

Relevance of Information Technology on Organizational Productivity of Small and Medium Scale Enterprises in Port Harcourt, Nigeria

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Abstract

Purpose: This study was carried out to investigate the relevance of information technology on organizational productivity of small and medium scale enterprises in Port Harcourt, Nigeria.

Design/Methodology/Approach: The study adopted a survey design. Four objectives, three research questions and one hypothesis were formulated to guide the study. Population of the study consisted of registered SMEs in Port Harcourt where 13 were purposively selected. Total enumeration sampling technique was used to select all the 300 employees within the 13 SMEs. Instrument for data collection included a well-structured questionnaire. The instrument was validated using Cronbach's alpha with an overall reliability of 0.74. Of the 300 distributed, 271 (90.3%) constituted the response rate. Data were analyzed using descriptive statistics and regression analysis.

Findings: Findings from the study revealed that IT significantly contributes to organizational productivity ($r=0.003$, $P<0.05$) which implies that information technology has a significant effect on the organizational productivity of SMEs.

Implication: The study established that effective utilization of IT in business performance would account for improved productivity of SMEs as it has become a growth platform for many larger companies.

Originality/Value: This study is the first of its kind investigating effect of IT in organizational productivity in Port Harcourt with evidence. Therefore, to harness full benefit of SMEs, the researchers recommended that trained IT staff be employed by SMEs; and a high level of IT infrastructure be introduced to enhance full participation of SMEs and productivity.

Keywords: Information Technology, Organizational productivity, Medium Scale Enterprises, Port Harcourt.

Paper Type: Empirical

Introduction

There is no doubt that small and medium-scale enterprises (SMEs) contribute significantly to economic growth and development. The prominent role SMEs play in growing a nation's economy and reducing unemployment has led to a renewed interest by scholars to explore various approaches that are practicable for their growth and sustainability. Theorists have observed that adoption of information and communication technology in SMEs could account for improved performance, especially in a 'knowledge economy' (Berisha-Namani, 2009). All over the globe, the presence of information technology is not only theoretical but the effect is far reaching, especially in the business environment.

In Nigeria, the contribution of information technology in various sectors of the economy is well recognized. This acknowledgement, perhaps stem from realizing the nature of processes or transactions in the digital age, particularly among the various sizes of organizations as cognizance is taken of improved output. Undoubtedly, the transformation brought about by information technology in sectors such as the banking institution, academic/educational sector, entertainment, governance, insurance, among others, has been widely agreed to be practicable for SMEs growth (Ashrafi and Murtaza, 2008; Akande, 2013; Akande and Yinus, 2013). Despite this, a lacuna still exists in the level of productivity of Nigerian SMEs in spite of the availability of information technology.

According to Pollard (2006), new technologies (IT) facilitates flexibility, cheap/economy of transactions, increased interactivity, improved interconnection among customers and business colleagues when compared to the traditional business processes. Howbeit, Ireferin, Abdul-Azeez and Tijani (2012) observed that despite the opportunities information technology could offer in business organizations, SMEs in Nigeria are yet to fully avail themselves of such opportunities, perhaps, due to a seemingly contextual or environmental peculiarity which in turn places their performance and productivity at lower ebb. Information systems in organizations constitute a veritable information technology tool that drives organizational productivity. This is coupled with varying degree of services available such as video-conferencing, teleconferencing, computing system/programs, appropriate functional software, modern machines designed for specific organizational tasks, printers/photocopiers, mobile phones and the internet. Also, considering the spate of technological advancement and innovation in this era, it has become more rewarding for SMEs to adopt and apply information technology tools in every sphere of operation for optimal performancesuch that any contrary decision on adoption of viable IT tools, could be inimical to the survival vis-à-vis productivity of such an SME.

