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# INFORMATION AND COMMUNICATION TECHNOLOGY AND THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN NASARAWA STATE, NIGERIA

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## ABSTRACT

*The adoption of Information and Communication Technology (ICT) has precipitated accelerated performance in the Small and Medium Enterprises (SMEs) sub-sector despite its disadvantage of pushing people out of job. It has made rapid changes in global production, work and business methods, and trade and consumption patterns in and between enterprises and consumers. This study examines the impact of ICT on the Performance of SMEs in terms of productivity, profitability, turnover, efficiency, customer's satisfaction, employment opportunity, cost reduction and time saving. Questionnaires were administered to 100 SMEs in Nasarawa State which were randomly selected as the study sample and Pearson Product Moment Correlation Coefficient (PPMCC) was used as the method of analysis to find the correlation between ICT and the performance indicators in addition to the descriptive statistics. The findings of the study showed that, the adoption of ICT is positively and significantly correlated to productivity, profitability and employment generation but, negative and significant relationship to cost savings. This means that the adoption of ICT increases productivity, profitability and employment generation by the SMEs and decreases operation costs. The study concludes a significant correlation between the adoption of ICTs and the performance of SMEs in Nasarawa State. This inspires the study to recommend for the future an integration of ICT in day-to-day activities and/or general operations of the SMEs in Nasarawa state.*

## KEYWORDS

Information and Communication Technology, Small and Medium Enterprises, Performance Indicators.

## 1. INTRODUCTION

Today's business world has been deeply influenced by Information and Communication Technology (ICT) and the application of ICT among business is widespread. ICT is rapidly changing global production, work, business methods, trade and consumption patterns in and between enterprises and consumers. It has provided new ways to store, process, distribution and exchange information within companies and with customers (Kollberg & Dreyer, 2006). The recent ICT developments have enormous implications for the operation, structure and strategy of organizations (Buhalis, 2003). Organizations of all types around the globe are currently utilizing ICT, not only to cut costs and improve efficiency, but also to provide better customer service (Ashrafi & Murtaza, 2008). Spanos et al, (2002) state that ICT has the ability to enhance, coordinate and control the operations of many organizations and can increase the use of management systems.

On the other hand, Ongori and Migiro (2010) state that the impact of globalization has obliged many SMEs to adopt ICT in order to survive in the present competitive era especially in competing with large organizations. Bresnahan et al. (2002) argued that durable productivity gains have been achieved in enterprises that use ICT. ICT helps in the effective flow of data in organizations thereby assisting organizations to obtain information at any given time which in turn, helps these organizations to reach their desired targets. In addition, ICT brings about change in businesses and helps to create competitive advantage hence, organizations of all types including SMEs adopt ICT.

Information and Communication Technology (ICT) is considered to be a powerful tool for socio-economic development. Effective ICT-utilisation, appropriate applications, and individually tailored solutions, can create cross-sectoral opportunities and, thus, ICT can play a substantial role to address a number of goals on the development agenda. In an attempt to identify sectors that are likely to be responsive to technological change with high return on investment, Small and Medium Enterprises (SMEs) have materialised as one potential target sector to harness ICT for development.

Small and Medium Enterprises (SMEs) play an important role in economic development of a country. Several theories elaborate on the connection between information technology, economic development and social change. Almost all agree on the importance of information and communication technology adoption in SME, while the importance of SME as the engine to economic growth is well acknowledged worldwide.

Information and communication technology, particularly the "Internet" is having a significant impact on the operations of SMEs and essential for the survival and growth of the nation's economy in general and SMEs in particular. Information technology is changing the economy and traditional businesses have become more dependent on new technologies. New technologies facilitate increased interactivity, flexibility, cheap business transactions as well as improve interconnectivity with business partners and customers. Information technology is having a significant impact the sector of Small and Medium Enterprises (SMEs), especially where industries are in decline with high levels of unemployment. In spite of all the advantages accrued by ICTs, it is capable of rendering people jobless as works that are required to be done manually are replaced with computers.

