Covid-19 Pandemic: Effect of ICT on SMEs Performance in Jos North Plateau State

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Abstract

This paper examines the effect of ICT on Small and Medium Enterprise (SME) performance in Jos North during the covid-19 era. A descriptive survey research design was adopted for the study. A total sample size of 186 SMEs was drawn from a population of 360 SMEs using Krejcie and Morgan's (1970) table for sample determination. Out of the 186 copies of a questionnaire administered, 170 were properly completed and returned while 16 were rejected on the grounds of some irregularities in their completion. Responses collected from the administration of the questionnaire were computed using simple arithmetic mean and regression analysis that allows for decision-making. Findings from the study showed that ICT has a significant effect on the performance of SMEs in Jos North during the covid-19 period. The study, therefore, recommended that all owners/managers of SMEs in Jos North should prioritize the adoption and use of ICT in all their business operations even after the covid-19 era. Owners/managers of SMEs should consider the type of ICT available, reliable infrastructure, perceived benefits of ICT, and ICT skilled staff when deciding on the adoption of ICT. Owners/managers of SMEs should consider financial limitations, unreliable infrastructure, lack of skilled ICT staff, perceived attitude toward ICT, etc as factors that inhibit the adoption of ICT.

Keywords: Covid-19, Information Communication Technology, Small and Medium Enterprise, Business Survival.

INTRODUCTION

Globally, coronavirus also known as the Covid-19 pandemic is causing large-scale loss of lives and severe human affliction. It appears to be the largest public health catastrophe that has generated a major economic setback. Truly, this virus has revealed that the world is indeed a global village, as it has swept across many countries around the world. The coronavirus was first discovered in Wuhan, China at the end of 2019, since then the viral wave has continued to spread like ravaging wildfire across the globe. Because of the devastating effect of the Covid-19, on the 11th of March, 2020 the World Health Organization (WHO) declared it a pandemic and since then it has become a universal emergency, given its impact on the world's public health crisis and economic downturn.

This situation has put the world on her toe since no one could tell when normalcy will return. Succinctly capturing this, Tucker (2020), asserts that the outbreak of Covid-19 will certainly cause bankruptcy for many businesses across the world since the movement for both buyers and sellers is restricted. Also, Naveen and Anders (2020), aver that many businesses are forced to close as a result of the severe impact of covid-19, causing an unprecedented disruption in global business activities. This change has brought about a serious effect on economies which has made many countries of the world intensify their effort in containing the spread of the virus. The severe effect of the coronavirus could have implicit spill-over into the financial market, commodities market, crude oil market, etc.

To confirm the severe effect of this virus on Nigerian's economy, the study of Ozili, (2020), confirmed that, covid-19 has disrupted the Nigerian economy causing a devastating effect leading to a sharp decline in oil prices, drop in revenue, inability to service loans, disruption of global supply chain and the withdrawal of investors from Nigerian stock market. All these factors mentioned have extended their devastating effect on both large and small businesses operating in Nigeria and by extension the world at large. Unfortunately, the effect of the covid-19 was so severe on SMEs because of their higher levels of vulnerability and lower resilience related to their size. As Verbano and Venturi, (2013), put it, larger firms possess the ability to survive sudden shocks more than SMEs because larger firms own significant financial resources when compared with SMEs. More so, since most of them operate with a low capital base and low stock level, it is so easy for them to feel the brunt of the covid-19 since most of their business networks and supply chains hitherto, connected to larger businesses were disrupted. Other outsourcing business services critical to their performance were also disrupted except, for the few SMEs that deployed information communication technology or digitalized their business operations were able to overcome the devastating effect of covid-19.

As it is now, it will take a longer time for many SMEs to re-build contacts with their former networks once supply chains are disrupted, particularly those SMEs that have foreign network contacts. For instance, in Nigeria, some SME owners depend on imported goods from China, European and western countries for their business performance. Therefore, the prevalence of this ravaging virus has succeeded in disrupting businesses globally with severe effects on SMEs in particular. The magnitude of the severe effect of this covid-19 on SMEs globally was presented in the study conducted by Bartik, (2020). The results of the study show that 5800 SMEs were surveyed in the United State, it was reported that 43% of those SMEs are already temporarily closed. Also, an average number of the surveyed SMEs have their employees reduced by 40% while, three-quarter of the SMEs surveyed could not sustain their cash in reserve for two months or less. Another study that examined the impacts of the pandemic on SMEs was conducted by International Trade Centre, (2020). The study surveyed the effect of the pandemic among SMEs

in 132 countries; two-thirds of the SMEs have their business operations highly affected and onefifth show a high risk of closing down their businesses permanently within two to three months. Similarly, other studies carried out in many countries as reported by McKinsey, (2020) show that between 25%-36% of SMEs could shut down permanently from the disruption in the first four months of the outback of the pandemic.

