

Effect of Industry Type on Adoption of ICT among SMEs In Nigeria. A Case Study of SMEs in Oyo State.

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ABSTRACT

Small and medium enterprises have gradually emerged as potential solutions to the myriad of challenges faced by the modern society and most especially, developing economies. Rising level of industrial sophistication and technical advancement has created a very stiff competition for survival. Nonetheless, the contributions of SME's to gross domestic product of many developing economies is still hampered by poor business-ICT integration. Survey data was collected from 80 SMEs in Oyo State across different sectors using stratified random sampling technique with the aid of a structured questionnaire. Analysis of regression showed that demographic variable (Staff Strength) significantly influences use of ICT among SMEs while SME service delivery had no influence on ICT use. Also, analysis of variance on the categories of SMEs was not a determinant factor on the use of ICT. The outcome of this study has implications for owners of SMEs, stakeholders, government and academic researchers in developing countries as it can provide patterns to help bridge the existing digital divide especially among Nigerian SMEs.

Keywords: Information and Communication Technology (ICT), SMEs, Industry, Oyo State and Category.

Aims Research Journal Reference Format:

Oyediran, O & Omoshule, A. (2016): Effect of Industry Type on Adoption of ICT among SMEs In Nigeria. A Case Study of SMEs In Oyo State.. Advances in Multidisciplinary Research Journal. Vol. 2. No. 4, Pp177-188

1. BACKGROUND TO THE STUDY

Western economies realized long ago that small and medium enterprises are the main drivers for rapid and sustained economic development. Small and medium enterprises play very vital roles across different sectors in any nation. The experience of developed countries as regards SMEs buttresses the fact that their roles cannot be overemphasized especially among developing economies Oyediran and Omoshule (2016). A concerted effort towards industrialization in Nigeria has remained a daunting task. These may perhaps be due to disparities in government policies on trade and investment and also the perpetually irregular exchange rates which further reduces the purchasing power of the Nigerian entrepreneur. Globally, definitions of SME's abound and are often defined within a specified context. In Nigeria, SMIEIS and CBN (2001) define the micro/cottage industry as an industry with a total capital employed of not more than N1.5M excluding cost of land and working capital and labor employed of not more than 10 workers; small-scale industry as one with a total capital employed of over N1.5M but not more than N50M, excluding the cost of land and working capital with labor size of 10 to 100 workers.

Medium-scale industry has total capital outlay of over N50M but not more than N200M excluding the cost of land and working capital and labor size of between 100 to 300 workers. SMEs in this study refers to organizations having a total number of 10 to 100 employees and a capital asset of over N1.5million but not more than N50 million excluding cost of land and buildings.

Successive governments have over time formulated policies ranging from economic to ICT and sometimes reversed earlier ones in a bid to jumpstart the growth of SMEs and to ease the process of industrialization. For instance, institutions such as Nigeria Industrial Development Bank (NIDB), the Nigerian Bank for Commerce and Industry (NBCI) and many Microfinance outfits have been provided. SMEs are well suited to the natural endowment of the Nigerian nation. This is because they promote the use of local raw materials, low technologies, light industries that employ greater number of persons per unit of capital employed than Large Scale Enterprises (LSEs), serve as entrepreneurial development centers and can facilitate balanced development since they can be operated at remote and rural areas in addition to having short gestation period, Ayodeji and Balcioglu (2010). UNCTAD (2001) affirms that countries with a high rate of small industrial enterprises have succeeded in making the income distribution (both regionally and functionally) more equitable.

This is in turn a key factor in ensuring long term social stability by alleviating export dependence and by reducing economic disparities between urban and rural areas. Technological advancement witnessed in developed countries and most especially by the Asian tiger nations is largely attributable to development of vibrant and continually evolving SME sectors. The Nigerian situation however still leaves much to be desired, advances witnessed in many western countries like China, Singapore and Malaysia have not translated into growth when compared to the largest black nation. Their performance and effectiveness as an instrument of economic growth and development in Nigeria continues to be under scrutiny, Oyediran and Omoshule (2016). This study therefore aims at investigating the influence of different category of industries on the performance of SMES in Nigeria.