This study focus on the impact of the adoption of ICT on the performance of SMEs in Nigeria, particularly in Nasarawa State. Thus, the study addresses the following questions; does the adoption of ICT increase productivity, profitability, turnover, efficiency and customer's satisfaction? Does it reduce operation cost, and saves time? What is the effect of the adoption of ICT on employment opportunity?

## RESEARCH HYPOTHESES

The study assumed the following answers to the research problem that informed the study:

- H0<sub>1</sub>:** There is no significant correlation between the adoption of ICT and the productivity of SMEs in Nasarawa State.
- H0<sub>2</sub>:** There is no significant correlation between the adoption of ICT and the profitability of SMEs in Nasarawa State.
- H0<sub>3</sub>:** There is no significant correlation between the adoption of ICT and cost reduction of SMEs in Nasarawa State.
- H0<sub>4</sub>:** There is no significant correlation between the adoption of ICT and employment generation in SMEs in Nasarawa State.

## 2. LITERATURE REVIEW

### 2.1 EXPLORING THE IMPACT OF ICT

Adeosun, et al,(2009) state that, the use of ICT enables strategic management, communication, collaboration, information access, decision making, data management and knowledge management in organizations. ICT causes fundamental changes in the nature and application of technology in businesses. ICT can provide powerful strategic and tactical tools for organizations, which, if properly applied and used, could bring great advantages in promoting and strengthening their competitiveness (Buhalis, 2003). Hengst and Sol (2001) state that ICT enables organizations to decrease costs and increase capabilities and thus assist to shape inter-organizational coordination. The use of ICT can assist to lower coordination cost and increase outsourcing in organizations.

ICT is used to exchange information and it provides a medium for learning. Ramsey, et al, (2003) note that organizations generally stand to gain from ICT in areas such as reduced transaction costs, information gathering and dissemination, inventory control, and quality control. Fink and Disterer, (2006) argue that ICT not only help organizations to become more efficient and effective but also help them to become competitive. Pavic et al. (2007) state that organizations have the opportunity to achieve a competitive advantage from the advances in ICT through innovation, marketing, efficiency gains, better quality and customer responsiveness. Lal,(2004) further states that web-enabled services increase the competitiveness of organizations as they change the relationship with customers and also assist to create stronger link between firms and clients. ICT helps to increase business competitiveness and enhance enterprise performance through indirect cost savings such as labour costs and increased labour productivity and direct cost such as reduction of firm's input (Chowdhury & Wolf, 2003; Love et al., 2006). In order words, ICT can influence the performance of an enterprise in multifaceted ways. Hence, ICT can bring about change in organizations and make them more competitive, innovative and generates growth (Obijiofor et al., 2005).

### 2.2 THE ROLE AND BENEFITS OF ICT IN SMEs

The definition of SMEs varies from country to country but is often based on employment, assets or a combination of the two. The Small and Medium Development Agency of Nigeria (SMEDAN) defines SMEs based on the following criteria: a micro enterprise as a business with less than 10 people with an annual turnover of less than 5 million Naira, a small enterprise as a business with 10-49 people with an annual turnover of 5-49 million Naira while a medium enterprise as a business with 50-199 people with an annual turnover of 50-499 million Naira. In Nigeria, SMEs cover the entire range of economic activity within all sectors (SMEDAN, 2005).

In the present knowledge-based economy, it is important for SMEs to adopt processes that enable them to provide services that will bring about competitive advantage. ICT has a significant positive impact on organizational performance (Maldeni & Jayasena, 2009) and is vital to SMEs. Without the use of ICT, modern businesses are not possible as ICT has a significant impact on SMEs operations and crucial for the survival and growth of economies in general (Berisha-Namanil, 2009). ICT provide opportunities for business transformations (Chibelushi, 2008) and provide SMEs the opportunity to conduct business anywhere (Jennex et al., 2004). The European Commission (2008), states that SMEs could use ICT in order to grow and to become more innovative. Love et al; (2004) also ascertain that the use of ICT offers many benefits to SMEs at different levels (operational level, tactical level and strategic level). The benefit of ICT cuts across all sectors of the economy and all the fields of human activities.