In Nigeria, the effect of the pandemic was quite devastating on SMEs and their owners. The study by Payed, (2020) indicates that 28% of SMEs have suspended their employees while, 54.7% of SMEs have their businesses shut down, this has created untold livelihood challenges to those who are affected. The study also reported that due to lockdowns and restrictions there was a sudden reduction in business hours and the requirement for labour in Nigeria. There is also a significant drop in the number of customers patronizing SMEs, supporting figures from the study reveals that, before February 2020 and May 2020, there was a decrease of 38% of the number of customers that patronized SMEs daily in Nigeria. An average decrease of 41% in revenue was recorded as a result of government measures to curb the spread of the covid-19 pandemic in Nigeria. These are some of the major predicaments confronting SMEs ' performance and their owners in Nigeria.

It is now a known fact that the ugly effect of the covid-19 pandemic has come to stay in the business environment until the vaccine and its cure are discovered. Therefore, the need for SMEs to develop strategies that will give them the competitive edge over the severe effect of the pandemic becomes imperative. Recently, some SMEs have started appreciating available tools that can aid their performance through the implementation of the right information technology that can help SMEs to increase their revenues, manage their cash flow effectively, recover debt, simplify bill payments, enhance the digital signing of business documents, automate approval processes, onboarding of new clients, acquire and engage new customers, improve payment time, reduce the cost of business and improve efficiency to meet the needs of remote workers (Jessi, 2020). A study carried out by OECD, (2020) observed that countries like Argentina, South African, Malaysia, France, Japan, Spain have implemented several measures to encourage SMEs to adopt telemarketing which they believe in the long run will enhance the adoption of new business practice and technology. Similarly, other countries have concentrated their effort on the digitalization of SMEs to contend with the crisis.

Despite the concerted effect made by many nations across the globe to support SMEs to recover and survive the ravaging effect of the covid-19, many SMEs find it difficult to adopt and use information and communication technology (ICT) in sourcing for new sales channel and improve their business performance. For instance, several studies (Olusola & Oluwaseun 2013; Rahman, Yaacob & Radzi, 2015; Okundaye, Fan & Dywer, 2019) all agreed that the use of technology by Nigerian SMEs can enhance customers service, reduce marketing and distribution cost, increase wider market coverage and enhance business performance. This could only be achieved if the SMEs exhibit the willingness to adopt ICT as a business tool irrespective of its cost. Unfortunately, many SMEs in Nigeria are not willing to adopt ICT solutions for business operations hence, there is the need to investigate reasons for their unwillingness to adopt ICT. Also, in some cases, some SMEs in developing countries like Nigeria are unaware of the visible benefits of the use of ICT and e-business. Such visible benefits according to Okundaye, Fan and Dywer, (2019) include work routines simplification through ICT, increase in productivity, promotion effectiveness and efficiency of communication, and customer service improvement. The inability of such SMEs to appreciate the contributions of ICT on the performance of SMEs has severe consequences for the adoption and use of ICT by SMEs in Nigeria. Similarly, those SMEs that are willing and aware of the visible benefits of ICT are hindered by barriers to ICT usage. According to Asunka, (2016), many SMEs in Nigeria are willing and knowledgeable of the benefits of ICT on business performance however, certain barriers thwarted them from adopting and implementing ICT solutions. Such barriers are grouped into internal and external barriers. The internal barriers include; organizational behaviour, the beheviour of the owner/manager, cost of adopting ICT while, the external barriers comprises political, cultural, legal, social, and infrastructural barriers (Tarute & Gatautis, 2014). These barriers have mitigated the adoption and implementation of ICT by many SMEs hindering them from performing ultimately especially, during this covid 19 periods. This worrying situation calls for more investigation to determine the number of barriers that prevent SMEs from using ICT in their business operation in Jos North metropolis. From the ongoing discussion, no study to the best of the researchers' knowledge has been conducted in Jos North to investigate the existence of these issues identified hence, the need for this study becomes necessary.

Given the foregoing issues established above, the study focus on the main objective and other specific objectives to guide the study as follows:

1. To determine the effect of ICT on SME's performance during the Covid-19 era.

i. To ascertain the willingness of SMEs to adopt ICT during the Covid-19 era.

ii. To examine those factors that inspire SMEs to adopt and use ICT during the covid-19 era.

iii. To find out those factors that inhibit SMEs from using ICT during the covid-19 era.

