

RELEVANCE OF INFORMATION TECHNOLOGY IN THE EFFECTIVE MANAGEMENT OF SELECTED SMES IN LAGOS STATE NIGERIA

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ABSTRACT

Internet, computers and telecommunication systems have become very important delivery systems and productivity tools of electronic data and information. SMEs in Nigeria are yet to fully harness the potential benefits of adopting information technology to bring about prompt delivery of services, efficiency and the ability of customers to be served in any part of the country without any encumbrance. This study investigated the relevance of information technology in the effective management of selected SMEs in Lagos. The survey involves one hundred and fifty respondents comprising of managers and employees in selected SMEs within Lagos State. Questionnaires were used as a data collection tool. Four hypotheses were formulated and tested using descriptive analysis and regression analysis through the Statistical Package For Social Science (SPSS). Findings from the data analyzed shows that use of information technology by managements of SMEs helps to improve productivity and market shares thereby increasing the effectiveness of management. This study recommends proper education and training for managers and employees to create more awareness and improve the e-literacy of SMEs operators.

Keywords: Information Technology, SMEs, Management Efficiency, Competitiveness, Technology Adoption.

INTRODUCTION

For many years, small and medium scale enterprises in Nigeria have been faced with management challenges and one of the major problems has been grossly attributed to the absence of or inadequate use of Information Technology for effective management. The undoubted factor which indicates the improvement of the competitiveness of most enterprises is the usage of IT, (Bazhenova, Taratukhin & Becker, 2012). In Lagos State and Nigeria at large, the impact of IT on SMEs operation performance has not been greatly explored (Akande & Yinus, 2013) as files and folders are still in use for data storage and record keeping. In the same vein, Agwu & Murray (2015) posit that some business and government transactions are still conducted manually and lots of files and documents are shelved in large cabinets and handed from table to table. In this information age manual compilation of records with files and folders should not be in vogue, such a database system is prone to alterations and manipulations. Retrieval of such records becomes a needle in a haystack when the files and folders become voluminous over a long period of time. A comprehensive use of information technology in small and medium scale enterprises in Nigeria will be a change in the positive direction for the industry as this will reform and improve the efficiency of management of SMEs in Lagos state as well as Nigeria at large. The objectives of this study among others are 1) determine if use of information technology leads to increase in production output, 2) ascertain whether the application of Information technology

increases the efficiency of management of SMEs, 3) determine if Information Technology enhances competitiveness of SMEs and 4) clarify the challenges involved in the implementation of Information Technology and how it affects management. As this study is fixated on the relevance of information technology in the effective management of selected SMEs with specific reference to Lagos State, the scope of the study is therefore limited to the activities of selected SMEs within Lagos as a metropolitan city. While there are so many literatures on information technology and SMEs, none to the knowledge of the authors have discussed the relevance of IT on the effective management of SMEs, hence this study closes this gap.