1.1 Statement of the Problem

The SME sector provides, on average, 50% of Nigeria's employment, and 50% of its industrial output. Frank and Ngozi (2012). Specifically, Nigerian businesses have little or no infrastructural support, whether in telecommunications, transportation, manufacturing, electricity supply, agriculture. Most people start their own businesses and then do virtually everything by themselves to succeed. The success levels of SMEs in Nigeria still leaves much to be desired, Osagie (2010). As unemployment assumes a frightening dimension, efforts undertaken by the Nigerian government to promote ICT use among SMEs across different industries have not yielded many dividends; many of the SMEs have failed to reap the benefits evenly.

There is a dearth of research on ICT utilization and ownership patterns among SME's in Nigeria. The moderating effect of business categories on technology among SMEs remains yet to be discovered which presents a significant gap in knowledge. In similar vein, though studies like an financing industrial development in Nigeria: case study of SME's in Kwara, Ayodeji and Balcioglu (2010), use and Non use of ICT among SME's in Oyo State, Nigeria, Oyediran and Omoshule (2016), investigative study of factors affecting use of ICT in SMEs in Nigeria, Irefin et al (2012), adoption and utilization of e-business by SMEs in Ibadan, Bankole (2010) abound, such researches were carried out on solitary SME sectors within a given state. Hence, these studies did not effectively address peculiar factors affecting sectors of trading, agro-allied, telecommunications, pharmaceuticals, manufacturing, textile, building & construction, transport, tourism as well as events & entertainment. Also, the nature of ICT used by specific SME sectors and their specific applications were not determined. Furthermore, it is still quite unclear whether the factors that affect SMEs in Nigeria cuts across different SME sectors or are restricted to particular sectors.

1.2 Objectives of the study

The major objective of this study is to investigate factors that promote and inhibit ICT use among different SME categories in Oyo state. The specific objectives of the study are to:

1. Identify the type of ICTs used by the selected SMEs in Oyo State.
2. Identify the transactions / activities ICTs are used for in the SMEs.
3. Determine the influence of characteristics of SME Owners on the use of ICT.
4. Identify elements that promote and inhibit use of ICT among the SMEs in Oyo State.

1.4 Research Hypotheses

H₀₁: There is no significant relationship between the demographic profile of SMEs and the use of ICT

H₀₂: There are no significant differences in the diversity of ICT used among the different categories of SMEs.

2. METHODOLOGY

Due to the nature of these study, a stratified random sampling research design was adopted, which involves collection of data from SMEs in pharmaceutical, manufacturing, textile, telecommunication, agro-allied, tourism, printing, building & construction, events & entertainment and trading based on different categories. The dispersed nature of the subjects and the unavailability of ample data on registered SMEs in the state justify selecting a few respondents from whom generalization about the population could be made.

Ease of access to the SMEs was negotiated through their professional associations. SMEs in Nigeria belong to various associations like: Nigerian Association of Small-Scale Industrialists (NASSI), Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), Chamber of Commerce and Industries. However, no comprehensive list of firms operating within the state could be provided while some associations outrightly refused to divulge any information. The Oyo state chamber of commerce however proved helpful as it had a list of 159 registered firms across the different sectors within the state. The researcher also independently discovered that some unregistered SMEs had incorporated the use of basic ICT's like the mobile phone and the computer system in their business activities. Conversely, this development made the researcher to purposively select 87 SMEs who use other forms of ICT which specifically include (the internet, intranet, e-mail, web portal, video conference and enterprise resource systems) Nonetheless, the unevenness in the population made the researcher to randomly select variable sampling elements to ensure proportional representation of the different SME sectors.

3. DATA PRESENTATION

3.1 Demographic Characteristics of SME ICT Users

The demographic characteristics of the SMEs was obtained using a number of measures that include nature of organization, organization type, age of organization, staff strength of organization, owner ICT literacy and number of years of ICT usage.