The below null hypothesis is stated to give direction to the study.

Ho: Use of ICT does not significantly affect SME's performance in Jos North, Plateau State.

LITERATURE REVIEW

Coronavirus Pandemic (Covid-19): The term covid-19 is referred to as a disease which is caused by a new strain of coronavirus, it was formally called '2019 novel coronavirus when it was first discovered in Wuhan, a city in China (Musa & Aifuwa, 2020). After a proper investigation on the virus, it was later renamed covid-19 where 'CO' stands for corona, 'VI' for the virus, and 'D' for disease. According to (UNICEF, 2020), the new virus has similar

characteristics to the family of viruses associated with the common cold and Severe Acute Respiratory Syndrome (SARS). The Covid-19 also presents other symptoms which include; fever, shortness of breath, and cough. In the severe cases of the infection, it can lead to difficulties in breathing making the disease more fatal and deadly since its cure and vaccines are in the process of development at the time of writing this paper. Transmission of Covid-19 is done through direct contact with respiratory droplets of an infected patient through coughing and sneezing (UNICEF, 2020). More so, touching infected surfaces with un-sanitized hands and touching the nose, mouth, eyes, and ears with the hand aid the spread of this virus. Even though the virus survives on the surface for longer hours, simple disinfectant and hand washing can kill it (UNICEF, 2020).

Information Communication and Technology (ICT): So many scholars defined information and communication (ICT) based on their perceptions and understanding. For instance, Apulu and Latham, (2010) simply defined ICT as a wide range of computerized technologies. Any technology that enables communication and electronic capturing, processing and transmission of information is regarded as ICT (Ashrafi & Murtaza, 2008). Similarly, Ritchie and Brindley (2005) defined ICT as "the array of primarily digital technologies designed to collect, organize, store, process and communicate information within and outside an organization". Oluwatayo (2014) suggests that the convergence of information technology (IT) and telecom technology constitute ICT. Internet, wired-wireless intranet, mobile phone, laptop, desktop, handheld devices, business productivity software, etc are all components of ICT, which are used in different countries. The commonly used ones in Nigeria include; Internet, Automated Teller Machines (ATM) Personal Digital Assistants (PDAs) mobile phones, and smart cards (Apulu & Latham, 2010).

With the advent of covid-19, the demand and use of ICT have become imperative for most businesses across the globe. This is so because ICT is now the main driver of change in organisations and allows business transactions even during restrictions and lockdown of economies. In the words of Dudhe (2013), the evolution and use of ICT have explicated business processes and transactions which has also improved information and knowledge management for informed business decision-making. Unlike in the past when most managers and development planners saw ICT as a luxury service and as such it was not given the desired prominence in the national strategies for economic development (Frempong, 2005).

Small and Medium Enterprises (SMEs): Up-till date, there is no generally accepted definition for small and medium enterprises. A consensus on a universally accepted definition of small and medium enterprise is yet to be agreed upon by major stakeholders (Apulu & Latham, 2016). Several countries, organisations, and individual stakeholders hold different definitions of SMEs. For now, several scholars have defined SMEs in terms of their revenue base, the number of employees, assets base, or combination of any of the factors (Oluwatayo, 2014). This accounts for the diverse definitions which are often dependent upon the individual's viewpoint (Adair & Taylor, 1994). In the Nigerian context, the National Council of Industries defines SMEs as any

business venture having a total asset base of two hundred million (\aleph 200,000,000.00) with exception of land and working capital and whose employees ranging between ten to three employees (Oluwatayo, 2014). Similarly, the Small and Medium Development Agency of Nigeria (SMEDAN) describes SMEs in line with the following criteria; micro-enterprise as a business venture having not more than 10 employees, a turnover not more than \aleph 5,000,000.00; small enterprise as a business venture having 10 to 49 employees, with turnover ranging from \aleph 5 to \aleph 49,000,000.00; and medium enterprise as a business venture having a range of 50 to 199 employees, with a turnover of between \aleph 50 to \aleph 499,000,000.00.

