

## ASSESSMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY ON THE PERFORMANCE OF SELECTED SMALL AND MEDIUM SCALE ENTERPRISES IN ILORIN METROPOLIS, NIGERIA

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### ABSTRACT

*Information and communication technologies (ICT) and its impact in the economic, social and personal development had become an important object of scientific researches during recent decades. The focus of the study is on "Assessment of ICT on the performance of SMEs in Ilorin. A sample size of 100 SMEs was selected in a cross-sectional survey research design in Ilorin, Kwara State. The returned copies of questionnaire of 74 representing (74.0%) were accordingly analysed using simple percentage and regression analysis. The major result of the hypothesis tested showed that there is a significant relationship between the independent variable (adoption of ICT) on dependent variable (SMEs performance) ( $R = .663$ ,  $R^2 = .440$ ;  $P < .05$ ). Findings from the analysis of the data indicate that SMEs have gained a significant advantage using ICTs particularly in the areas of communication and customers' satisfaction, marketing efficiency, market penetration and promptly responding to market changes, quality improvements for products and services, reducing operational costs and more importantly increasing revenue stream. In conclusion, since ICT has been shown to be a driving force to the improved performance of SMEs, its full adoption and usage should be encouraged and aggressively pursued. Based on the finding, the study recommended that government should invest heavily on ICT infrastructure and awareness aspects related to the benefits and adoption of ICT. The study also recommended that entrepreneurs/ business owners should be trained on online transactions (e-commerce), online business relationships (B2B and B2C), and resource management.*

### INTRODUCTION

The modern economic environment which is dominated by globalization, hyper-competition, and knowledge and information revolution has revolutionized the way business is conducted (Pavic, 2007). Today's business world has been deeply influenced by Information and Communication Technologies (ICT) and the application of ICT among business is widespread. ICT are rapidly changing global production, work and business methods and trade and consumption patterns in and between enterprises and consumers. Denni (1996) emphasised that, every business owner must bring ICT into their business operation and take advantage of the benefits they offer.

Information and communication technology (ICT) and e-business applications provide many benefits across a wide range of intra- and inter-firm business processes and transactions. ICT applications improve information and knowledge management inside the firm and can reduce transaction costs and increase the speed and reliability of transactions for both business-to-business (B2B) and business-to-consumer (B2C) transactions. In addition, they are effective tools for improving external communications and quality of services for established and new customers.

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 and 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, 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).

Accordingly Ghobakhloo, Sabouri, Hong and Zulkifli (2011) noted that Small and medium-sized enterprises (SMEs) account for major source of employment, technological advancements, and competitive advantages for both developed and developing countries. Owing to the intensified competitive pressure and necessity for entering to global market undergone by SMEs, these businesses are incrementally employing Information Technology (IT) to take advantage of its substantial benefits. Furthermore, Information and Communication Technology has brought about changes in the way businesses are conducted amongst SME's as they play a major role in storing, retrieving, processing and disseminating information.

ICT has played a major role by opening up opportunities for SMEs to market and sell their products online to a global audience, and has enabled employees and other stakeholders to work and access information anywhere in the world. This has helped SMEs to cut costs associated with traditional business processes (Lawrence, 2009). By use of an organisation's own website or through the use of social networking websites such as Facebook, one can reach millions instantly and still be able to offer personalized services and be able to engage clients and customers on a one-on-one level while marketing one's services and products (Gilmore, 2007).

Through the use of ICT, business owners can gather timely and accurate information that can be beneficial to their businesses and help them stand out in the competition. This enables such businesses and entrepreneurs become relevant in modern informed and techno-based world. Through Internet which is a sub-set of ICT, SMEs can source for supplies and other resources online thus reducing the need for physical travel and save costs. A SME or learning institution can also offer online education, training, or consulting services to its clients through the Internet thus overcoming the political and geographical barriers and delimiting the need for physical contacts (Lawrence, 2009; Eshun and Taylor, 2009).

## **STATEMENT OF THE PROBLEM**

The introduction highlighted a number of benefits derivable from Information and Communication Technology which affirms that Information and Communication Technology is germane growth and development of a business in any economy. The major concern of this research is to assess ICT on the performance of SMEs in Ilorin. The use of ICT to improve performance is one of the problems being faced by SMEs at present due to the lack of knowledge on the benefit of ICT in their businesses. Entrepreneurs are still using the traditional tools to stay competitive. Given the chances SMEs can identify the current economic possibilities and benefits in adopting ICT. Therefore the focus of this research is to assess the degree to which the application of ICT can help to improve the economy and improve performance of small and medium scale enterprises in Ilorin.

