in Bauchi Metropolis.***

For the first relationship, that is access to ICT infrastructure and firm survival,  $R=0.805$ . This represents a high correlation indicating a strong and positive relationship between access to ICT infrastructure and firm survival among Medium Enterprises in Bauchi Metropolis. Similarly displayed in the table is the statistical test of significance (p - value), which makes it possible the generalization our findings to the study population. From the result obtained, the probability value is  $(0.000) < (0.05)$  level of significance; hence, the study rejects the null hypothesis and concludes that there is a significant relationship between access to ICT infrastructure and firm survival among Medium Enterprises in Bauchi Metropolis.

***H<sub>02</sub>: There is no significant relationship between ICT adoption and firm survival among Medium Enterprises in Bauchi Metropolis.***

For this relationship, that is ICT adoption and firm survival,  $R=0.853$ . This represents a high correlation indicating a strong and positive relationship between ICT adoption and firm survival among Medium Enterprises in Bauchi Metropolis. Similarly displayed in table is the statistical test of significance (p - value), which makes it possible the generalization of our findings to the study population. From the result obtained the probability value is  $(0.000) < (0.05)$  level of significance; hence the study rejects the null hypothesis and concludes that there is a significant relationship between ICT adoption and firm survival among Medium Enterprises in Bauchi Metropolis.

***H<sub>03</sub>: There is no significant relationship between policies regulating ICT and firm survival among Medium Enterprises in Bauchi Metropolis.***

For this relationship, that is policies regulating ICT and firm survival,  $R=0.863$ . This represents a high correlation indicating a strong and positive relationship between policies regulating ICT and firm survival among Medium Enterprises in Bauchi Metropolis. Similarly displayed in table is the statistical test of significance (p - value), which makes possible the generalization of our findings to the study population. From the result obtained the probability value is  $(0.000) < (0.05)$  level of significance; hence the study rejects the null hypothesis and concludes that there is a significant relationship between policies regulating ICT and firm survival among Medium Enterprises in Bauchi Metropolis.

## 5. Summary of findings

- i. Access to ICT infrastructure, ICT adoption, regulations controlling ICT, and company survival were shown to be significantly correlated in the research on ICT platforms and firm survival in medium-scaled firms in Bauchi Metropolis. The results showed a substantial positive association between these variables, meaning that companies with better access to ICT infrastructure, higher degrees of ICT adoption, and supporting ICT policies usually had better survival rates.
- ii. Furthermore, the findings emphasized the important part that government policies and rules play in enabling MSE adoption of ICT.
- iii. Finally, the study also revealed the need of removing obstacles to ICT acceptance including budgetary restrictions, lack of digital skills, and limited infrastructure.

## 6. Conclusion and Recommendations

### 6.1 Conclusion

The paper evaluated the role played by Information and Communication Technology (ICT) platforms in improving the survival and competitiveness of medium-scaled businesses (MSEs). The results confirmed that company survival is quite significantly connected with access to ICT infrastructure, use of digital tools, and supporting legislative initiatives. Companies that combine ICT platforms—including digital marketing, enterprise resource planning (ERP), and cloud computing—showed more resilience, better operational efficiency, and more market reach. Companies that ignore ICT run the danger of lagging behind rivals given the fast digital revolution of sectors, therefore affecting sustainability and market performance. It also revealed how MSEs can negotiate obstacles such as technology changes, market competitiveness, and economic swings using ICT adoption. Companies with strong digital skills are more nimble, fast adopting to fit consumer behaviour and industry changes. ICT infrastructure availability, adoption, and company survival demonstrate a substantial and favourable link empirically. Policymaking is also very important since cybersecurity and digital accessibility frameworks boost company confidence in using digital solutions. The insights of the study support the continuous conversation on digital transformation and underline the need of including ICT into corporate models for long-term survival.

### 6.2 Recommendations

Thus, the study recommended that:

- i. The government should collaborate with the private sector to expand affordable and high-speed internet access, particularly in underserved areas of Bauchi Metropolis, to enhance digital connectivity for medium enterprises.

- ii. Business associations and government agencies should introduce digital training programs for entrepreneurs and employees to enhance their ICT adoption skills, ensuring effective integration of technology into business operations.
- iii. Policymakers should implement clear and flexible ICT regulations that encourage technology adoption while ensuring cybersecurity and fair competition, fostering a business-friendly digital environment in Bauchi Metropolis.

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