Whilesome SMEs in Nigeria have been noted to fade out after five years as they struggle to survive the economic reality in the country, others still struggle with producingpoor quality product and service delivery, whiletheir attempt to measure up with their counterpart globally has remained a mirage. It is obvious since Onuba (2015) in his report lamented that 103 Nigerian products were rejected abroad compared to other African countries like South Africa and Ghana thatonly have between six and seven rejects. Could this situation be attributed to poor application of information technology? Can products and services offered by SMEs be of better quality in Nigeria through the proper application of information technology? Can SMEs in Nigeria still measure up with global standard and sustained beyond fifteen years? However, it appears that much has not been documented as to how organizational productivity of SMEs could be affected by information technology in the Nigerian context. It is against this backdrop that this study

investigated the relevance of information technology on organizational productivity of small and medium scale enterprises in Port Harcourt, Rivers State.

Objective of the study

The specific objectives are to:

1. Identify the types of information technology tools available in the selected SMEs
2. Determine the purpose for which the information technology tools are used in the selected SMEs
3. Identify the factors affecting organizational productivity of the selected small and medium scale enterprises in Port Harcourt
4. Determine the effect of information technology on organizational productivity within the selected SMEs in Port Harcourt.

Research Questions

1. What are the types of information technology tools available in the selected SMEs?
2. For what purpose are the information technology tools utilized in the selected SMEs?
3. What factors affect organizational productivity in the selected small and medium scale enterprises in Port Harcourt?

Research Hypothesis

H₀₁: Information technology has no significant effect on the organizational productivity of small and medium scale enterprises.

Literature Review

The knowledge age, information revolution, globalization, technological innovation and hyper competition that characterized the modern economic/business environment have indeed revolutionized business procedures and processes (Pavic et al, 2007). As noted by Al-Qirim (2007) information technology utilization is a key driver for better services even though its adoption in SMEs is still in a poor state. Although several definitions exist on information technology, but the following are useful for the purpose of this paper. According to Boar (1997), IT is defined as those technologies deployed in the operation, collection, transportation, retrieval, access, storage, presentation, and transformation of information in all its forms. Attaran (2003)

posited that IT is the capabilities offered by computers, software applications, and telecommunications to organizations for the delivery of data, information, and knowledge to individuals and organizational processes. IT is the application of Information and Communication Technologies such as computer hardware, software, and networks required for connecting to the internet (Tan et al, 2009). Information processing and utilization in addition to computer technologies forms the main thrust of the IT applicability.

According to Ghobakhloo, Sabouri, Hong and Zulkifli (2011) IT covers a wide range of information processing/systems, computer applications, internet infrastructure as well as any technology used for processing or disseminating information that promotes individual and organizational effectiveness. Furthermore, the computer applications and requisite packages include Computer Aided Design (CAD), Computer Aided Manufacturing (CAM), Enterprise Resource Planning (ERP), Electronic Commerce (EC), Electronic Fund Transfer (EFT), internet, extranet, Collaborative Planning, Forecasting and Replacement Application (CPFR), Supply Chain Communications Systems (SCCS), Electronic Supply Chain Management Systems (ESCMS), among others. The aforementioned applications are IT tools designed to improve organizational productivity. For instance, ERP and EC are directly instrumental in increasing organizational productivity and business performance, cash handling/transfer, purchasing and sales as well as management of resources/raw materials. It suffice then to say that IT has enormous contribution on business operations in as much as organizations avail themselves of its appropriate adoption. On the adoption of IT by SMEs, Salmeron and Bueno (2006) noted that certain characteristics such as types, the name/brand popularity, quality, user friendliness and compatibility are some factors that accounted for success or failure of the process. While Shin (2006) attested to the fact that user friendliness remains a determining factor he as well noted that Enterprise Application Software (EAS) that are easy-to-understand and long in use are more effective when compared to complex or hard-to-understand brand new package. This does not in any way exclude their quality, usefulness, and dependability (Sardana, 2008). Love, Irani, Standing, Lin, and Burn (2005); Dibrell, Davis, and Craig (2008); Nguyen

(2009); Ghobakhloo *et al* (2011) all agreed that cost is a major determinant for the adoption of IT by most SMEs around the world, the case is not different in Nigeria (Irefin, Abdul-Azeez, and Tijani 2012). Although factors exist which appear to deter the adoption of IT in SMEs however, the quest for survival and relevance in this present economy leaves no room for IT's absence in SMEs especially where improved productivity is sought.