The recent increase in technological advancement has had strong impact on SMEs in other parts of the world including China and Brazil (James, 2011). They came by as a result of conscious government efforts through the implementation of policies to make ICT available to SMEs. The government of Nigeria is equally making such efforts by implementing policies to make the ICT sector more advanced. It has made the economy more attractive to attract investors in the telecommunication industry, television and radio and has made it easier to import computer related technologies into the country.

## **RESEARCH QUESTION**

Does the use of Information and Communication Technology improves the performance of Small and Medium Scale Enterprises in Ilorin Metropolis?

## **OBJECTIVE OF THE STUDY**

The main objective of this study is to assess the contribution of ICT to the performance of small and medium scale enterprises in Ilorin metropolis.

## **RESEARCH HYPOTHESES**

Ho: There is no significant relationship between ICT and improved performance of SMEs in Ilorin Metropolis.

## **SIGNIFICANCE OF THE STUDY**

SMEs development is a major debate at the global level especially as a weapon for poverty reduction, job creation and general economic growth. It is hoped that the outcome of this research will add up or in other words contribute to existing studies especially with regards to the effect of ICT on small and medium-sized enterprises in Ilorin metropolis as well as barriers and challenges encountered through their transition to adapting ICT. The intended beneficiaries of this research study include the government, particularly the Federal Ministry of Information and Communication, who may make use of the results to help improve national ICT initiatives. The government can use the information to come up with policies that would encourage more businesses and entrepreneurs adopting ICT.

## **SCOPE OF THE STUDY**

The scope of this study is to assess ICT on the performance of small and medium scale enterprises in Ilorin metropolis. The justification for the choice of the study area is based on its economic viability and the revolution of ICT on SMEs in the area. The study covers the period of 2004-2015. The reason for the selection of this period is because that is the period when the awareness and impact of ICT was felt on SMEs performance. The researcher used One hundred (100) SMEs in Ilorin.

## **LITERATURE REVIEW**

### **CONCEPTUAL FRAMEWORK**

#### **THE CONCEPT OF INFORMATION AND COMMUNICATION TECHNOLOGY AND SMALL AND MEDIUM SCALE ENTERPRISES**

ICT is defined as an umbrella term that covers all technical means for processing and communicating information. The convergence of Information Technology and Telecom Technology gave birth to ICT (Akunyili, 2010). Practically speaking, ICT finds expression in digital technology and all its uses and variants, including the computer, the internet, mobile telephony, the different electronic applications (e-banking, e-governance, e-commerce, etc), digital media and broadband technology (Oluwatayo, nd).

ICT is also defined as any technology that facilitates communication and assist in capturing, processing and transmitting information electronically. Some commonly used ICTs in many developing countries include Radio, television and print media. Modern ICTs such as software, internet, fax, e-mails, mobile phones etc have become available to many countries worldwide in recent years and they are effective means of communicating knowledge and information (Parliamentary Office of Science and Technology, 2006; Apulu and Lathman, 2006; Kweku, 2006). However, the most rapid growth in ICT today is in mobile phone usage for business purposes.

SMEs have been defined in various ways and there is no generally accepted definition of small business because the classification of business into large-scale or small-scale is a subjective and qualitative judgment. In Nigeria, there is no clear-cut definition that distinguishes a purely small-scale enterprise from a medium-scale enterprise.

The Central Bank of Nigeria in its Monetary Policy Circular No. 22 of 1998, defined Small and Medium Scale Enterprise as having an annual turnover not exceeding 500,000 naira. The National Economic Reconstruction Fund (NERUND) put the ceiling for small-scale industries at 10 million naira. Section 37b(2) of the Companies and Allied Matters Decree of 1990 defines a small company as one with: an annual turnover of not more than 2 million naira; and net asset value of not more than 1 million naira (Ekpenyong and Nyong, 1992).