According to Fullanteli and Allegra, (2003), ICT offers to enterprises a wide range of possibilities for improving SME's competitiveness. It provides mechanisms for getting access to new market opportunities and specialized information services such as distance consulting, continuous training, and new advisory modes.

Organizations can exchange real-time information and build closer relationships with their customers, suppliers and business partners. Customers can receive immediate feedback that allow companies to react fast to changing customers' demands and recognizing new market niches. This implies that organizations that are able to exploit the potentials offered by ICT can handle innovative processes such as Supply Chain Management (SCM), Customer Relationship Management (CRM) and Knowledge Management (KM) more effectively (Fullanteli and Allegra, 2003). Also, Swift, (2009) argues that SMEs benefit from the use of ICT as it connects them more easily and cheaply to external contacts. Through the use of ICT infrastructures, SMEs can engage in e-commerce.

Electronic commerce will aid them in increasing their efficiency in their day-to-day business operations and sustain their business growth through the opening of new market channels, and to increase the flow of information (Ongori & Migiro, 2010). ICT enable SMEs to have access to robust business information that lead to organizational effectiveness (Irani, 2002). Hence, ICT is now viewed as a vital resource that enhances the competitiveness of SMEs in any business environment.

### 2.3 ICT ADOPTION AND FIRM PERFORMANCE

Despite the potential benefits of ICT and e-commerce, there is debate about whether and how their adoption improves firm performance. Use of and investment in ICT requires complementary investments in skills, organisation, innovation, investment and change entails risks and costs as well as bringing potential benefits. While many studies point to the possibility of market expansion as a major benefit for SMEs, larger businesses can also expand into areas in which SMEs dominated. Moreover, it is not easy for SMEs to implement and operate an on-line business, as this involves complementary costs for training and organisational changes as well as direct costs of investing in hardware and software solutions.

While many studies provide evidence of the positive effects of ICT adoption on firm performance, others have shown no relation between computer use and firm performance. A study of Canadian manufacturing establishments (plants) with ten or more employees (excluding food processing establishments) drawn from the Statistics of Canada's business register, shows that those with high productivity growth are more likely to be using greater numbers of advanced ICT (Baldwin, 2002). Between 1988 and 1997, advanced technology users grew more in terms of both productivity and profitability than non-ICT users, especially when they use communication technologies, including company-wide and/or inter-company computer networks.

Recently, Organisation and Economic Cooperative Development (OECD) analysis shows the impacts of ICT and e-business strategies on firm performance as being positive in the overall, but that ICT are not a panacea in themselves. The OECD's Electronic Commerce Business Impacts Project (EBIP) studied a set of 220 early successful adopters of e-business strategies in a range of established sectors in eleven different countries. This study showed the positive impacts of e-commerce on their turnover and profitability and to a lesser extent on employment, most notably when e-commerce is part of larger business strategies of firms (OECD, 2002). Further work by researchers in 13, OECD countries, based on large scale statistical surveys provides, evidence that the use of ICT can contribute to improved firm performance, in terms of increased market share, expanded product range, customised products and better response to clients demand. Moreover, it indicates that ICT may help reduce inefficiency in the use of capital and labour, e.g. by reducing inventories, and that the more customers or firms are connected to the network, the greater the benefits (spillover effects). However, the analysis shows that complementary investments in skills, organisational change and innovation are key to making ICT work, and that the use of ICT affects firm performance primarily when accompanied by other changes and investments and that without these, the economic impact of ICT may be limited.