Organizational productivity is a measure of the efficiency of production, which is presented as the ratio of output to input in production. According to Richard, Devinney, Yip, and Johnson (2009) organizational productivity is considered alongside organizational performance which deals with financial performance, product market performance and shareholder returns. Financial performance of the enterprise here implies profits, return on assets, return on investment among others; product market performance account for measures such as sales or market share; while shareholder return explains indices such as total shareholder return, economic value added etc. Organizational productivity stems from the concept of how productive an enterprise or organization is, especially in measuring outcomes against set goals. According to Curtin *et al* (2013) organizational productivity is the measure of an organization's ability to employ its available resources at any given point in time, in an efficient and effective way so that desired goals and valuable outputs are achieved. Furthermore, organizational productivity includes certain degree of outputs per unit of input such as a completed task per team (group) per week; in an oil exploration firm context- number or metres of pipe laid per person per day/ per week. However, Curtin and his team noted that innovation, collaboration and improved competitive positioning are key drivers of organizational productivity. NECA (1991) in Oyeranti (2000) presented organizational and technical factors of productivity to include degree of integration, percentage of capacity utilization, size and stability of production, adequate and even flow of raw materials, subdivision of operations, and balancing of equipment. Others include cost saving resulting from the introduction of new technologies; improved methods of accomplishing certain tasks; increased morale and satisfaction on the part of employees; more and better products and services; focus on quantitative and qualitative

productivity measures; unit of analysis such as work group and people. (p. 20&21).

The successful management of inputs such as materials, people, systems, knowledge, management, processes, attitudes, skill, equipment and tools through a prescribed conversion process; that leads to outputs such as increased volume (reaching wider market), improved services (better delivery, better quality/output, better customer benefits), and reduced costs (lower unit cost, more profit, more sale) are considered crucial to the survival of any organization. Considering the present state of SMEs in relation to productivity, to achieve the afore mentioned outputs seemed challenging over the years, which perhaps constituted a major gap in this study which is associated with partial or absolute absence of information technology in SMEs-organizational processes. SMEs are not multinational organizations, transnational companies nor publicly owned outfits; rather, a small and, or medium sized enterprise with most often, a narrow context within which operations are carried out (Akande, 2005). This implies that decisions as how to galvanize its productivity through the adoption of IT may not enjoy wide range of idea (cross-fertilization of idea) and robust deliberation of board members. Although Ojo (2004) in Akande and Yinus (2013) argued that SMEs' definition vary according to economies and contexts but with same basic principle. The term enterprise represents "a business organization consisting of one or more domestic establishments under common ownership or control" while Small and Medium sized enterprises includes all enterprises with fewer than 500 employees (US International Trade Commission, 2010:1-2). According to Lucky and Olusegun (2012) SME are not public limited companies but businesses having not less than 250 workers either in trading businesses, manufacturing, or service industries.

For the purpose of this study, SMEs are businesses with turnover of less than N100million per annum and less than 300 employees, with maximum asset of about N500million excluding land and working capital (Oyelaran-Oyeyinka, n.d.). It was observed that amidst opportunities such as strong export and employment opportunities, significant untapped growth potential, new growing sectors, among others, challenges such as "huge gaps in infrastructure (IT inclusive), poor financial support/credit environment, high level of

unskilled workforce and low investment commitment" still persist (p.6). Hence, the need to thrive, productively, has been the bane of most SMEs in Nigeria due to poor or low state of IT infrastructure adoption. Where IT adoption is successful, the high mortality rate associated with insufficient productivity, competitiveness, business and management skills, financing and access to proper advice and information, lost export and business development opportunities will naturally be taken care of (Koh and Simpson, 2005; Fong, 2011; Oladejo and Adereti, 2010). In the same vein, factors that inhibits IT adoption in SMEs in Nigeria as identified by Akande and Yinus (2013) and Popoola (2010), which include financial constraints, poor physical infrastructure, legal and regulatory issues, weak IT strategies, lack of research and development, dependence on foreign technology, poor information infrastructure, and weak IT implementation are not to be left unattended to, as to maximize the opportunities available with IT towards SMEs productivity.