According to Akomea-Bonsu and Sampong (2012), Bolton committee in 1971 formulated an economic definition. With regards to the economic definition a firm is regarded as small if it has relatively small share of their market place, managed by owners or part owners in a personalized way and not through the medium of a formalized management structure; is independent in the sense of not forming part of a large enterprise. With the establishment of Small and Medium Enterprises Equity

Investment scheme (SMEEIS) by the CBN in 1999, the bankers committee in 2006 defined Small and Medium Enterprise as any enterprise with a maximum asset base of N1.5billion (excluding land and working capital), and with no lower or upper limit of staff. However, according to Kalanje (2002), the definition of SMEs is based on an enterprise's number of employees, the level of assets, sales turnover of the said enterprise or a combination of these criteria in most countries. Despite the varying perspectives in the above definitions researchers are in agreement in indicating that Small and Medium Scale Enterprises (SMEs) are defined in terms of size or market share; capital base; numbers of employees; turnover and asset value among others. Arguably these characteristics of the small and medium scale enterprise affect the level of adoption of ICT in the sector.

Accordingly, Akomea-Bonsu and Sampong (2012), Taylor and Murphy (2004), Martin and Matlay 2001 agree and acknowledge that there are many factors that make SMEs different, such as turnover, industry, number of employees and format of business. These factors need to be studied in more detail to establish how they influence the adoption process.

### **IMPACT OF ICT ON SMES PERFORMANCE**

According to Alam and Noor (2009), Information and Communication Technology offers enterprises avenues to compete on a global scale with improved efficiency and closer customer and supplier relationships. Similarly, Melville (2004) highlight that the use of ICT brings about customer satisfaction by improving service quality thereby offering new opportunities for companies. Moreover, Apulu and Latham (2010) claim that ICT enables customers to give immediate feedbacks that allow companies to react fast to customers' demands and recognize new market niches. This entails that organizations that are able to exploit the potentials offered by ICT can handle various types of innovative processes in their businesses since ICT influences the performance of an organization in multifaceted ways. Thus, ICT can bring about change in organizations and make them more competitive, innovative and assist to increase organizational growth (Obijiofor, 2005).

### **BARRIERS TO ICT ADOPTION**

Large organizations have enough resources to adopt ICT while on the other hand SMEs have limited financial and human resources to adopt ICT. Duan (2002) identified lack of ICT skills and knowledge in SMEs as one of the major challenges. Houghton and Winklhofer (2004) have reported a slow response of SMEs relating to adoption of ICT.

Shiels (2003) found that characteristics of the firm and industry sector are contributory factors to the adoption and exploitation of ICTs by SMEs. Kapurubandara(2006), have categorized internal and external barriers that impede adoption of ICT by SMEs in a developing country. The internal barriers include owner manager characteristics, firm characteristics, cost and return on investment, and external barriers include: infrastructure, social, cultural, political, legal and regulatory.

### **DIRECT AND INDIRECT EFFECT OF ICT ON SMES' PERFORMANCE**

The SME sector has an important role to play in economic development, poverty reduction and employmentcreation in developing economies. The SME sector largely exceeds the average economic growth of national economies in many countries and contributes significantly to employment creation (Esselaar, et al., 2006; Higon, 2011).

