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# **INFLUENCE OF ICT USE ON BUSINESS PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN PORT-HARCOURT NIGERIA.**

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## **Abstract**

The significant contributions of the Small and Medium Enterprises towards developing the economy of any given country cannot be over emphasized. SMEs are attributed to be engine of economic development especially as experienced in most developed countries of the world. However, the contribution of the SMEs in developing countries has been confirmed as poor. This assertion is not farfetched from what is obtainable in Nigeria. Research has shown the performance of SMEs to be poor especially in Port-Harcourt. In this study attempts are made to examine the influence of ICT use on performance of Small and Medium Enterprises in Port-Harcourt Nigeria. Self-structured questionnaire was used to collect data from the respondents. The research adopted a descriptive and inferential statistics to analyses the research question and hypothesis using linear regression. The findings show that ICT use significantly influenced the performance of SMEs ( $R = 0.551$ ,  $R^2 = 0.303$ ,  $F = 132.312$  Sig. = 0.000). The study concludes that ICT use in business operation of SMEs should be encouraged. Also SMEs owners should sustain their use of traditional ICT tools and integrate the use of cloud based solutions in their business practices.

**Keywords: ICT use, Business, Performance, SMEs**

## **Introduction**

The concept of business is an age long term that deals with any activity that involves the use of human and non-human resources, directed towards the achievement of stated goals and objectives. When organizations, institutions or enterprising entities engage in a commercial, industrial or professional activities it is seen that a business is taking place. It is noted that small business are firms with little capital outlay hence cannot be compared to large business due to their small size and they are described by Phummy (2011) as businesses involved mainly in trading. The contributions of the SME sector cannot be over emphasized. Hence, it has been documented across literature that no single economy can grow without the contributions from the SME sector. Therefore, SMEs are the engine of economic growth and development and this is manifested in their capacity to create jobs, reduce poverty and advance the development of indigenous business thereby stimulating national development (Agwu and Emeti, 2014).

The importance of Small and Medium Enterprises in this contemporary economy has triggered a lot of research. This is because of the fact that, small and medium enterprises are very crucial to any given economy as such studies are conducted to keep them alive. However, in the developing country like Nigeria the performance of SMEs is poor compared to advanced countries where it is started by Abu (2012) that SMEs contributes in Netherlands about 38.6% to GDP and employs 55% of the workforce amongst other countries. According to the Nigeria Bureau of Statistics (2013), besides the poor performance of the SMES, they are increasingly experiencing a high mortality within 1 to 5 years of establishment while only about 5-10 percent experience success. This challenge can be attributed also to SMEs in the study locale. Thus, it becomes pertinent to investigate if SMEs make use of ICT in their business operations because there seems to be less attention given to ICT use by the SMEs in their business operational activities especially in the study area. These gap prompts the investigation to determine if ICT use have an influence on the performance of SMEs.

## **Literature Review**

### **A view of the concept ICT**

Globalization and digitalization have changed the way business is done and how organizations competes. This change is been driven by Information and Communication Technology (ICT). ICT is seen as the life wire of modern civilization. ICT has sped up the pace of globalization and increased the complexity of business practices because firms not only need to be familiar with their local context but also with global developments. In the same note, businesses have gone global not only relying on local content but understanding business practices and culture that underpin the performance of most organization so that they can favorably compete in a global scale.

Rafi and Muhammed (2008) starts that ICT refers to the wide range of computerized information and communication technologies. These technologies include products and services such as desktop computers, laptops, handheld devices, wired or wireless intranet, business productivity software such as text editor and spreadsheet, enterprise software, data storage and security and others. These ICTs enables smooth operation of business process and business information access.