LITERATURE REVIEW

SMEs have been identified by various governments and organizations as a key contributor to the sustainable development of any economy. SMEs drove job growth by the creation of more jobs than large firms and contributed greatly to overall job additions. Agwu & Murray (2015) in their submission identified E-commerce as a vital aspect of information technology which is still a new development in Nigerian SMEs. The study described E-commerce as a cost effective tool that streamlines the business process and makes use of improved relationship networking to achieve competitive advantage. Adopters of E-commerce are said to be at an advantage as it leads to improvement in the internal and external communication as well as a better use of organizational resources. Agwu & Murray also revealed that some of the reasons why E-commerce is adopted include access to virtual information, online delivery and price comparison amongst others. Agwu & Murray (2015) in conclusion recognized that some SME's in Nigeria have not yet harnessed the full potential benefits electronic commerce offers to the business world and factors such as illiteracy, cost and maintenance, inadequate skills have been identified to be barriers to ecommerce adoption by SMEs in Nigeria. According to Kumar (2014) who researched on the roles, advantages and disadvantages of Information Technology (IT) in India identified IT has as a crucial tool that supports the economy of the nation. One of the advantages of IT discussed in the work is globalization, as the business world is now closer and barriers relating to geographical distance have now been considerably reduced. It is easier for SMEs to focus on customers as market share is now enlarged due to the global phenomenon. However, on the flip side a Kumar also identified the disadvantages of the emergence of IT to include unemployment and lack of job security. A lot of employees are laid off as a result of downsizing or outsourcing caused by IT. The major categories affected in the chain of distribution are the middle men whose services are no longer required as final consumers can be reached from a click of a button. Kumar (2014) concluded that IT has brought about changes in the society and plays a key role in the world. Bazhenova, Taratukhin & Becker (2012) presented in their work some analysis of how information technology impacts business process management with SMEs as the major focus. They posit that SMEs contribute to the sustainability of large industries and are also a means for social diversification in the economy. The major factor for improved competitiveness in SMEs was attributed to the adoption of information technology which leads to increase in efficiency of the enterprise. Bazhenova, Taratukhin & Becker (2012) opine that information technology has not been properly used in business process management in SMEs as it is in their larger counterparts and concluded that more research is required on this study in order to come up with more suitable BPM models for SMEs. In the exploratory study conducted by Khazanachi (2005) to deduce information technology appropriateness, a contingency theory of fit was used to determine conditions and criteria's managers should look out for before adoption and

implementation of information technology. Rana (2013) also opined that various researches have been conducted to identify factors that promote the adoption of IT in SMEs but no major light has been shed on the issues of technology “fit” in relation to organizational performance. The technology of focus in his research was Electronic Data Interchange (EDI) because of its continuing importance in e-commerce with a notable presence in B2B commerce. Khazanchi (2005) concluded that their findings showed a substantial indication of a relationship between structural, contextual and organizational factors in the dimensions of IT appropriateness and it was also consistent with that of the contingency theory of “fit”.

Information Technology

The continuous growth of innovation and the rise of information technology in the world today have changed the way organizations compete. Amongst other factors, technology has been recognized as one of the agents of change in the world (Ogbomo & Ogbomo, 2008). Business enterprises in order to gain competitive advantage in their respective industries are making use of information technology which requires managers to harness and implement its uses (Beheshti, 2004). Thus, the revolution of information technology has transformed operations of enterprises that aim to achieve the five R's which according to Rana (2013) which is to produce the right product, with the right quality, in the right quantity, at the right price and at the right time. Annan (2002) posits that information society has emerged as human capacity has been expanded, nourished and built up with access to relevant tools and technologies as well as the appropriate training for their effective use. According to Hansson (2015) the word technology is of Greek origin, based on “techne” that means art or skill and “-logy” that means “knowledge of” or “discipline of”. Information technology refers to anything related to computing technology, such as networking, hardware, software, the internet or the people that work with these technologies (Kumar, 2014). According to Anyakoha (1991) cited in Ogbomo & Ogbomo (2008) information technology is the use of man-made tools for the collection, generation, communication, recording, re-management and exploitation of information. It includes those applications and commodities, by which information is transferred, recorded, edited, stored, manipulated or disseminated. Rendulic (2011) affirms that ICT in everyday life comprises of the following: e-mail, e-commerce, online banking, e-government, online shopping, e-learning, etc.