Table 1 Demographic Characteristics Of SME's

Organization Nature	Frequency	Percent
Private Limited Company	22	27.5
Public Limited Company	8	10
Partnership	12	15
Sole proprietor	18	22.5
Family Owned Business	20	25
Others		
Organization Type	Frequency	Percent
Manufacturing	10	12.5
Textile	3	3.75
Telecommunication	8	10
Tourism	5	6.25
Building & Construction	10	12.5
Printing	13	16.25
Pharmaceutical	7	8.75
Events & Entertainment	4	5
Trading	17	21.25
Agro- Allied	3	3.75
Age of Organization	Frequency	Percent
1-5 years	23	28.75
5-10 years	41	51.25
>10 years	16	20
Staff Strength	Frequency	Percent
0-9	34	42.5
10-49	19	23.75
50-100	18	22.5
101-250	9	11.25
>250	0	0
Owner ICT Literacy	Frequency	Percent
Yes	60	75.0
No	20	25.0
Years of ICT Use	Frequency	Percent
1-3 years	33	41.25
4-6 years	15	18.75
7-10 years	12	15
>10 years	16	20
No response	4	5

Research Question 1a: What are the types of ICTs used by SMEs in Oyo State?

Results revealed that majority of the organizations used mobile telephone 32(86.5%) in their businesses, 31(83.7%) reported that they used computer, 29(78.4%) used internet while 27(72.9%) used the electronic mail. However, very few of the sampled organizations made use of video conference and enterprise resource system as portrayed by 9(24.3%) and 10(27%) respectively, the reason for the low volume can be attributed to the nature of their businesses.

Table 3 Distribution of Types of ICT used by SME's

Sectors	Video conference		Internet		E-mail		Credit Card System		Web portal		Computer		Enterprise resource System		Intranet		Telephony (mobile)		Broadcasting (Radio/TV)	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Pharmaceutical	3	42.9	5	71.4	6	85.7	5	71.4	7	100	7	100	2	28.6	7	100	7	100	5	71.4
Manufacturing	6	60	9	90	9	90	8	80	9	90	10	100	5	50	10	100	10	100	7	70
Textile	1	33.3	2	66.7	2	66.7	3	100	0	0	2	66.7	0	0	1	33.3	3	100	1	33.3
Telecommunications	4	50	4	50	4	50	6	75	6	75	8	100	2	25	6	75	8	100	7	87.5
Agro-allied	0	0	1	33.3	0	0	1	33.3	2	66.7	1	33.3	0	0	0	0	3	100	0	0
Tourism	0	0	3	60	4	80	5	100	4	80	4	80	0	0	3	60	4	80	3	60
Printing	2	15.4	10	76.9	11	84.6	9	69.2	12	92.3	13	100	6	46.2	13	100	13	100	6	46.1
Building & Construction	0	0	5	50	3	30	6	60	6	60	7	70	0	0	4	40	10	100	3	30
Events & Entertainment	0	0	4	100	3	75	2	50	3	75	4	100	1	25	4	100	4	100	4	100
Trading	0	0	15	88.2	13	76.5	14	82.3	17	100	15	88.2	5	29.4	10	58.8	17	100	6	35.3
Total	16	20	58	72.5	55	68.8	59	73.8	66	82.5	71	88.8	21	26.3	58	72.5	79	98.8	42	52.5

Research Question 1b: What Services do SMEs use ICT to deliver?

Table 4 revealed the services SMEs use ICT to deliver.