Bhagwat and Sharma, (2007) Silvius (2006) affirmed the contribution of IT on organizational performance, and productivity of SMEs through providing infrastructure needed for appropriate type of information provision at the right time; by providing SMEs with competitiveness through integration between supply chain partners and inter-organizational functions; and provision of business information. Madrid-Guijarro et al. (2009); Dibrell et al. (2008); Al-Qirim (2007); MacGregor and Vrazalic (2006); Ghobakhloo et al (2011) identified globalization constraints, limited access to market information, employing generalist rather than specialists, reliance on short term planning, lack of standardization of operating procedures controlled by SMEs (resource poverty), poor information management/dissemination, machine down time, issues relating to personnel management/remuneration, cost of acquiring and maintaining IT tools as specific militating factors against SMEs productivity.

Methodology

The choice for Port Harcourt is due to the fact that it remained an important commercial nerve in the South-South region of Nigeria, while most of the SMEs are concentrated in the Trans-Amadi area of the city perhaps, due to the heavy presence of industrial activities. A survey design

was used. 13 registered SMEs were purposively selected, while total enumeration was used to select all 300 employees within the selected organizations. The questionnaire contained closed questions which were pre-tested for reliability with Cronbach’s alpha = 0.74, and 271 copies which accounted for 90.3% were retrieved and analyzed using descriptive statistics and regression analysis.

Data Analysis and Results

The demographic information revealed that of the 271 respondents, 71.2% were male and 28.8% were female. Majority or 51.7% had Bachelors(BSc.) degree as their highest qualification, 26.2% had Higher National Diploma (HND) and 16.6% had Ordinary National Diploma (OND). Others include 3% with Postgraduate Diploma (PGD) and 2.6% holding Masters (MSc.) degree. Result also showed that 34.7% were between 25-29 years of age, 28.4% were between 20-24 years, 11.4% came within the age bracket of 30-34 years and 40-44 years respectively. Those whose age ranged between 35-39 and 45-49 years accounted for 23% and 15% respectively. This indicated that majority of SMEs employees are male with at least a BSc. or HND qualification which could account for positive contribution to productivity and a platform to maximize

information technology. Again, most of the workers are within their youthful age. This implies that SMEs have the capacity (in terms of workforce) to optimize IT application in order to enhance productivity in Port Harcourt and in Rivers State at large.

Findings from table 1 indicated that the most available information technology in the SMEs include internet services, printers, laptops photocopiers, CDRom, mobile phones, personal computers, recording machines, automated teller machine, and PDF document viewer. On the other hand, IT tools such as electronic fund transfer (EFT), electronic commerce (EC), and enterprise resource planning (ERP) were the least available as majority of the respondents reported slightly available 45.4%, not available 72.4% and 79.7% respectively. This implies that information technology packages and applications that could work well with internet facility could be maximized to enhance productivity. This finding also revealed that special IT tool customized for business processes such as EFT, EC, and ERP are lacking, so that unique business processes and services they provide are absent, and perhaps, handled manually. No doubt, this accounts for low productivity in a business environment where there is hyper competitiveness.

Table 1: Types of information technology tools available in the SMEs

IT Tools	Highly Available	Available	Slightly Available	Not Available
Internet services	223(82.3)	48(17.7)	-----	-----
Printers	216(79.7)	55(20.3)	-----	-----
Laptops	200(73.8)	55(20.3)	16(5.9)	-----
Photocopier	193(71.2)	56(20.7)	14(5.2)	8(3.0)
CD-ROM	177(65.3)	78(28.8)	8(3.0)	8(3.0)
Recording Machines	155(57.2)	69(25.5)	23(8.5)	24(8.9)
Mobile phones	148(54.6)	92(33.9)	8(3.0)	23(8.5)
Work station/ personal computer	129(47.6)	102(37.6)	32(11.8)	8(3.0)
Adobe acrobat reader	123(45.4)	56(20.7)	48(17.7)	44(16.2)
Automatic teller machines	116(42.8)	56(20.7)	62(22.9)	37(13.7)
PDF document viewer	99(36.5)	132(48.7)	24(8.9)	16(5.9)
Electronic funds transfers	48(17.7)	44(16.2)	123(45.4)	56(20.7)
Electronic Commerce	8(3.0)	8(3.0)	56(20.7)	199(72.4)
Enterprise Resource Planning	-----	16(5.9)	39(14.4)	216(79.7)