Basic information technologies can be used to store, retrieve, organize, transmit and algorithmically transform any type of information that can be digitized into numbers, text, video, music, speech and programs to name a few (Brynjolfsson & Hitt, 2000). Frenzel (2009) observed that information technology revolution has created innumerable opportunities as well as some challenges for numerous organizations; therefore, managers must learn to adapt to and maximize advantages offered by information technology in this information-based society while guarding against the threats associated with it. Technology has leveled the playing field (Scumaci, 2010), a world without PDAs, mobile phones and internet is unimaginable (Schubert & Leimstoll, 2007) as information technology has brought buyers and sellers closer together, thereby creating intimacy characterized in earlier eras (Levy & Powell, 1998). IT can improve efficiency and increase productivity in different ways leading to lower transaction cost, better resource allocation and technical improvements (Olusola & Oluwaseun, 2013). To succeed in this evolving environment, managers must be proficient in the adoption of new practices and improved techniques. IT saves money and time spent on repetitive tasks in an organization (Chinomona, 2013). Information technology has altered management practices and the nature of work in industrialized nations (Lohr, 2007). Proper dissemination of information via technology

empowers governments, institutions and individuals who sufficiently integrate it into their organizational structure. These days, the flow of information across the globe as little restriction, with access to internet, individuals can interrogate gigantic databases on super-information highways which information technology opens up. Woherem (2000) affirms that through internet connectivity business transactions can be carried out around the world without intermediaries or physical acquaintance with the customer. The adoption of computers in organizations has gone through four distinct phases (Scheimann, 2003): large central mainframes, personal computers and distributed data processing, the networking of microcomputers and the networking of networks. Each phase has added to, rather than superseded, the previous phase. The availability and cost of information and the way it is utilized shapes a lot of sectors in a nation and the business sector is not excluded. As a result of technological changes and innovation a lot of industries are directly or indirectly subjected to possible restructuring. Many developing Nations have hardly tasted the benefits of modern information technology. Information technology has paved way for platforms such as Electronic Commerce (E-commerce) and E-commerce is a technological innovation that enables Small to Medium Enterprises (SMEs) to compete on the same level with their larger counterparts (Agwu & Murray, 2015).

Importance of Information Technology in Business

In developing countries of the world IT plays a critical role in development (Olusola & Oluwaseun, 2013). Adoption of IT in business processes has improved the overall operational efficiency of firms (Barua et al., 2004). In preceding years the development of IT in areas such as manufacturing, multimedia, communications and electronic service networks as created new opportunities for firms thereby enhancing the way business transactions, processes, payment and delivery services operate. It has affected the business in the following ways:

1. Office Automation: Information technology is a vital and integral part of a business which has assisted the automation of several industrial and business systems.
2. Stores large amount of data: Business and commercial enterprises need to store, preserve and maintain large records as these records can be used for various purposes such as payroll accounting, inventory control, resources scheduling, sales analysis and generation of management reports to say the least. Availability, visibility and accessibility to files already stored has been made easier by information technology (Simchi-Levi et al., 2003) and can also be updated as at when necessary.
3. Improves Productivity: Computers have aided the automation of office tasks and procedures with the introduction of word processing software. In manufacturing processes, information technology has enabled shorter lead times and reduced scrap rates (Rana, 2013). This has improved the productivity of various enterprises.
4. Sharing of data and information: Business operations are undergoing drastic changes with the advent of social media which can be used to share data and information. The networking of computers (the connection of a number of computers within the organization to share the data and information) and use of e-mail have also played their part in sharing of information. This helps functional roles of transaction execution, collaboration, coordination and decision Support in supply chain management possible, (Auramo et al., 2005)
5. Competitiveness: Information Technology proffers a reliable and economical means of conducting business electronically. Routine tasks can be automated. Customer relationships can be built on the platform of information technology with the provision of “round the clock support”. IT successfully supports competitive strategies (Schubert & Leimstoll, 2007) which have aided the spreading of organizations as there are new strategies to entering markets which has increased their presence in the world.
6. Security: Security is always a critical issue in organizations. In order to prevent unauthorized personnel’s from gaining illegal access to company’s information, virtually every organization has some security

programs put in place to prevent such access. The basic attributes of a security program are integrity, availability and confidentiality which grants access to only authorized persons in an organization.