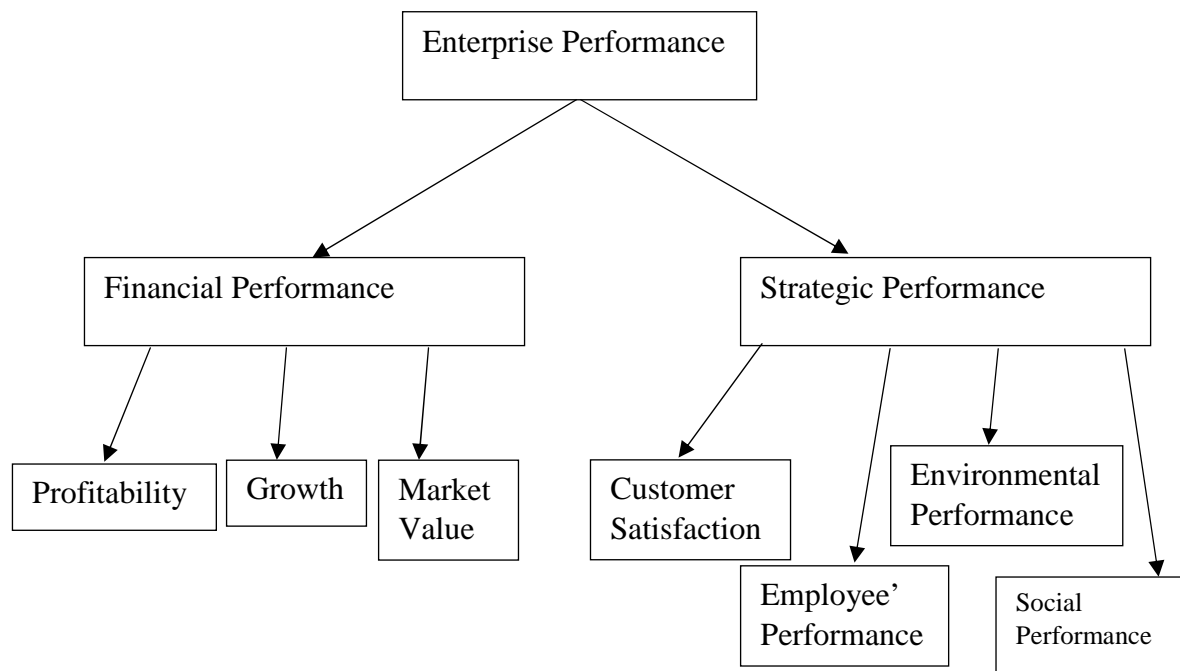
Consoli (2012), summarized various indicators and suggested that ICT effects on performance could be structured and analyzed via such indicators as efficiency, effectiveness and competitiveness, innovative business and intangible benefits. Undoubtedly ICT has a powerful impact on the economic performance and could be characterized by a highdegree of technological progress and productivity. Also it has an important social impact (Matei&Savulescu, (2012).

Liang, You and Liu (2010) and Santos and Brito (2012) identified that performance of thecompany/enterprise has two types:

- Financial performance
- Strategic performance

FIG. 1

DIMENSIONS OF PERFORMANCE



Source: (Santos & Brito, 2012)

**FINANCIAL PERFORMANCE**

- i. Profitability:** Return on Assets, Return on investment, Net income/Revenues, Return on equity, Economic value added
- ii. Growth:** Earnings per share, Stock price improvement, Dividend yield, Stock price volatility, Market value added (market value / equity),
- iii. Market value:** Market-share growth, Asset growth, Net revenue growth, Net income growth, Number of employees' growth

**STRATEGIC PERFORMANCE**

- i. Customers' satisfaction:** Mix of products and services, Number of complaints, Repurchase rate, New customer retention, General
- ii. Employees' satisfaction:** Turn-over, Investments in employees development and training, Wages and rewards policies, Career plans, Organizational climate, General employees' satisfaction customers' satisfaction, Number of new products/services launched
- iii. Environmental performance:** Number of projects to improve / recover the environment, Level of pollutants emission, Use of recyclable materials, Recycling level and reuse of residuals, Number of environmental lawsuits
- iv. Social performance:** Employment of minorities, Number of social and cultural projects, Number of lawsuits filed by employees, customers and regulatory agencies

**THEORETICAL LITERATURE**

There are several existing theories and different approaches that help to explain and advance the understanding of ICT adoption in small businesses. Prominent among the theories are the 'innovation-decision process framework' and 'technology acceptance model'. Among the theories, this study is built on the 'technology acceptance model' which has been described to stem from the theory of reasoned

action and aims at predicting the attitude of potential users towards a new technology by focusing on individual perceptions in evaluating costs and benefits.

Technology Adoption Model (TAM) has proven to be a robust model that is frequently used to study user acceptance of ICT. It is widely viewed as an information system theory which helps to understand the adoption and use of internet (Davis, 1989). The theory helps to understand how adopters come to accept or reject the use of ICT in their small businesses.

## **EMPIRICAL LITERATURE OF ICT ON IMPROVED PERFORMANCE OF SMEs**

A number of related empirical and theoretical literatures have probed into the subject of ICT adoption on improved performance of SMEs.