Denni, (1996) stresses that every business must bring ICT into their business operation and take advantage of the benefits they offer. Small businesses are increasingly using and adopting information and communication technology due to the advent of Personal Computers, (PCs), cost-effectiveness and cheaper ICT products. Alberto and Fernando, (2007) argue that the use of ICT can improve business competitiveness with internet providing numerous opportunities for SMEs to compete equally with large corporations. Apulu and Latham (2010) state that appropriate use of ICT can assist SMEs gain competitive advantage by reducing costs and improving core business processes. ICT improves business competitiveness and enhances enterprise performance through indirect cost savings such as labour cost and increased labour productivity and direct cost such as reduction of firms input (Chowdhury & Wolf, 2003). According to Brynsolfsson and Hitt (2000), the use of ICT can help to cut down the cost of coordination, communication, information processing and also enable efficient service provision at lower cost.

As the world economy continues to move toward increased integration as a result of advances in information communications technology, and the increasing reduction in trade barriers, some of the greatest opportunities for small businesses will derive from their ability to participate in the regional and international markets (Mutula & Brakel, 2006). Adoption of the ICT is considered to be a means to enable these businesses to compete on a global scale, with improved efficiency, and closer customer and supplier relationships (Chong et al., 2001). In this respect, SMEs should consider information and communication technology (ICT) as an important approach in their business to take competitive advantage from the global markets (Mutsaers et al., 1998). Moreover, ICT is a resource of SME which may help them to access and contribute to in order to enhance its competitiveness (Swash, 1998).

Some empirical studies by Bartelsman and Doms (2000), Brynjolfsson and Yang (1996), Dedrick et al. (2003), Kohli and Devaraj (2003) and Melville et al. (2004) confirm the positive effect of information and communication technology (ICT) on firm performance in terms of productivity, profitability, market value and market share. Their study also reveals that ICT has some effect in terms of intermediate performance measures, such as process efficiency, service quality, cost savings, organization and process flexibility and customer satisfaction. The introduction of ICT will offer various new investment opportunities within local industries, particular in the area of SMEs. Industries that are developing may take advantage of ICT which are being recognized by many previous studies. In fact, there is a need to accelerate the implementation of ICT to improve business performance.

**3. RESEARCH METHODOLOGY**

This study is essentially investigative and explanatory and seeks to know the effectiveness of the adoption of ICT on the performance of SMEs in Nasarawa State. The structure of its process and procedure is therefore descriptive. This study belongs to the generic family research design type called survey design.

Due to the technical nature of the topic of study, coupled with the need to ensure that the responses obtained are representative and reliable enough, the population of this study was narrowed to Nasarawa State, Nigeria with 100 SMEs randomly selected as sample. A questionnaire (or the research instrument) was administered to each of the sampled firms but only 96 were retrieved and analysed, 4 were not returned. The copies of the 100 questionnaires were given to managers and/or owners of the respective sampled SMEs in the 13 Local Government Areas (LGAs) of Nasarawa State.

The questionnaire was designed in such a way as to provide vital answers for the research questions and hypotheses tested. The questionnaire contained a set of questions classified into two major sections; section "A" and section "B". Section "A" featured questions on bio-data of the respondents, while Section "B" contained numerous statements of assertion and closed-ended questions. These were designed primarily to provide information for testing the hypotheses using Pearson Product Moment Correlation Coefficient (PPMCC) with the aid of SPSS in addition to descriptive statistics to analyse the differences in mean and standard deviation of the numerous statements of assertion. The opinions of respondents to these statements were sought out through likert scale format which is a psychometric scale commonly used in questionnaires, being the most widely used scale in survey researches.

**4. RESULTS AND DISCUSSION**

The results and discussion of this study were analysed based on the hypotheses of the study. Descriptive and inferential statistics such as Pearson Product Moment Correlation Coefficient adopted as analytical tools. The table is the result of the computation of the mean and standard deviation from the responses collected from the sample studied.