Table 4 Distribution of Services SMEs use ICT to deliver and Frequency of use

ICT services	Daily		Weekly		Monthly		Yearly		No response	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Online transaction	49	61.3	15	18.7	5	6.3	6	7.5	5	6.25
Communicating with the members of staff	75	93.7	0	0	3	3.75	0	0	2	2.5
Keep up with competitors	52	65	11	13.7	7	8.7	0	0	10	12.5
Providing company information online	38	47.5	25	31.3	5	6.3	3	3.7	9	11.3
Communicating with customers and suppliers	65	81.2	8	10	5	6.3	0	0	2	2.5
Obtaining information about new market value	33	41.3	21	26.2	18	22.5	0	0	8	10

Table 4 shows that among the sampled organizations, internal communication with members of staff on a daily basis is very key. This culture has been observed to eliminate bureaucracies and administrative bottlenecks which often time slows down work pace. The result also shows that the SME's primarily use ICT to communicate with customers and suppliers on a daily basis as signified by 65(81.2%). In the same vein, competition is key to the survival of any business. This is shown by 52(65%). 49 (61.3%) admitted using ICT for online transaction daily while 38(47.5%) said they used ICT to communicate with members of staff daily. Also from the table, results showed that 12(32.4%) use ICT to provide company information online this may be especially true as more companies seek wider reach obtainable through the world wide web.

Research Question 2: What factors promote or inhibit use of ICT among the SME ICT users in Oyo state?

This section is further divided into two:

1. Section 1 focuses on factors that promote ICT use among SME's.
2. Section 2 focuses on factors that inhibit ICT use among SME's.

What are the factors that promote ICT use among SME ICT users in Oyo State?

The distribution of factors that promote ICT use among SME's is presented in Table 5

Table 5 Distribution of Internal Factors promoting ICT Use among SME's

Possible Factors	Disagree		Agree		No Response	
	Freq	%	Freq	%	Freq	%
Internal						
Owner's high level awareness of ICT	32	40	43	53.7	5	6.2
Large size of the organization	10	12.5	57	71.2	13	16.2
Use of ICT by customers and suppliers	8	10	66	82.5	6	7.5
Perceived benefits of ICT	14	17.5	61	76.2	5	6.25
ICT Infrastructure	56	70	14	17.5	10	12.5
Adequate ICT literate staff	28	35	51	63.7	1	1.2
Owners decision to use ICT	18	22.5	45	56.2	23	28.7
High cost of ICT infrastructure	42	52.5	33	41.2	5	6.2
Nature of your organization's business	15	18.7	62	77.5	3	3.7
Low ICT maintenance costs	67	83.7	9	11.2	4	5

Among the internal factors promoting ICT use, use of ICT by customers and suppliers 66(82.5%) is a major factor among the observed organizations. This is closely followed by 62(77.5%) agreeing that the nature of business of their organization was equally key. The table further shows 61(76.2%) agreed that perceived benefits of ICT was responsible for its use. The large size of the organization followed by adequate ICT literate staff indicated by 57(71.2%) and 51 (63.7%) respectively were also agreed upon as contributing reasons.

Table 6 presents the distribution of external factors promoting ICT use

Table 6 Distribution of External Factors Promoting ICT Use among SME's

External	Disagree		Agree		No response	
	Freq	%	Freq	%	Freq	%
Consistent government policies	58	72.5	12	15	10	12.5
Adequate legal framework for businesses using ICT	63	78.7	14	17.5	3	3.7
Customers and suppliers preference	14	17.5	55	68.7	11	13.7
Reliable internet service	43	53.7	22	27.5	15	18.7
Popularity of online marketing and sales	16	20	59	73.7	5	6.2

The online platform has no closing hours is fast becoming the preferred business hub. The table shows that 59(73.7%) agreed that popularity of online marketing and sales was a major factor promoting use of ICT. The table further shows that 55(68.7%) agreed that their choice to use ICT is informed by the preference of their customers and suppliers. Few 22((27.5%) reported reliable internet service as an enabling factor. This holds true as services from internet service providers in Nigeria is still highly irregular.

What are the factors that inhibit ICT use among SME's in Oyo State?