Table 2 sought to find out the purpose for which information technology tools were utilized. The respondents indicated their purpose for utilizing information technology as follows, 79.3% strongly agreed that teleconferencing was the purpose for IT utilization. 76.4% indicated web

browsing, 70.8% indicated video conferencing as their reason, 67.9% believed that speed was of essence, while 64.9% strongly agreed that the purpose for which they utilized IT was for fund transfer. Also, 59.4% indicated receiving mails, 59% strongly agreed that online shopping was the reason for IT utilization, 56.8% believed it

was for neatness of work, 56.1% indicated for conducting research, consolidating credit facilities accounted for 56.1%, to save time accounted for 53.5%, and message transfer 53.1%. Other reasons indicated are for group work discussion, sending mails, and electronic banking with 47.8%, 45.8% and 39.9% respectively as shown in table 2 below

Table 2: Purpose for IT utilization

Items	Strongly Agree	Agree	Disagree	Strongly Disagree
Teleconferencing	215(79.3)	56(20.7)		
Web browsing	207(76.4)	64(23.6)		
For video conferencing	192(70.8)	79(29.2)		
For speed of work	184(67.9)	79(29.2)	8(3.0)	
Financial transfer	176(64.9)	87(32.1)	8(3.0)	
Receiving mails	161(59.4)	94(34.7)	16(5.9)	
For online shopping	160(59.0)	95(35.1)	16(5.9)	
Neatness of work	154(56.8)	117(43.2)		
To conduct research	153(56.5)	86(31.7)	24(8.9)	8(3.0)
To consolidate credit facilities	152(56.1)	111(41.0)	8(3.0)	
To save time of work	145(53.5)	103(38.0)	23(8.5)	
Message transfer through mails	144(53.1)	88(32.5)	31(11.4)	8(3.0)
For discussion group work	129(47.8)	80(29.5)	62(22.9)	
Sending mails	124(45.8)	101(37.3)	30(11.1)	16(5.9)
For electronic-banking	108(39.9)	93(34.3)	8(3.0)	62(22.9)

The findings in table 2 revealed that majority of employees in the SMEs agreed to the fact that IT tools are beneficial to their work process and could account for higher degree of productivity. This is obvious in the result as all the fifteen items describing the various purposes for which they utilize IT were answered in the affirmative by majority. It suffices to say that SMEs employees are becoming conscious of the current trend in the global business/economic circuit and the need to contextualize such innovations. Again, it implies that in as much as the larger organizations or conglomerates are maximizing the opportunities that IT offers with far reaching positive impact, the smaller and medium sized could take a queue and cash into customized IT packages/ applications for SMEs.

Table 3 tries to identify factors that militate against organizational productivity of small and medium sized enterprises. Findings from table 3 revealed the various factors that affect organizational productivity especially in the small and medium scale enterprises. Among these factors, issues relating to cost seem the most challenging. Respondents indicated that high cost of maintaining equipments was a major contending factor with a value of 67.9%; high cost of purchasing them with 68.6%; and the challenge of unqualified personnel with 65.7%. Poor culture of equipment maintenance, challenge associated with power supply, and low level of skilled workers with 54.6%, 43.5% and 49.8% respectively were challenges identified as well.