Mutua and Wasike (2009) reviewed literature on ICT adoption and its impacts on firms in both developing and developed countries and analyses the determinants of ICT adoption and their impact on firm's performance. By use of an additional survey on ICT service providers, they unearth and provided challenges facing ICT providers in Kenya and how these challenges can be dealt with. Their study provided empirical evidence both on the factors that determine adoption of ICT (landline or internet connection) and the impact of proxies for ICT adoption on output of SMEs. Findings show that the main determinants of adoption of ICT are the size of the firm as indicated by firm employment, formal registration, and if a manager has some internet training. Registration or formalization of firms is also correlated with higher probability of adopting ICT. As predicted, the study finds that ICT tends to augment both capital and labour thus raising productivity of firms. Thus, the analysis shows that the ICT adoption as proxied by access to internet or a landline is significantly correlated with higher SMEs output. The study shows that adoption and use of ICT is a key factor to helping enterprises to raise their productivity and competitiveness.

Ghobakhloo (2011), analyzed reasons that persuade small and medium enterprises (SMEs) to adopt information technology (IT), as well as which factor and how it affects the level of IT sophistication in SMEs entrepreneurial segment. Drawing on the technology-organization-environment view of the firm, the study hypothesizes that technological, organizational and environmental factors can be viewed as the reasons for IT sophistication within SMEs. The proposed research model and hypotheses were tested using survey data from a sample of 121 Iranian manufacturing SMEs. Findings showed that external pressure, information processing needs, IT-enabled innovativeness and performance and competitive pressure are the key drivers of IT sophistication within SMEs. The findings offer valuable insights to executives and consultants on why SMEs move toward IT adoption. Likewise, the results of the study could serve as a benchmarking measure of reasons persuading SMEs to adopt sophisticated IT.

Alam and Noor (2009), examines the relationship between ICT adoption and its five factors which are perceived benefits, perceived cost, ICT knowledge, external pressure and government support. The results of this study show that three factors examined are significantly important to the adoption of ICT whereas perceived cost and external pressures are found to be insignificant in determining its adoption. This study provides a greater understanding of SME's perception about ICT adoption in their service business.

## **METHODOLOGY**

This study is an empirical investigation as the study was conducted through a self-administered survey questionnaire. The research design used for this research is descriptive survey. It is concerned with the collection of data for the purpose of assessing ICT adoption for improved performance of SMEs in Ilorin metropolis.

Questionnaire was the instrument used to elicit information from SMEs operators who use ICT devices like Personal Computer, Point of Sales Terminal (POS), Mobile Phones etc. to transact their businesses in the study area. The population frame was 179 registered SMEs according to a report by Adebayo (2015). A sample of 100 SMEs was selected in a cross-sectional survey research design out of which a total of 88 copies of questionnaires were correctly filled and returned. The questions were based on a 5-point Likert attitude scaling ranging from Strongly Agreed, Agreed, Undecided, Disagreed and Strongly Disagreed.

## DATA PRESENTATION

**Table 1: SEX OF RESPONDENTS**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid MALE	53	71.6	71.6	71.6
FEMALE	21	28.4	28.4	100.0
Total	74	100.0	100.0	

Source: Field Survey, 2016

Table 1 above shows the gender distribution of the respondents. It is revealed that fifty-three (53) respondents were male which constitute 71.6%, while twenty-one (21) were female which constitute 28.4%. This indicates that there were more male SMEs operators in the study area than female.

**TABLE 2: AGE OF RESPONDENTS**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18-25	36	48.6	48.6	48.6
26-35	23	31.1	31.1	79.7
36-45	12	16.2	16.2	95.9
46 AND ABOVE	3	4.1	4.1	100.0
Total	74	100.0	100.0	

Source: Field Survey, 2016

Table 2 above shows the age distribution of the respondents. It is revealed that thirty-six (36) respondents were age 18-25 years representing 48.6%, twenty-three (23) were between 26-35 years representing 31.1%, twelve (12) respondents were age 36-45 representing 16.2% while three (3) respondents were 46 and above years old representing 4.1%. This indicates that middle age of 18-25 years operates SMEs more in the study area.

**TABLE 3: NATURE OF BUSINESS**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid AGRO ALLIED	2	2.7	2.7	2.7
MANUFACTURING	1	1.4	1.4	4.1
TRADING	53	71.6	71.6	75.7
OTHERS	18	24.3	24.3	100.0
Total	74	100.0	100.0	

Source: Field Survey, 2016

Table 3 above shows the nature of the business of the respondents. It is revealed that two(2) respondents representing 2.7% operate agricultural related businesses, one (1) representing 1.4% operate manufacturing businesses, fifty-three (53) representing 71.6% operate trading while eighteen (18) representing 24.3% represented other businesses. This indicates that in the study area, majority of the SMEs operates trading related businesses.