**DESCRIPTIVE STATISTICS**

	N	Mean	Std. Deviation
Adoption of ICTs	94	4.8404	.36817
Productivity of SMEs	96	3.4896	1.45815
Profitability of SMEs	94	3.5319	1.41954
Turnover of SMEs	96	3.5313	1.40640
Efficiency of SMEs	94	3.5213	1.41215
Customer's Satisfaction in SMEs	93	3.5054	1.41132
Cost Reduction in SMEs	96	4.6979	.46157
Employment Generation in SMEs	95	4.2211	.96952
Time Savings in SMEs	95	3.5368	1.41279
Valid N (listwise)	90		

Source: SPSS Output, 2013

The above table confirms the effectiveness of the adoption of ICTs in SMEs given the high mean score of above 4.84. This follows that the adoption of ICT in SMEs has more influence on cost reduction and employment generation with a high mean score of above 4.69 and 4.22 respectively. This means, they are rated high compared to profitability, turnover, efficiency, customer's satisfaction and time saving with respective mean scores of above 3.53, 3.53, 3.52, 3.50 and 3.53 respectively. Question on whether the adoption of ICT increases productivity scored the lowest mean score of about 3.49 from the study. This implies there is not enough productivity in SMEs in Nasarawa State to justify the cost savings and employment generations.

**CORRELATIONS**

		Adoption of ICTs	Productivity of SMEs
Adoption of ICTs	Pearson Correlation	1	.364(**)
	Sig. (2-tailed)		.000
	N	94	94
Productivity of SMEs	Pearson Correlation	.364(**)	1
	Sig. (2-tailed)	.000	
	N	94	96

Source: SPSS Output, 2013

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

From the above Pearson's results, it is clearly indicated that the adoption of ICT in SMEs Nasarawa State has significant positive correlation with productivity. This implies that productivity in SMEs increases with increase in the adoption of ICTs. The correlation is low because it is only significant at 0.01 levels but it is positive and direct. The Null hypothesis that states that, there is no significant correlation between the adoption of ICTs and the productivity of SMEs in Nasarawa State is rejected.

**CORRELATIONS**

		Adoption of ICTs	Profitability of SMEs
Adoption of ICTs	Pearson Correlation	1	.249(*)
	Sig. (2-tailed)		.016
	N	94	93
Profitability of SMEs	Pearson Correlation	.249(*)	1
	Sig. (2-tailed)	.016	
	N	93	94

Source: SPSS Output, 2013

\*Correlation is significant at the 0.05 level (2-tailed).

The above Pearson's results indicate that the adoption of ICTs in Nasarawa State SMEs has significant positive correlation with profitability. This implies that profitability in SMEs increases with increase in the adoption of ICTs. The correlation is significant at 0.05 levels. Thus, the Null hypothesis that states that, there is no significant correlation between the adoption of ICTs and the profitability of SMEs in Nasarawa State is rejected.

**CORRELATIONS**

		Adoption of ICTs	Cost Reduction in SMEs
Adoption of ICTs	Pearson Correlation	1	-.228(*)
	Sig. (2-tailed)		.027
	N	94	94
Cost Reduction in SMEs	Pearson Correlation	-.228(*)	1
	Sig. (2-tailed)	.027	
	N	94	96

Source: SPSS Output, 2013

\*Correlation is significant at the 0.05 level (2-tailed).

From the above Pearson’s results, it is clearly indicated that the adoption of ICTs in Nasarawa State SMEs has significant negative correlation with cost savings. This implies that cost of expenditures in SMEs decreases with increase in the adoption of ICTs. The correlation is significant at 0.05 levels. Thus, the Null hypothesis that states that, there is no significant correlation between the adoption of ICTs and the cost reduction of SMEs in Nasarawa State is rejected.

**CORRELATIONS**

		Adoption of ICTs	Employment Generation in SMEs
Adoption of ICTs	Pearson Correlation	1	.220(*)
	Sig. (2-tailed)		.033
	N	94	94
Employment Generation in SMEs	Pearson Correlation	.220(*)	1
	Sig. (2-tailed)	.033	
	N	94	95

Source: SPSS Output, 2013

\*Correlation is significant at the 0.05 level (2-tailed).