7. **Cost Benefits:** Companies now have a relatively large choice of suppliers as a result of the vast availability of internet based information at their disposal which has led to a more competitive pricing. Information technology reduces transaction costs (Kramer, Jenkins & Katz, 2007) and the major class affected by this development is the “middleman” whose service becomes less important as company goods and services can be distributed directly to customers.
8. **Marketing:** Companies that use e-business platforms to conduct commercial activities can create brand awareness with their respective websites, thus, creating new opportunities for advertising and promotion of their products. Furthermore, superior services such as after sales services can be offered to customer through companies’ websites.

Therefore the following hypotheses are given:

Hypothesis one

H₀: Use of information technology does not lead to increase in production output.

H₁: Use of information technology leads to an increase in production output.

Hypothesis Two

H₀: The application of information technology does not lead to an increase in management efficiency.

H₁: The application of Information Technology leads to an increase in management efficiency.

An Overview of Small and Medium Scale Enterprises

According to Lawal (2002) there is no single, generally accepted definition of SMEs. Definitions in terms of size (such as profitability, turnover, net worth and number of employees) when applied to one sector can lead to the classification of all enterprises as small whereas when applied to another sector may lead to a different result (Mahembe, 2011). A common definition of SMEs according to International Finance Cooperation comprises of registered businesses with less than 250 employees (IFC, 2009). The Small and Medium Sized Development Agency of Nigeria (SMEDAN, 2005) cited in Abdullahi et al. (2015) 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 ₦5,000,000.00, a small enterprise as a business with 10-49 people with an annual turnover of ₦5 to 49,000,000.00; and a medium enterprise as a business with 50-199 people with an annual turnover of ₦50 to 499,000,000.00; however, based on section 3 of the Small Business Act of 1953, cited in Saffu et al. (2008): An SME shall be deemed to be one which is independently owned and operated and which is not dominant in its field of operation.

Role of SMEs in Nation Building

Small and Medium Enterprises (SMEs) has continued to be a popular phrase in the Business world (Kadiri, 2012). SMEs have been fully recognized by governments and development experts as the main engine of economic growth and a major factor in promoting private sector development and partnership (Udechukwu, 2003). They are the first step towards development and industrialization in economies (Bashir, 2008). Small and medium scale enterprises are sub sectors of the industrial sector which plays a crucial role in industrial development (Ahmed, 2006). The state of poverty in a nation is as a result of inadequate income

and income is generated from employment which SMEs provide. SMEs can be used as a means to tackle unemployment if properly promoted (Owualah, 1999). The economic contributions of SMEs include employment generations, improved entrepreneurial skills, innovations, rise in GDP and exports and increased production volumes (Mahembe, 2011). Sanda et al. (2006) observed that SMEs are somewhat better at creating employment opportunities than large firms. Fayad (2008) opines that several multi-million dollar companies have their roots in SMEs. The industrial development of Nigeria as suffered in the past years as a result of absence of solid small and medium enterprises. The first generation of SMEs recorded a minute progress in its early stages which experienced a devaluation under the Structural Adjustment Programme (SAP) whose policies were rooted in neo-classical theory of perfect competitive market. Nigeria with the population of over 120million, fertile land and rich variety in natural resources, SMEs should thrive naturally but with the sluggish rate of development in areas such as technology, communication and social infrastructure, that is not the case. Small and Medium Enterprises Development Agency of Nigeria estimates that SMEs represent 96% of businesses in Nigeria and contribute 75% of the National employment (SMEDAN, 2016)