**TABLE 4: HOW LONG HAVE YOU BEEN INTO BUSINESS**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid BELOW 5 YEARS	30	40.5	40.5	40.5
6-10 YEARS	28	37.8	37.8	78.4
11-20 YEARS	10	13.5	13.5	91.9
21 AND ABOVE	6	8.1	8.1	100.0
Total	74	100.0	100.0	

Source: Field Survey, 2016

Table 4 above shows the years of experiences of respondents. The table reveals that thirty (30) respondents representing 40.5% have below 5 years' experience; twenty-eight (28) respondents representing 37.8% have 6-10 years' experience, ten (10) respondents representing 13.5% have 11-20 years of experience, while six (6) respondents representing 8.1% have 21 and above years of experience. This indicates that many SMEs operators in the study area ventured into business not quite long but make use of technological devices.

**TABLE 5: WHAT KIND OF ICT DEVICES DO YOU OFTEN USE IN YOUR BUSINESS**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid PERSONAL COMPUTER	21	28.4	28.4	28.4
HAND SET	45	60.8	60.8	89.2
POINT OF SALE TERMINAL (POS)	2	2.7	2.7	91.9
OTHERS	6	8.1	8.1	100.0
Total	74	100.0	100.0	

Source: Field Survey, 2016

Table 4 above shows the kind of technological devices the respondents often use in their businesses. The table reveals that twenty-one (21) respondents representing 28.4% often use personal computer to transact businesses with customers; forty-five (45) respondents representing 60.8% often use hand set (Mobile phone) to transact businesses with customers, two (2) respondents representing 2.7% often use POS to ease transaction payment for their customers, while six (6) respondents representing 8.1% have 21 often use other technological devices. This indicates that many SMEs operators in the study area often use their mobile phones to transact businesses with their customers than any other technological devices.

## METHOD OF DATA ANALYSIS

To analyze the data collected from primary sources Pearson correlation moment analysis was adopted to assess ICT on the improved performance of SMEs in the study area.

## DATA ANALYSIS AND DISCUSSION OF FINDINGS

The statistical tool adopted to analyze the data generated is the Pearson Correlation using Statistical Package for Social Sciences to analyze the result.

Ho: There is no significant relationship between ICT and Improved performance of SMEs in the study area.

H1: There is significant relationship between ICT and Improved performance of SMEs in the study area.

### Table 4.1



**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.663 <sup>a</sup>	.440	.432	2.27530

a. Predictors: (Constant), ICT ADOPTION

Source: Researcher Computation, 2016

The model summary as indicated in table 4.1 shows that R Square is 0.440; this implies that 44% of variation in the dependent variable (SMEs performance) were explained by the constant variables (ICT adoption) while the remaining 56% is due to other variables that are not included in the model. This mean that the regression (model formulated) is useful for making predictions since the value of R<sup>2</sup> is close to 1

**Table 4.2**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	292.393	1	292.393	56.479	.000 <sup>b</sup>
	Residual	372.742	72	5.177		
	Total	665.135	73			

a. Predictors: (Constant), ICT Adoption

b. Dependent Variable: SMEs PERFRMANCE

The estimated F-value (56.479) as given in table 4.2 with significance value of 0.000, which is less than p-value of 0.05 (p<0.05) which means that the explanatory variable elements as a whole can jointly influence change in the dependent variable (SMEs Performance). The implication of this test was that, as a single variable elements, a particular explanatory variable element for instance the use of internet, as an element under ICT may not be significant to influence SMEs performance, but when it is combines with other variables such as government e-Readiness, market force e-Readiness and supporting industries e-Readiness, they can jointly lead to higher performance of SMEs.

**Table 4.3**

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.524	1.798		4.184	.000
	ICT ADOPTION	.633	.084	.663	7.515	.000

a. Dependent Variable: SMEs PERFRMANCE

The dependent variable as shown in the table 4.3 was SMEs Performance. The predictors is ICT, it is obvious that there is a direct relationship between ICT and SMEs Performance. This means an increase in the adoption of ICT can lead to high performance of SMEs. According to the result in the table above ICT t-test coefficient is 7.515 since the P-value is 0.000 which is less than 0.05 (i.e. <0.05). This means that these variables are statistically significance at 5% significant level. The overall summary of this

regression outcome in relationship to the coefficient of ICT adoption is that ICT adoption has led to high performance of SMEs.