Table 3: Factors affecting organizational productivity of SMEs

Items	Strongly Agree	Agree	Disagree	Strongly Disagree
High maintenance cost of equipment	184(67.9)	79(29.2)	8(3.0)	
High purchasing cost of tools	186(68.6)	62(22.9)	8(3.0)	15(5.5)
Unqualified personnel in the organization	178(65.7)	70(25.8)	8(3.0)	15(5.5)
Poor equipment maintenance culture	148(54.6)	100(36.9)	8(3.0)	15(5.5)
Poor power supply in the organization	118(43.5)	131(48.3)	7(2.6)	15(5.5)
Low level of skilled workers	135(49.8)	94(34.7)	21(7.7)	21(7.7)
Availability of highly skilled professionals	102(37.6)	116(42.8)	38(14.0)	15(5.5)
Improper dissemination of information	119(43.9)	68(25.1)	77(28.4)	7(2.6)
Regular breakdown of equipment due to old age	112(41.3)	83(30.6)	61(22.5)	15(5.5)
Frequency of machine downtime	120(44.3)	108(39.9)	28(10.3)	15(5.5)
High cost of transporting raw material	120(44.3)	122(45)	6(2.2)	23(8.5)
High cost of transporting finished goods	119(43.9)	109(40.2)	20(7.4)	23(8.5)
Poor remuneration of work	103(38)	131(48.3)	22(8.1)	15(5.5)
Poor data collection strategy	95(35.1)	124(45.8)	45(16.6)	7(2.6)
High cost of training personnel	77(28.4)	94(34.7)	52(19.2)	48(17.7)

Respondents strongly agreed that challenges such as improper dissemination of information, regular breakdown of equipment due to old age, frequent machine downtime, high cost of transporting raw materials, transporting finished goods, poor remuneration, poor data collection mechanism, scarcity of highly skilled professionals, and high cost of training personnel also persist to inhibit productivity of the organization. This indicates that organizational productivity has not been at its peak since numerous factors abound that hampers its growth. It also implies that much is to be done by SMEs managers/owners and employees in

terms of addressing the identified factors if the enterprises are to be more productive. Issues relating to cost, maintenance culture and information architecture seem to be dominant among the factors which could be well addressed with opportunities available in IT applicability.

Table 4: Hypothesis Testing

The null hypothesis was tested at 0.05 level of significance which sought to determine the effect of IT on organizational productivity of SMEs

H₀: Information technology has no significant effect on the organizational productivity of small and medium scale enterprises.

Model	Unstandardized Coefficients	R ²	F	Sig.	Remark	
	B	Std. Error				
1 (Constant)	3.440	.728	0.644	12.24	.003	Significant
Information Technology (IT)	2.245	.378				

Dependent Variable: Organizational Productivity of SMEs

The result from the above regression table indicates that the coefficient of the independent variable (IT) is 2.245 which is positive. This means that a positive relationship exists between information technology and productivity of SMEs. Hence, an improvement on information technology brings about a corresponding improvement on the productivity of SMEs, all things been equal. Again, the overall coefficient of determination R² which is the explanatory

power of the model is 0.644. This implies that 64.4% of the variation in the productivity of SMEs is explained by IT in the model while the remaining 35.6% change is accounted for by variables outside the model. Thus, since the R² is above 50% it means that the stated independent variable in the model is good enough to explain changes in the productivity of SMEs.

Furthermore, the value for F-test statistics from the above result is 12.24 which is significant

$P < 0.05$. From this result, it shows that F -calculated is greater than F -tabulated hence the null hypothesis is rejected. This implies that information technology has a significant effect on organizational productivity of SMEs.

Discussion of findings

The study revealed that general information technology tools are available in the SMEs such as the internet services, printers, laptops, photocopiers, mobile phones and CD-ROM but the specialized IT packages/tools for SMEs' business processes such as electronic funds transfer, electronic commerce, and enterprise resource planning are lacking. This is supported by the findings of Ghobakhloo *et al* (2011), which attests to the fact that IT tools both general and specialized are relevant for business processes. No wonder the retrogression experienced by SMEs in Nigeria. In as much as business operations, regardless of the size fails to avail themselves of the IT opportunities, the probability of folding up or churning out poor quality product and services remains high (Onuba, 2015). This finding is also in line with the findings of Tan *et al* (2009) that the main thrust of IT functionality is in information resources processing in evident in quality outputs. The absence of some specialized business information resources/ applications in the daily operations of the SMEs accounts for the failure rate presently encountered, and will remain a failing institution until proper adoption of requisite information resources and technologies is achieved. On the purpose for which IT tools are utilized, the study revealed that teleconferencing, web browsing, speed, neat job, cash transfer, consolidating credit facilities, time saving and e-banking are obvious reasons. This is in line with the findings of Pollard (2006) which identified new technologies as facilities that facilitates such processes as identified in this study in addition to flexibility, economy of transactions, increased interactivity and improved interconnection among customers. Also, it was observed that IT supported processes are more effective and efficient than the traditional/conventional methods.