Information and Communication Technology (ICT) and SMEs Performance

It is a known fact that knowledge obtained through information is power. Hence organisation relies upon readily and timely information to succeed in their business operations. In the words of Gyambrah and Offei, (2016), for SME owners/managers to respond promptly and adequately to a turbulent business environment depends largely on the ability of the information and communication technology employed by such SMEs to handle the situation. A major task of a business owner/manager is his/her ability to access, share and use knowledge through information. Hence, the role played by information and communication technology in assisting SMEs to expand business opportunities, overcome business pressure from competitors, reduce the cost of operations, increase productivity and revenue generation, enhance general business efficiencies. As a matter of fact, the effect of ICT on enhancing the performance of SMEs in developing countries, Nigeria inclusive cannot be overemphasised

Several studies have confirmed the significant effect of ICT on the performance of SMEs; Kamal and Qureshi (2009) identified the positive effect that ICT plays in the growth, development, and sustainability of SMEs globally. Similarly, Good and Qureshi, (2009), observed that ICT has the immanent ability to brace up the survival chances of small and developing SMEs. As the covid-19 pandemic effect ravages globally, disrupting business activities and impacting severe effect, forcing many businesses both large and small to close temporarily and some permanently, most SMEs owners are thinking out of the box on how to enhance their performance to overcome the covid-19 pandemic effect and adjust to the recent normal way of doing business during the pre and post-pandemic era. A study recently conducted by OECD (2020), which suggested that SMEs should adopt digitalization and telemarketing as this, will increase their sales, lower the cost of production and improve their relationships with their business stakeholders (customers, suppliers, government, etc.).

METHODS

This study was carried out among SMEs operating within Jos North Metropolis, where the capital of the state is cited. The study employed descriptive and survey research, both the quantitative and qualitative method for data collection was exploited. A list of registered SMEs operating in Plateau State was obtained from the Plateau State Ministry of Commerce and Industry. Out of 1,312 SMEs found in the register, 360 are cited in Jos North. The higher number

of SMEs registered in Jos North justifies the choice of selecting it for the study. The total sample size of 186 SMEs was drawn from seven (7) major groups of SMEs; Medical services, Services, Fashion and Design, Manufacturing, Educational services, Artisan, and Agro-business. The sample size distribution of the major group of SMEs is shown in Table 3.1:

S/N	Types	of	SMEs Sample of SMEs		Percentage
	Population				
1	Med Services	(Chemist, Pharmacist, etc)	53	27	15
2	Services (Hot	el, Restaurant, Laundry, etc)	60	31	17
3	Fashion and I	Design	48	25	13
4	Manufacturin		39	20	11
5	Educational S	ervice	58	30	16
6	Artisan (Mech	nanics, Vulcanizer, welders, etc)) 48	25	13
7	Agricultural(H	Farming, , Agro-vet, etc)	54	28	15
	Tota	l	360	186	100

Table 1: Population and Sample Distribution of SMEs in Jos North Metropolis

Source: Plateau State Ministry of Commerce and Industry.

The sample size of 186 SMEs was chosen for the study. Krejcie and Morgan's (1970) table for determining sample size was adopted to statistically select 186 respondents to serve as the sample size. The sample elements were categorized into 7 stratum hence, stratified sampling technique was employed and each element from the strata is selected using random sampling technique. The instrument employed for data collection was a questionnaire; closed-ended questions. The questionnaire was designed in the form of a five-point Likert scale developed by the researcher. A total of 170 copies of the questionnaire were returned and analysed out of the 186 copies of the questionnaire administered to owners and staff across the seven (7) strata. Both descriptive and inferential statistics were adopted for data analysis in the study. The questionnaire administered was made of two sections. Section 'A' of the questionnaire was on the demographic characteristics of the respondents, Section 'B' contained questions that determine the roles of ICT on SMEs performance.

All responses were measured using a five-Likert scale ranging from 'strongly disagree' (1) to 'strongly agreed' (5). The use of the 5-point Likert scale is necessary because Krosnic and Fabrigar (1997) posit that a scale of 5 to 7 points is more reliable and valid than a shorter or longer scale. It is also an interval scale that enables a researcher to analyse questionnaire

responses using parametric tools. Simple arithmetic means and regression analysis were used to analyse the data collected.