The distribution of factors that inhibit ICT use among SME's is presented in table 7

Table 7 Distribution of Internal Factors Inhibiting ICT Use among SME's

Possible factors	Disagree		Agree		No response	
	Freq	%	Freq	%	Freq	%
Owners lack of awareness of ICT	16	20	56	70	8	10
Owners decision to use ICT	19	23.7	61	76.3	0	0
Low volume of organization activities and transactions	13	16.3	53	66.3	14	17.5
Lack of necessary ICT infrastructure	9	11.3	71	88.7	0	0
Nature of the organizations business activities	12	15	68	85	0	0
Lack of qualified staff to develop and support ICT	44	55	14	17.5	12	15
High ICT startup / maintenance cost	5	6.3	75	93.7	0	0
Little return on investment	35	43.7	31	38.7	14	17.5

The table revealed that SMEs operating within Oyo State face several factors inhibiting their use of ICT. The table shows that a chief factor militating against ICT use was high ICT maintenance cost 75(93.7) closely followed by a lack of necessary ICT infrastructure as indicated by 71(88.7%). This suggests that more effort is required on the part of policy formulators and stakeholders in bringing down the cost of ICT so that SME's can do business profitably. 68(85%) opined the nature of business organizations as a determinant. Furthermore, because many SME's in Nigeria are privately owned, owner's decision to use ICT remains a significant factor as indicated by 61(76.3%).

Table 8 presents the external factors inhibiting SME's.

Table 8 Distribution of External Factors Inhibiting SME's

External	Disagree		Agree		No Response	
	Freq	%	Freq	%	Freq	%
Customers and suppliers preference for face-to-face interaction	13	16.2	61	76.3	6	7.5
Uncertain government taxation rules	8	10	70	87.5	2	2.5
Poor maintenance culture	11	13.7	69	86.3	0	0
Inadequate legal framework for businesses using ICT	5	6.2	62	77.5	13	16.3
Lack of popularity for online marketing and sales.	55	68.7	13	16.2	12	15
Power failure	1	1.2	79	98.7	0	0

The table showed that power still remains a critical issue, exorbitant cost of providing power may perhaps account for high cost of doing business in the country, 79(98.7%) attested to this fact. 70(87.5%) indicated that unstable and uncertain government policies is a hindrance to SME growth while poor maintenance culture, 69(86.3%) is considered sufficient reason affecting SME's. Furthermore, 62(77.5%) said inadequate legal framework is a major inhibiting factor.

Test of Hypotheses

Hypothesis 1: There is no significant relationship between SMEs' demographic profiles and the use of ICT.

Table 9 presents the significant relationship between SMEs' demographic profiles and the use of ICT.

Table 9 Showing Regression Analysis of SME Demographic Profile on Use of ICT

	B	Std. Error	Beta	T	Sig
(Constant)	19.751	5.769		3.423	.002
Nature of organization?	.741	.698	.181	1.062	.297
Type of organization?	-.663	.334	-.336	-1.927	0.063
For how long has your company been in operation?	.863	2.411	.059	.358	.723
What is the staff Strength of this company?	1.820	.812	.403	2.242	.033
Is the owner of this company ICT literate?	.768	2.476	.054	.310	.758
Since when has your organization adopted ICT for its operations?	-.965	1.846	-.086	-.523	.605
a. Dependent Variable: USEFICT					

Table 9 revealed that strength of staff of a company among other SMEs' demographic profiles was significant ($p < 0.05$), other variables such as nature of organization, type of organization, how long the organization had been in existence, ICT literacy of SME owner and period of adoption of ICT are not significant ($p > 0.05$). This implies that SMEs who have higher staff tend to use ICT.

Hypothesis 2: There are no significant differences in the diversity of ICT used among the different categories of SMEs.

Table 10 presents the significant differences in the diversity of ICT used among the different categories of SMEs.

Table 10 Anova Analysis of differences in the Diversity of ICT Used among the Different SME Categories

Dependent Variable: Use of ICT					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	247.928 ^a	9	27.548	.618	.771
Intercept	18123.528	1	18123.528	406.510	.000
Types of Organisation	247.928	9	27.548	.618	.771
Error	1203.748	27	44.583		
Total	23101.000	37			
Corrected Total	1451.676	36			

a. R Squared = .171 (Adjusted R Squared = -.106)

Results from table 10 shows that the null hypothesis is not rejected ($F= 0.553$; $p> 0.05$). This implies that there is no significant difference in the diversity of ICT used by SMEs in different sectors for service delivery.