Problems of Small and Medium Enterprises

1. **Poor Implementation of Policies:** Implementation is a vital aspect in any organization and it requires proper execution. A good policy poorly executed will not yield the desired result. Past government have formulated good policies to improve SMEs policies but such goals fail to take shape due to weak implementation (Baadom, 2004).
2. **Lack of Continuity:** The form of most small scale enterprises is sole proprietorship and the moment the owner loses interest or dies such business often comes to an end; hence, the risk of financing such business is high.
3. **Poor Capital Outlay:** Small scale business is adversely affected by inadequate capital outlay. Financiers are often unconvinced about committing their fund to it as the sector is regarded as a high risk area.
4. **Poor Management Expertise:** Due to lack of managerial competencies required to run the business in its full capacity, going concern becomes an issue as the business may not remain in the foreseeable future. Training of management and employees is usually not a priority in SMEs which hinders the performance of the organization.
5. **Inadequate Information Base:** One of the basic functions of management is planning. Poor record keeping which is usually characterized by SMEs leaves management short of vital information necessary to make adequate planning to bridge the gap between goals and accomplishments.
6. **Lack of Raw Materials:** Some SMEs depend on external sources for raw materials and those who fall in that category are subject to fluctuations of foreign exchange which makes planning difficult as rates may change from time to time.
7. **Poor Accounting System:** Due to the lack of standard accounting system, there tends to be mismanagement of the available resources in small and medium scale enterprises, which may lead to the pre-mature death of the business. The poor accounting system also makes it difficult for proper appraisal of performance.
8. **Unstable Policy Environment:** The instability in government policies as militated against the growth of existing small and medium scale businesses overtime. With the lack of adequate support and incentives from the government, SMEs in their start-up phase face major difficulties of survival.

Costs-Benefit Analysis of Information Technology Adoption

The adoption of ICT by SMEs provides the ability of rapid access to data, assessment, processing and dissemination of large data volumes (Bazhenova, Taratukhin & Becker, 2012). SMEs are adopting information technology for cost-effectiveness and as a result of cheaper IT products (Alam, 2009). However, a cost-benefit analysis allows a business to evaluate alternative courses of action by weighing up the different measurable disadvantages and advantages of each

option. There is a likelihood of monetary cost to any change in IT profile of a business. This cost might be in terms of price paid for the new software and hardware, cost of training staff or continuous subscriptions to service providers like ISP or telephone services. These costs are compared with the potential benefits of adoption which can be determined in monetary value in terms of decrease in business cost or increase in revenue.

Hypothesis Three

H_0 : *Information Technology does not enhance competitiveness of SMEs.*

H_1 : *Information Technology enhances competitiveness of SMEs.*

Hypothesis Four

H_0 : *Implementation challenges do not affect management.*

H_1 : *Implementation challenges affects management.*

THEORETICAL UNDERPINNING

Diffusion of Innovation Theory

Diffusion is a process by which innovations are communicated through certain channels over time among the members of a social system (Rogers, 2003). Oliveira & Martins (2011) posit that DOI is a theory of how, why and at what rate new ideas and technology spread through cultures, operating at the individual and firm level. The word “technology” and “innovation” are used interchangeably by Rogers (Sahin, 2006). Diffusion of Innovations tries to describe how a population takes up innovation (Robins, 2009). Furthermore, Rogers (2003) identified 5 attributes that determine the successful spread of an innovation:

1. Relative advantage
2. Compatibility with existing values and practices
3. Simplicity and ease of use
4. Trialability
5. Observable results

The degree of willingness to accept innovation differs from one individual to another; thus, it is largely observed that the fraction of the population that adopts an innovation assumes a normal distribution over time (Rogers, 2003). A category of five individual innovativeness ranging from earliest to latest adopters is achieved by separating this normal distribution into the following groups: innovators, early adopters, early majority, late majority, laggards (Rogers, 2003). This is shown in Figure 1 below.