RESULTS AND DISCUSSION OF FINDINGS

S/N	SS	SA	А	NS	DA	SD	Ν	MEAN
1.	SS1	66 (38.8)	89 (52.3)	19 (11.1)	10 (5.8)	5 (2.9)	170	4.51
2.	SS2	60 (35.2)	101 (59.4)	6 (3.5)	3 (1.7)	0 (0)	170	4.28
3.	SS3	45 (26.4)	64 (37.6)	50 (29.4)	7 (4.1)	4 (2.3)	170	3.78
4.	SS4	72 (42.3)	94 (55.2)	4 (2.3)	0 (0)	0 (0)	170	4.40
5.	SS5	67 (39.4)	98 (57.6)	5 (2.9)	0 (0)	0 (0)	170	4.36
6.	SS6	54 (31.7)	107 (62.9)	4 (2.3)	3 (1.7)	2 (1.1)	170	4.2
7	SS7	45(26.4)	112 (65.8)	8 (4.7)	5 (2.9)	0 (0)	170	4.10

Table 2: Responses on Suggested Statement on the Roles of ICT on SMEs Survival

Source: Author's computation, 2021

Note: Key responses; Strongly Agree (SA, 5), Agree (A, 4), Not sure (NS, 3), Disagree (D, 2), Strongly Disagree (SD, 1). =5+4+3+2+1 = 15/5= 3. Therefore, the mean below 3point is rejected. Key: SS – Suggested Statements

A. The Roles that ICT Played in your SME during the Covid-19.

SS1: Do you agree ICT solution has helped your/other SMEs to increase sales, reduce cost, expand customer's base, and provide access to raw materials during the covid-19 period.

SS2: The use of ICT has helped your/other SMEs to survive the severe effect of covid-19.

B. Willingness of SMEs to adopt ICT during the covid-19 era.

SS3: Looking at the effect of the lockdown and restrictions imposed by the government, your SME has shown a willingness to adopt and use ICT.

C. Determine factors that Inspire SMEs to adopt and use ICT.

SS4: Type of ICT available, availability of funds, reliable infrastructure, perceived benefits of ICT, and ICT skilled resources are factors that will encourage SMEs to adopt ICT.

F. Find out factors that inhibit SMEs from using ICT.

SS5: Financial limitations, unreliable infrastructure, lack of skilled ICT staff, and perceived attitude toward ICT discourage SMEs from using ICT.

SS6: Inability of government to provide infrastructure like; power, strong broadband, discourages your organisation from adopting ICT.

SS7: The inability of the government to regulate fraudsters in the internet space discourages SMEs from adopting ICT solutions.

Test of Hypothesis

H0: The use of ICT has no significant effect on SMEs' performance during the covid-19 lock downs

Model	Unstandardized		Standardized	T-sat	Sig	
	Coefficients		Coefficients			
	В	Std Error	Beta			
(Constant)	.757	.128		5.418	.000	
ICT	.802	.022	.766	22.601	.000	
R= .777; R- Square = .603; F= 605.211, p<0.05						

Table 3: Regression analysis on effect of ICT on SMEs performance

Source: Author's computation, 2021

Finding from table 4.1 shows that, responses on SS1 indicates that the majority of the respondents, representing 91.1% strongly agreed or agreed that the ICT solution has helped SMEs to increase sales, reduce cost, expand customer's base and provide access to raw materials during the covid-19 period while, few respondents, representing 8.7% of the entire respondents strongly disagreed or disagreed. Also on SS2, the majority of the respondents, representing 94.6% strongly agreed or agreed that ICT has helped some SMEs to perform well and survive the severe effect of covid-19 while, few respondents, representing 1.7% of the entire respondents strongly disagreed or disagreed. Similarly, responses on SS3 show that most respondents, representing 64% of the entire respondents strongly agreed or agreed that lockdown and restrictions imposed by the government have stimulated the willingness of SMEs to adopt and use ICT while, few of the respondents, representing 6.4% differ in their thoughts. On SS4, almost all the respondents, representing 97.5% of the entire respondents strongly agreed or agreed that type of ICT available, availability of funds, reliable infrastructure, perceived benefits of ICT, and ICT skilled resources are factors that encourage SMEs to adopt ICT while only 2.5% of the respondents were not too sure. Also in SS5, nearly all the respondents, representing 97% of the entire respondents, strongly agreed or agreed that Financial limitations, unreliable infrastructure, lack of skilled ICT staff, and perceived attitude toward ICT discourages SMEs from adopting and using ICT while the remaining 3% of the respondents were not sure.

Responses from SS6 shows that the majority of the respondents, representing 94.6% strongly agreed or agreed that, the inability of the government to provide infrastructure such as power, strong broadband, discourage SMEs from adopting ICT while, the remaining respondents, representing 2.8% strongly disagreed or disagreed with the position of the majority.

Furthermore, in SS7 majority of the respondents, representing 92.2% strongly agreed or agreed that the inability of the government to regulate fraudsters in the internet space discourages SMEs from adopting ICT solutions while a few of the respondents representing 2.9% had their thoughts contrary to the opinion of the majority.