4. DISCUSSION OF FINDINGS

The study revealed that majority of the SMEs are still at the early stage of ICT use. They predominantly use basic ICT equipments like mobile telephones and computers. This explains why Irefin et al (2012) noted that the most basic ICT tool for SMEs is having communication capabilities through fixed or mobile phones and those SMEs may then use a personal computer with basic software for things like information processing or keeping track of accounting items. Quite remarkably, result also revealed that, few of the SME's have begun to use some advance communication equipment like the electronic mail, internet browsing, web portal, intranet and enterprise resource system. These suggests that ICT use by SMEs ranges from basic technology such as radio and telephone lines to more advanced technology such as emails, e-commerce and information processing systems.

However, availability does not imply use. Further enquiry into the services delivered by the SMEs using available ICTs revealed they are channeled towards keeping up with competitors and providing online transaction services while also using it to communicate with members of staff of the organization thereby suggesting that the technologies are predominantly used as a marketing and communication tool. This form of ICT use is considered beneficial on the long run. The ability of organizations to communicate effectively with customers and suppliers can enable a company attain greater levels of competitive advantage.

In understanding the reasons why organizations tend to use ICT, results revealed that the nature of business, adequate ICT staff, perceived benefits of ICT and use of ICT by customers and suppliers significantly stimulate a company's use of information and communication technology. Little wonder Mpofu et al (2009) noted that organizational readiness of every organization is reflected in the size, type, nature of business as well as ICT expertise and the perceived benefits upheld by the management and employees. From the study, result revealed that SMEs are still hampered by inadequate ICT infrastructures for promoting their various businesses, these corroborates finding from previous studies. This can be attributed to the presence of few ISPs and mobile operators within the country. Also, ICT is changing the way we live, work and study. Findings from the study revealed that SMEs are being driven to integrate ICT into their business operations by external influence of customers and suppliers.

This discovery agrees with Harindranath, Dyerson and Barnes (2008) which identified use of ICT by SMEs in Southeast England as reason for improvement of customer service, keeping up with competitors and enhancing supplier relations. Likewise, to have a more robust understanding of the whole study, factors inhibiting use of ICT were also considered. The study revealed that high ICT maintenance cost was a chief factor inhibiting ICT use. Accordingly, Apulu Latham, Moreson (2011) noted that high cost associated with ICT implementation makes SMEs in most cases ignore the utilization of ICT. The researcher therefore suggests more effort on the part of the government, ICT providers and regulatory authorities to make ICT readily available for business owners.

Among other factors inhibiting use of ICT discussed in this study, high ICT maintenance was discovered to be a leading reason as stated by more than two-third of the organizations. This could be an extension of Harindranath et al (2008) who affirmed that after cost, the single biggest constraint on ICT investment was the uncertainty over the potential business benefit from such investments. This finding do not however downplay the effect of external factors like power failure and customer willingness to engage in online transactions in Nigeria due to various security concerns and restrictions in the global market.

In this study, certain demographic characteristics of SMEs were considered to determine their influence on SMEs. A major attribute of SMEs in Nigeria relates to ownership structure, which largely revolves around one-man or a family. Among SMEs in Oyo state, findings on their nature reveals no significant influence on ICT use. Onuorah (2009) affirmed that Nigerian SMEs are predominantly owned by a sole proprietor or by partners. In such arrangements, capital for running the business is raised among friends, relatives and acquaintances. A major implication of such organization type however is that it limits the capacity for expansion while also mostly restricting the business within the confines of the local environment in which it operates consequently leaving very little capital left for ICT consideration or uptake. This observation is in agreement with Oyosiji and Kayode (2010) who also noted that the manager/proprietor's vision in sole proprietorship business is mostly confined to the local community in which the business operates and there is generally little or no knowledge of the wider or distant markets.