From the above Pearson’s results, it is clearly indicated that the adoption of ICT in Nasarawa State SMEs has significant positive correlation with employment generation. This implies that employment generation in SMEs increases with increase in the adoption of ICT. The correlation is significant at 0.01 levels. Thus, the Null hypothesis that states that, there is no significant correlation between the adoption of ICT and the employment opportunity in SMEs in Nasarawa State is rejected.

It suffices to say from the above results that, the adoption of ICT has positive and significant correlation with the productivity of SMEs in Nasarawa State given the coefficient and level of significant of 0.364 & 0.000 respectively. Thus, our hypothesis that says, there is no significant correlation between the adoption of ICT and the productivity of SMEs is rejected. This implies that adoption of ICT by SMEs in Nasarawa State could lead to massive productivity. This is consistent with the findings in previous studies such as Brynjolfsson and Yang (1996), Bartelsman and Doms (2000), Baldwin (2002), Dedrick et al. (2003), Kohli and Devaraj (2003). Thus, the adoption of ICTs by SMEs in Nasarawa State has not led to increased productivity given the lowest mean score of about 3.49 to commensurate the employment target of the SMEs.

Similarly, the adoption of ICTs has positive and significant correlation with the profitability of SMEs in Nasarawa State given the coefficient and level of significant of 0.249 & 0.016 respectively. Thus, the Null hypothesis is rejected by accepting the alternate hypothesis that the correlation between the adoption of ICT and the profitability of SMEs in Nasarawa State is significant. This means that the adoption of ICT by SMEs in Nasarawa State has increased the profitability. This is consistent with the findings in previous studies such as Brynjolfsson and Yang (1996), Bartelsman and Doms (2000), Dedrick et al. (2003), Kohli and Devaraj (2003) and Melville et al. (2004). It follows that the adoption of ICT by SMEs in Nasarawa State would increase profitability in collaboration with increased turnover, cost reduction, efficiency and customer’s satisfaction.

It is also evident from the above results and analysis that, the adoption of ICT has negative and significant correlation with cost savings of SMEs in Nasarawa State given the coefficient and level of significant of -0.228 & 0.027 respectively. Thus, the Null hypothesis is rejected by accepting the alternate hypothesis that the correlation between the adoption of ICT and the cost savings of SMEs in Nasarawa State is significant. This means that, the adoption of ICT by SMEs in Nasarawa State has significantly reduced cost of expenditure. This is consistent with the findings in previous studies of Brynjolfsson and Hitt (2000) who argued that the use of ICT can help to cut down the cost of coordination, communication, information processing and also enable efficient service provision at lower cost, Chowdury and Wolf (2003) and more recently Apulu and Latham (2010) confirmed the above finding in the studies.

The result also shows that, the adoption of ICT is significantly positively correlated to employment generation in SMEs in Nasarawa State given the coefficient and level of significance of 0.220 and 0.033 respectively. Thus, the Null hypothesis is rejected by accepting the alternate hypothesis that the correlation between the adoption of ICT and employment generation in SMEs in Nasarawa State is significant at 5%. This means that the adoption of ICTs by SMEs in Nasarawa State would significantly increase employment opportunities. This is consistent with the findings in previous studies such as Denni (1996), Swift (2009). The results revealed that the employment opportunities in SMEs suffer a setback because of the defective productivity in the SMEs that could not commensurate the needed target.

**5. CONCLUSIONS AND RECOMMENDATIONS**

From the study conducted and the findings obtained, the following conclusion were reached, the adoption of ICT is positively correlated to productivity, profitability and employment generation with statistical significance. The cost savings correlation is negative and statistical significance. This implies that productivity, profitability and employment opportunities of SMEs in Nasarawa State increase with an increase in the adoption of ICT but, cost saving decreases with an increase in the adoption of ICT. That is, the correlation between the adoption of ICTs, and productivity, profitability and employment generation is positive and significant, but that of cost savings is inverse. Thus we conclude that, the adoption of ICTs could exert positive impact on the performance of SMEs in Nasarawa State by reducing cost of expenditure, and increasing productivity, profitability and employment opportunities. The study also concludes that ICT adoption amongst SMEs in Nasarawa State have competitive advantage, satisfy their customers, and saves time and cost. The significance of this study is of value to SME owner-managers and IT professionals as it could encourage them to intensify their efforts in deploying ICT in their various organizations and enlightening employees on the benefits that is associated with the adoption of ICT.