Finally, the result in Table 4.2 shows the R-value of .777 indicating that there is a strong relationship of 77.7% between the use of ICT and SMEs' performance also, the result shows that change in SMEs' performance as a result of using ICT is shown to be 60.3%. The F-value of 605.211 confirmed that the model is good and fit for prediction and the p-value of .001 which is less than 0.05 which suggest that there is a significant and positive relationship between the use of ICT and SMEs performance hence, the null hypothesis is rejected while the alternative hypothesis is accepted indicating that, use of ICT has a significant effect on SMEs performance in Jos North, Plateau State.

DISCUSSION OF FINDINGS

This study aims to determine the effect of ICT on SME performance during the covid-19 era. To achieve this goal, the study pursues other specific objectives. To ascertain the effect of ICT on SMEs performance during the covid-19 era, SS1 and SS2 were computed, the results show means of 4.51 and 4.28 for SS1 and SS2 respectively. Since the values of the two means are greater than 3point, the suggested statements (SS) were accepted, indicating that ICT has a significant effect on the performance of SMEs. This also agrees with the finding in table 4.2 which rejects the null hypothesis and accepted alternative hypothesis indicating that the use of ICT has a significant effect on SMEs' performance. The result from this study is in accordance with the related studies conducted by Kamal and Qureshi (2009) and Good and Qureshi, (2009).

The willingness of SMEs to adopt ICT in their business operation during the covid-19 was investigated. Responses provided in SS3 show a mean of 3.78 which is greater than 3point hence, the suggested statement is accepted indicating that, SMEs are willing to adopt and use ICT during the covid-19 era. This finding agrees with the study of Asunka, (2016).

The study further seeks to identify factors that will inspire SMEs to adopt and use ICT. The outcome of SS4 shows a mean value of 4.40 which is greater than 3point. Therefore, the suggested statement is accepted, indicating that factors like; type of ICT available, availability of funds, reliable infrastructure, perceived benefits of ICT, and ICT skilled resources can inspire SMEs to adopt ICT. The outcome of this finding concurs with the studies of Rahayu and Day, (2017) and Napitupulu, Syafrullah, Rahim, Abdullah, and Setiawan, (2018).

Finally, the study also seeks to know those factors that mitigate the adoption of ICT by SMEs during the covid-19 era. Responses obtained from SS5, SS6, and SS7 produced mean values of 4.36, 4.20, and 4.10 respectively. All the values of the means are greater than 3piont hence, all the suggested statements are accepted positively by the majority of the respondents indicating that, financial limitations, unreliable infrastructure, lack of skilled ICT staff and perceived attitude toward ICT, the inability of the government to provide infrastructure and to regulate fraudsters in the internet space discourage SMEs from adopting and using ICT solution. The result of this study is in line with the studies done by Tarute and Gatautis, (2014) and Elbeltagi, Hamad, Moizer and Abou-shouk, (2016).

6. Conclusion and Recommendations

It is no longer news that coronavirus has brought in its wake destruction to lives and economies of nations because many people have died and economic activities have been shut down. Movement restriction was placed, and a ban on gathering was implemented, thereby negating the performance of SMEs in Jos, Plateau State, and globally. In the course of this study, it was observed that with the outbreak of the virus, cases of SMEs closing down become the order of the day while many of them becoming bankrupt. However, some few SMEs that adopted ICT in their business operation were seen flourishing in their business operations during the lockdowns and restriction of movement confirming the significant role of ICT, no doubt this has stimulated the willingness of other SMEs to adopt and use ICT in their business operations. This falls in line with the findings of this study which concludes that ICT has a significant effect on the performance of SMEs in Jos North, Plateau State.

Based on the findings of the results, the study recommends that:

1. Since ICT can guarantee SMEs' performance in a turbulent business environment, the owner/manager of SMEs must prioritise the use of ICT as a vital tool in the organization.

2. Owner/manager of SMEs in Jos North and elsewhere should develop strong will and passion for the adoption and use of ICT in their business. They should also encourage, motivate and educate their staff to follow suit.

3. Owner/manager of SMEs should consider certain factors like; type of ICT available, availability of funds, reliable infrastructure, perceived benefits of ICT, and ICT skilled staff when deciding on the adoption of ICT.

4. Owner/manager of SMEs should consider financial limitations, unreliable infrastructure, lack of skilled ICT staff, perceived attitude toward ICT, the inability of the government to provide infrastructure, etc as factors that inhibit the adoption of ICT.

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