Similarly, Oyosiji and Kayode (2010) opined that the rate of business mortality amongst Nigerian SMEs is high probably because of a strong mutual distrust and the dominance of the sole proprietor which militates against the formation of partnerships or limited liability companies. Similarly, Adelaja (no date) comments that SMEs have the problem of lack of continuity whereby in most cases, immediately the owner, proprietor or entrepreneur dies or loses vision or commitment, most small-scale enterprises die. The SMEs surveyed are not evenly distributed plus they deliver various forms of services. These suggest that perhaps SMEs in some sub-sectors are able to survive and thrive than others. The outcome of this study shows an opposing view to widely acclaimed influence of ICT use on performance as there was no significant influence of ICT use on Service delivery among SMEs. The reason for such among Nigerian SMEs may not be far-fetched. Mouelhi (2008) rightly suggested that the greatest benefits of ICT are realized when ICT investment is combined with other organizational changes and human capital upgrade. These key factors are still lacking among SMEs in Nigeria. Most of the SMEs are owned by proprietors who often times are resistant to change, aim at maximizing profit as well as reducing all other forms of cost including staff development.

5. CONCLUSIONS

Findings from this study give better insight into some of the issues concerning the use of ICT among SMEs in Oyo state. SMEs within the state are still at the early stages of ICT use. Although SME owners are often times aware of ICT functions, awareness of strategic benefits of ICT can be further improved upon. The findings from this study approve that most of the SMEs are unable to integrate ICT into their businesses. However, it is believed that an external motivator can effectively tilt the scale towards more pronounced use of ICT especially among SMEs in Oyo state. The researcher opines that an innovative brand leader can sufficiently influence many SMEs by developing tailor made, industry specific ICT solutions and services that showcase short and long term benefits of ICT.

5.1 Recommendations

The challenges and problems of ICT usage among SMEs in Nigeria are hydra-headed and hence can only be effectively tackled by a multi-dimensional and concerted approach by all stakeholders i.e. the government (Federal, State and Local) and other agencies and parastatals, banks, regulatory authorities as well as SMEs (owner and Management), the employees and other donor agencies. Thus for SMEs in Oyo State to remain competitive or to become successful, it is important for owner-managers to understand the critical success factors related to ICT usage and also develop a strategic vision. In light of the above, the following recommendations are made:

- 1) The ICT industry must intermittently develop ways of making SMEs owners/ managers realize the supplementary value and latent benefits inherent in the use of appropriate ICT while also developing products and services targeted at addressing specific business needs. It can be done by having seminars or induction sessions to allow SMEs assess their new inventions. In order to receive greater responses towards ICT acceptance, it is recommended that certificates should be given as a token and financial support to attend such seminars. These would help authorities in establishing a close link with the SMEs and get continuous feedback from them in order to identify problem areas in their products or services and take necessary actions to rectify them.
- 2) This study also recommends that Government should as matter of urgency assist prospective entrepreneurs to have access to finance and necessary information relating to business opportunities, modern technology, raw materials, market, plant and machinery which would enable them to reduce their operating cost and be more efficient to meet market competitions.

5.2 Contributions to Knowledge

This research has made a novel contribution to the area of ICT use by identifying inadequacies of previous research in recognizing major stakeholders responsible for promoting effective utilisation of ICT amongst Nigerian SMEs, which has not been identified in previous researches. The research has also highlighted key motivating factors for ICT acceptance in Nigerian SMEs and common benefits of ICT with respect to the organizational performance of many SMEs who utilise ICT solutions. Though some literatures have identified both the challenges to and the benefits of ICT adoption, only a few literatures have considered SMEs' specific utilisation of ICT. This research contributes to knowledge by validating the findings which comprise the key factors hampering SMEs' advancements in Nigeria and also highlights chief motivating factors promoting ICT use.

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