**Decision Rule:** As a result of the outcome, the Null Hypothesis ( $H_0$ ) is rejected on the basis that the p-value is less 0.05. Hence the alternative hypothesis is accepted, that is there is a significant relationship between ICT and SMEs Performance in Ilorin metropolis. This is supported by Consoli (2012), that ICT effects on performance could be structured and analyzed via such indicators as efficiency, effectiveness and competitiveness, innovative business and intangible benefits.

## **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **SUMMARY OF THE FINDINGS**

Small and Medium Scale Enterprises are considered globally to be the engine of growth of modern economies and serve to provide more employment to a large portion of the population in a given economy than the big organizations hence contribute to poverty reduction. Globally, SMEs have some peculiar challenges inform of unstable business environment and or threat from the larger organizations. However, that being said the study also found out that most small and medium-sized enterprises have one way or other moderately adopted ICT applications even though it is not clear as to whether they have adopted basic or advanced ICT applications. However, the uptake and usage of mobile telephony technologies, personal computer, Point of Sales Terminal etc. are indeed a milestone achieved which certainly helped foster ICT diffusion and adoption. The rapid adoption of mobile phone, personal computer, POS and other technologies helped realize the perceived benefits of technology and has led many businesses to heavily rely on for their business operations.

It could be summarised that fairly majority of SMEs have gained a significant advantage using ICTs particularly in the areas of communication and customers satisfaction, marketing efficiency, market penetration and promptly responding to market changes, quality improvements for products and services, reducing operational costs and more importantly increasing revenue stream. The research findings correlate positively the gathered findings from the literature review related to the perceived benefits of ICT in terms of enhancing overall performance of the firm.

Furthermore, even though country facts indicate that the government has implemented several business regulation reforms aimed to assist business community in general and in particular SMEs such as easing business start-up processes, property registration, investor protection, access to credit and tax incentives, cross border trade and more importantly creating the enabling environment for ICT initiatives research findings indicate that the government needs to invest more in ICT infrastructure up to a saturation level. In addition, the findings indicate the need for the government to strengthen legal frameworks, areas such as privacy measurements as well as awareness of ICT benefits and consulting provisions. These two slightly different reflections provide an answer for what has been done so far and what needs to be done yet.

It was found that even if very small, a firm has the opportunity to attain competitiveness and outmaneuver its rivals if it constructs a culture that fully utilizes the opportunities that come with ICTs be it the internet, electronic commerce, e-business and communication technologies, knowledge-based innovation management. Furthermore, it was found that ICT can simply help firms to quickly locate more customers, outsource best suppliers, and most importantly reach suitable business partners worldwide. Enthusiastic respondents expressed that they have found ICTs as very effective in terms of decreasing the time between the outlay of capital and the receipt of products and services.

## **CONCLUSION**

The overall aim of this research was to assess how the use of Information and Communications Technology (ICT) has improved the performance of small and medium scale enterprises in Ilorin metropolis. The study showed that, a firm has the opportunity to attain competitiveness and outmaneuver its rivals if it constructs a culture that fully utilizes the opportunities that come with ICTs be it the internet, electronic commerce, e-business and communication technologies. Furthermore, it was found that ICT can simply help firms to quickly locate more customers, outsource best suppliers, and most

importantly reach suitable business partners worldwide. It was concluded that ICT helps SMEs operators to expanding geographical reach as well as increasing brand awareness, increasing revenue, improving customer services and interaction as well as competing with bigger rivals. ICT enables firms not only to create interaction with the customer but also a way that customers too can themselves design products and services according to their desire and need.

## **RECOMMENDATIONS**

On the strength of the above conclusions, the study recommends the following:

1. The study recommended that, government should address more about ICT infrastructure investment and awareness aspects related to the benefits and adoption of ICT.
2. The study recommended that, based on the increase interest in ICT adoption by SMEs, entrepreneurs/business owners should be trained on ICT and how it can be useful to the modern business such as e-commerce. They can be trained on online transactions (e-commerce), online business relationships (B2B and B2C), and resource management.
3. The study also recommended that, SMEs operators should adopt more ICT devices that could help them serve their customers better in any transaction since these will improve the efficiency and effectiveness of their businesses and therefore increase their profit level.

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