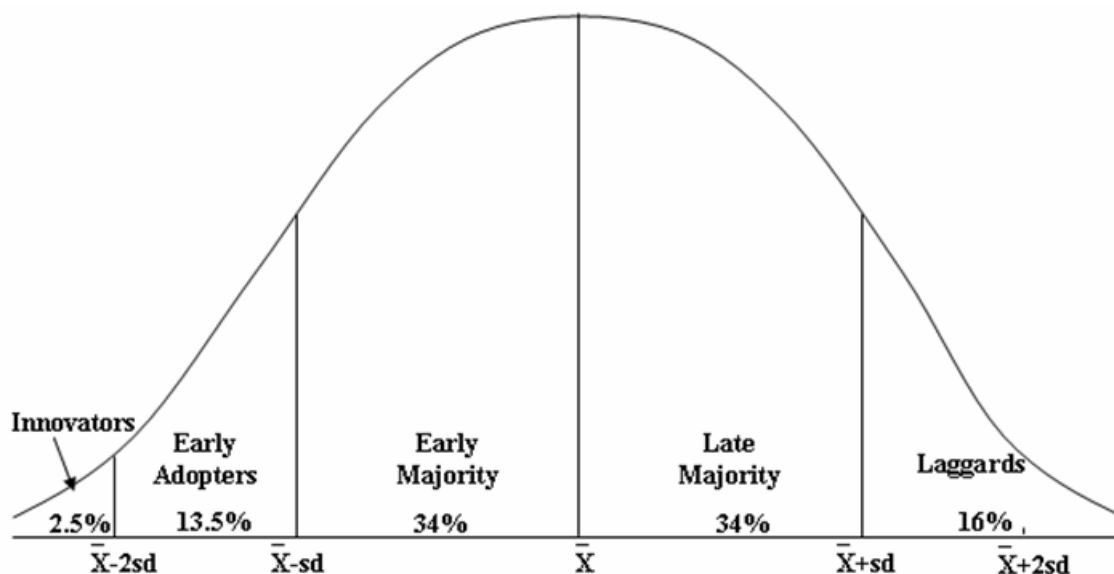


FIGURE 1
ADOPTER CATEGORIZATION ON THE BASIS OF INNOVATIVENESS

However, innovation process in the organizational environment is more complicated. People fall into two categories as they are either for or against the adoption of innovation and as such, play a major role in the final decision making. There are three independent variables that influence innovativeness of an organization (Oliveira & Martins, 2011):

1. Individual characteristics which deals with the perspective of the leader regarding change.
2. Internal characteristics of organizational structure which can be further broken down to factors such as: centralization, complexity, formalization, interconnectedness, organizational slack and size.
3. External characteristics of the organization which deals with the openness of the system.

METHODOLOGY

Questionnaires were designed and administered to seven different categories of SMEs within Lagos (Table 1). The questionnaires were administered to the various respondents by self and hand delivery. All the necessary arrangements were made to ensure that each category got the adequate number of questionnaires delivered and returned to the researcher. A total of 150 questionnaires were distributed to senior managers and employees of 20 SMEs within Lagos using a convenience sampling technique. Out of 150 questionnaires administered, 120 were returned indicating a response rate of 80 percentages. 10 were distributed to Photographers with response rate of 70 percentage, 15 were given to electronic shops with a response rate of 100 percentage, 20 were given to pharmacies with a response rate of 80 percentage, 20 were given to bakeries with a response rate 75 percentage, 30 were given to private schools with a response rate of 73.3 percentage, 35 were given to bookstores with a response rate of 25 percentage and 20 were given to boutiques with a response rate of 100 percentage

ANALYSIS OF FINDINGS

Four hypotheses were postulated and examined in this study. This section presents the findings.

Table 1			
QUESTIONNAIRE DISTRIBUTION OF EACH ENTERPRISE			
Business Sector	Number of Questionnaires Handed	Number Retrieved	Response Rate (%)
Photographers	10	7	70
Electronic Shops	15	15	100
Pharmacy	20	16	80
Bakery	20	15	75
Private Schools	30	22	73.3
Bookstores	35	25	71.4
Boutiques	20	20	100
Total	150	120	80