The study recommends, based on the conclusions reached that; Nigerian SMEs should develop better organizational capabilities by integrating ICT in their day-to-day activities as it could enable them to effectively benefit from the opportunities that are associated with the use of ICT in the current knowledge based economy. Also, in order for SMEs in Nigeria to keep up with competitions in the present era of technological advancements, ICT awareness should be increased and the Nigerian government should put in place viable frameworks that could support these SMEs and Nasarawa State government should throw its weight fully to support SMEs in the state.

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## APPENDIX

## QUESTIONNAIRE

Please, TICK ( ) where appropriate

## SECTION A: BIO DATA

1. Sex: Male ( ) Female ( )
2. Age: 18-25 ( ) 26-30 ( ) 31-40 ( ) 41-50 ( ) 51-60 ( ) 61 & above ( )
3. Marital Status: Single ( ) Married ( )
4. Educational Qualifications:
 

WASC/SSCE	( )
OND/HND/Bachelors' Degree	( )
Post-Graduate Qualifications	( )
Others/specified	( )

## SECTION B: ADOPTION OF ICT AND SMEs PERFORMANCE

5. Do you agree that the adoption of Information and communication Technology (ICT) has great influence on the general performance of Small and Medium Enterprises (SMEs) in Nasarawa State?
  - i. Strongly Agree ( ) ii. Agree ( ) iii. Undecided ( ) iv. Disagree ( ) v. Strongly Disagree
6. Do you agree that increase in productivity increases the profitability of SMEs?
  - i. Strongly Agree ( ) ii. Agree ( ) iii. Undecided ( ) iv. Disagree ( ) v. Strongly Disagree
8. To what extent do you agree that increase in productivity reduces cost?
  - i. To a great extent ( ) ii. To somewhat extent ( ) iii. Undecided ( ) iv. To a little extent ( ) v. To no extent at all
9. Do you agree that internet facilities have significant impact on SMEs sales turnover?
  - i. Strongly Agree ( ) ii. Agree ( ) iii. Undecided ( ) iv. Disagree ( ) v. Strongly Disagree
10. Do you agree that the profitability of SMEs in Nasarawa State increases with the adoption of ICTs?
  - i. Strongly Agree ( ) ii. Agree ( ) iii. Undecided ( ) iv. Disagree ( ) v. Strongly Disagree
11. Do you agree that employment opportunity in SMEs in Nasarawa State is influenced by the adoption of ICT?
  - i. Strongly Agree ( ) ii. Agree ( ) iii. Undecided ( ) iv. Disagree ( ) v. Strongly Disagree
12. What is the effect of ICT on the efficiency of SMEs?
  - i. Avery great effect ( ) ii. Great effect ( ) iii. Undecided ( ) iv. Little effect ( ) v. No effect
13. What is the effect of ICT on customer's satisfaction in SMEs products and services?
  - i. Avery great effect ( ) ii. Great effect ( ) iii. Undecided ( ) iv. Little effect ( ) v. No effect
14. Do you agree that ICT provides information that satisfies the need of the customers?
  - i. Strongly Agree ( ) ii. Agree ( ) iii. Undecided ( ) iv. Disagree ( ) v. Strongly Disagree
15. To what extent do you agree that the adoption of ICT in SMEs has reduced cost?
  - i. To a great extent ( ) ii. To somewhat extent ( ) iii. Undecided ( ) iv. To a little extent ( ) v. To no extent at all
16. Do you agree that the adoption of ICT saves time in SMEs operations?
  - i. Strongly Agree ( ) ii. Agree ( ) iii. Undecided ( ) iv. Disagree ( ) v. Strongly Disagree ( )

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