The study revealed some factors that militate against the productivity of SMEs such as cost of purchasing and maintaining equipments, poor maintenance culture, issue relating to poor power supply, cost of transporting products and raw materials, poor information infrastructure, unskilled workforce and poor remuneration. This

is buttressed by the findings of Oyelaran-Oyeyinka (n.d.); Oladejo and Adereti (2010) who observed that unskilled workforce and lack of credit facilities are some challenges confronting SME. Similarly, Akande and Yinus (2013) and Popoola (2010) identified financial constraint, poor physical infrastructure, poor IT strategies and poor information infrastructure as constituting major setback to achieving organizational productivity and the adoption of IT in Nigeria SMEs. This implies that SMEs in Port Harcourt and other parts of Nigeria are to proactively confront these challenges if they must succeed. Some of these challenges are best tackled with combined efforts of SMEs; perhaps, the role of the regulatory bodies cannot be sidelined at this point. Finally, it was revealed in this study that there is a positive relationship between IT and SMEs productivity. This implies that the successful adoption/ application of IT in SMEs organizational processes will account for improved organizational productivity. This finding is inline with those of Bhagwat and Sharma, (2007); Silvius (2006); Madrid-Guijarro *et al.* (2009); Dibrell *et al.* (2008); and Al-Qirim (2007). They agreed that information technology contributes positively on organizational performance and productivity of SMEs as it provides infrastructure needed for appropriate type of information provision, providing SMEs with competitiveness through integration between supply chain partners and inter-organizational functions, and provision of business information. It suffices to say that the neglect of IT by SMEs will increase the chances for organizational failure.

Conclusion

This study has been able to contribute empirically to existing studies on the effect or relevance of information technology on organizational productivity, more so, small and medium sized enterprises productivity in Nigeria. It has brought to the fore IT tools predominantly available at the disposal of most SMEs in Nigeria and identified some specialized tools beneficial for SMEs. This study has also highlighted available services employees and their organizations can enjoy through IT applications. It went further to identify factors that inhibits organizational productivity in Nigerian SMEs where cost of purchasing and maintenance of equipment, poor power supply, poor remuneration, poor information and technology infrastructure, and unskilled work force are identified to have devastating

consequences on the SMEs; more so, it was able to discover that indeed IT remains highly relevant to the productivity of organizations especially the SMEs through the result of the regression which indicated that IT has a significant effect on SMEs productivity.

Recommendations

Based on the identified challenges, this study therefore recommends that

1. The source of power should be well managed as to avoid regular power outage or unstable voltage which will in turn impact on the longevity of the equipments, after all, the equipments depend largely on power to function.
2. The management of SMEs should maximally utilize the credit facilities provided by the central bank and seek for other financial opportunities within and outside the country to effectively cater for the needs of their enterprise.
3. Available resources should be keenly managed as to galvanize the availability of highly skilled personnel, train and retrain the existing employees on IT skills in addition to the required knowledge.
4. The management and SME owners should work with appropriate agencies to put in place information and technology infrastructure that will provide appropriate platforms for specialized business information resources/ applications to be made available for employees; IT providers/specialists are necessary for each SME for interconnectivity and networking for easy transactions both at local and international levels.
5. IT gadgets cost and internet provision should be subsidized by the government/ stakeholders, while developing an effective electronic transaction network/platform (for different business or commerce activities) for the growth information and communications technology in Nigeria.

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