Source: Author's field survey results 2017

In terms of Age, 20-30 years have a frequency of 34 representing 28.3%. 31-40 years have a frequency of 74 representing 61.7% and 42 and above has a frequency of 11 respondents representing 10%. This shows that majority of the employees are middle aged people (31-40) followed by young adults (20-30) while older people (41 and above) are the least represented in the category. Therefore, the strength in manpower of SMEs in this region is in the middle aged people. The marital status of the sampled population shows that a total number of 82 respondents are married with a response rate of 35.8% while a total number of 38 respondents are single with a response rate of 31.7 percentages. This shows that majority of the sample population are married. Therefore, the labor force of the SMEs in this region appear to be family oriented people who have responsibilities and obligations to attend to, which could serve as a motivating factor in their work. The educational status, 51 respondents representing 12.8 percentages have WASSCE/GCE, 62 representing 51.7% have BSc/HND, while 7 of the respondents have MSc/PhD representing 5.8 percentage. It shows majority of the respondents are BSc/HND holders. However, the combination of BSc/HND and MSc/PhD holders represent 57.5% which implies that a greater number of the employees/management have tertiary level of education compared to the number with just secondary educational certificates. Therefore, the employees of this region can be said to be well educated. Majority of the sample population with 111 respondents representing 92.5 percentages have work experience of between 1-5 years, 9 respondents have work experience 6-10years constituting 7.5 percentage. This indicates that majority of employees of SMEs in this region do not have long term plans to stay in the same line of occupation for more than 5 years and only few of them (7.5%) end up not changing jobs before the 5 year mark. Therefore, a greater number of the employees are there on a short term base.

Table 2
DESCRIPTIVE STATISTICS

	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Management/Employees of the enterprise make use of information technology	120	1.00	2.00	134.00	1.1167	0.32237	2.419	0.221
Do you agree that the use of information technology has improved the productivity of your enterprise	120	1.00	4.00	231.00	1.9250	0.50481	0.656	0.221
Information technology is NOT a tool for development in the enterprise	120	1.00	5.00	456.00	3.8000	1.11219	-0.824	0.221
With the use of computers and similar devices, inventory control is achieved better in the enterprise	120	1.00	4.00	237.00	1.9750	0.69164	0.653	0.221
Internet has provided decision relevant information to management in the enterprise which has improved services	120	1.00	5.00	180.00	1.5000	0.83011	1.703	0.221
Valid N (list wise)	120							

Source: Author's field survey results 2017

Table 2 presents information on questions that measure if the use of Information Technology leads to increase in product output. The 87.5 percentages of the respondents strongly agreed that they use Information in product output while 12.5 percentages agreed which is a cumulative of 100 percentages. Majority of the respondents agreed that the use of Information Technology has improved the productivity of their enterprise with a cumulative of 94.2 percentages agreeing and strongly agreeing. The table also showed that majority of the respondents disagreed that Information Technology is NOT a tool for development in the enterprise, Agreed that the use of computers and similar devices is achieved better in the enterprise and that Internet has provided decision relevant information to management in the enterprise which has improved services with a cumulative percentage rate of 71.9 percentage, 84.2 percentage, 85.8 percentage. Also the mean of the five questions “Management/Employees of the enterprise make use of information in product output”, “Do you agree that the use of Information Technology has improved the productivity of your enterprise”, “Information Technology is not a tool development in the enterprise”, “With the use of computers and similar devices, inventory control is achieved better in the enterprise”, “Internet has provided decision relevant information to the Management of the enterprise which has improved services”.

Analysis of the above further showed that the average respondent agreed that the use of Information Technology leads to increase in output.

	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Information technology has improved the skills of employees/employers in the enterprise	120	1.00	3.00	146.00	1.2167	0.48824	2.228	0.221
Information technology has enhanced work speedily	120	1.00	4.00	228.00	1.9000	0.47456	0.173	0.221
Greater percentage of the employees/employers appreciates information technology	120	1.00	4.00	186.00	1.5500	0.80805	1.196	0.221
Information technology has weakened the use of brain and led to fatigue in the work place	120	1.00	4.00	252.00	2.1000	0.82401	0.819	0.221
Technology has reduced stress and work load	120	1.00	5.00	219.00	1.8250	0.99294	1.146	0.221
Valid N (list wise)	120							

Source: Author's field survey results 2017

Tables 3 present information on questions that measure if the application of Information Technology increases management efficiency. The 81.7 percentages of the respondents strongly agreed that Information technology has improved the skills of employees/employers in the enterprise while 15 percentages agreed which is a cumulative of 96.7 percentages. The table also showed that majority of the respondents agreed that Information technology has enhanced work speedily with a cumulative of 95 percentages agreeing and strongly agreeing. Majority of the respondents agreed that a Greater percentage of the employees/employers appreciate information technology and that Technology has reduced stress with a cumulative percentage rate of 83.3 percentages, 78.3 percentages. Meanwhile, Information Technology has weakened the use of the brain and led to fatigue in the work which is the only negative of Information Technology cited in that section. Also the mean of the five questions "Information Technology has improved the skills of employees/employers in the enterprise", "Information Technology has enhanced work speedily", "Greater percentage of the employees/employers appreciates Information

Technology”, “ Information Technology has weakened the use of the brain and led to fatigue at work”, “Technology has reduced stress and work load”.

DISCUSSION AND CONCLUSION

Study findings revealed that a bright future for SMEs in Nigeria is embedded in the application of information technology. For SMEs in Nigeria to realize their full potential and play their role accordingly, they cannot afford to ignore the application of information technology. For SMEs to have teeth to bite in terms of competition there must be a means to deliver their services online and in real time across and beyond the borders of the country. The research findings show that information technology is vital for smooth performance of management functions and better communication in the organization, which enhances the effectiveness of decision making and also facilitates the accomplishment of goals and objectives of the organization. The Nigerian government would do well to recognize SMEs as the backbone of the economy which has the characteristics of a catalyst that can propel the growth and development of the nation by providing employment, poverty alleviation, improving local goods and increasing GDP to name a few. Therefore, major investments should be diverted to the acquisition and implementation of information technology with a proper structure to facilitate adequate training for managers, employees and all other stakeholders so as to ensure e-literacy. Furthermore, SMEs who have adopted information technology also have their own challenges as human beings are the main threats to information technology in an organization. Manipulation of devices and gadgets can be used to commit fraud. The obstacles confronting the spread of information technology are not technical but rather behavioral and in the cause of rejection of technology, the human system is the one that resist change. However, from the survey results, the disadvantages of using information technology surpass the disadvantages. Finally, it is safe to draw conclusion from the results of this research that the use of information technology is relevant in the effective management of SMEs in Nigeria. These findings validate the theories utilized in this study which is the Diffusion of Innovation theory by Rogers (1995).

RECOMMENDATIONS

Based on the findings, the following recommendations are proffered:

1. SMEs in Nigeria should do well to adopt and implement information technology in their business process to enhance productivity.
2. There should be proper education and training of managers and employees to create more awareness and improve the e-literacy of SMEs.
3. SMEs have been noted for their contribution to development, therefore there is a need for government to provide the necessary infrastructures to assist the adoption of information technology in SMEs which will in turn improve their participation in development.
4. Manpower should not be eliminated but rather be used side by side with information technology in order to avoid unemployment in the country.
5. Government should improve on the electricity supply in the country so that the technology can be put to maximum use to achieve maximum result.
6. There should be periodic enlightenment campaign for stakeholders.

SUGGESTIONS FOR FURTHER STUDIES

This research focused on the relevance of information technology in the effective management of selected SMEs in Lagos. The research is likely to provoke some other related studies in an attempt to shed more light on the relationship between information technology and management effectiveness. It is therefore important to expand the scope in terms of sample size and sampling technique used, it is suggested that the study is replicated by using a much larger and broader sample. The conclusions of the study relate to a specific time in present and additional studies are required on a longitudinal basis to eliminate obsolescence, as we live in a world where change is constant.

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