ICT also is conceptually defined as any technology that facilitates communication and assist in capturing, processing and transmitting information electronically. ICT tools that are widely available and used includes software applications, internet, fax, e-mails, mobile phones, television, radio which effective means of communicating knowledge and information (Kweku, 2006). Placing the definition of ICT in the context of business applicability. The definition of Oluwatayo (n,d) will be adopted stating that ICTs finds expression in digital technology and all its uses and variants, including the computer, the internet, mobile telephony, the different electronic applications which includes e-banking, e-governance, ecommerce, digital media and broadband technology

### **ICT and Performance of Small and Medium Enterprises**

Yacob (2011) asserts that there is an overwhelming awareness that there are great potentials in the availability and use of information and communication technologies. The

use of ICT promotes development and improves services in any organization. It brings changes in today's business environment. Information and Communication Technology has been described as a catalyst for development in both developed and developing countries. According to Apulu and Lathman (2009) Information and Communication Technology is regarded as a driver and enabler of economic development in most countries of the world. Mutua and Wasike (2009) conducted a study and found out that adoption and use of ICT is a key factor to helping enterprises to raise their productivity and competitiveness. Within the SME sector information and communication technology has proven to be an enabler of business performance. There is no doubt on the impact of Information communication technology as an enabler in the growth, enhancement and performance of business organizations. Scholars attest to the fact that it allows business organization to access vital information crucial for decision making.

The importance of ICT towards the development and growth of SMEs cannot be over emphasized. However the essentiality of ICT is rapidly embraced in developed economies where the integration of ICT tools into business operational activities is seen. Small and Medium Enterprises need information to apply to a specific business problem as to enhance their performance. Thus it becomes a thing of concern to determine if the poor performance of SMEs in Nigeria especially from the study locale is a result of the lack of use of ICT tools. Therefore the general objective of this study is to investigate if ICT use will influence the performance of SMEs in Port-Harcourt. The specific objectives are to: find out the ICT tools used by SMEs in Port-Harcourt Nigeria and ascertain the extent of ICT used by SMEs in Port-Harcourt Nigeria.

### **Research Questions**

The research questions formulated below guided the direction of this study:

1. What are the ICTs used by SMEs in Port-Harcourt Nigeria?
2. To what extent are the ICTs used by SMEs in Port-Harcourt?

## Research hypotheses

The following null research hypotheses are formulated to guide the conduct of this study and was tested at 0.05 level of significance.

Ho1: ICT use will not significantly influence the performance of SMEs in Port-Harcourt Nigeria

## Design

The study made use of survey research design. A total enumeration technique was used to cover a four hundred and forty eight (448) proprietors of Small and Medium Enterprises in the formal sector of the SME sector in Port-Harcourt registered under the National Association of Small Scale Industrialist (NASSI) Rivers chapter of which three hundred and ten copies were properly filled and used for analysis.

## Results and Discussion of Findings

**Table 1. ICT tools used by SMEs**

		Responses		Percent of Cases
		N	Percent	
ICT tools used by SMEs	Desktop/laptop Computers	307	13.8%	99.7%
	Intranet connection	57	2.6%	18.5%
	Electronic fund transfer	163	7.3%	52.9%
	Fax machines	16	.7%	5.2%
	Internet facilities	288	13.0%	93.5%
	Amazon cloud	6	.3%	1.9%
	Websites	168	7.6%	54.5%
	Google cloud	63	2.8%	20.5%
	Microsoft cloud	16	.7%	5.2%
	Printers	290	13.0%	94.2%
	Photocopiers	215	9.7%	69.8%
	Scanners	213	9.6%	69.2%
	Point of sale systems	185	8.3%	60.1%
	Skype applications	18	.8%	5.8%
	Smartphones	218	9.8%	70.8%
Total	2223	100.0%	721.8%	

Results from Table 1 reveals that the ICT tools that are used by SMEs in Port-Harcourt, Nigeria are Desktop/laptop computer as indicated by 307 (99.7%) of the respondents, with a response rate of 13.8%. This is closely followed by printers and internet facilities, as reported by 94.2% and 93.5% of the respondents respectively, having a response rate

of 13% each. Other ICT tools which are used by SMEs in Port-Harcourt include smartphone, photocopier, scanners, point of sale systems, websites, and electronic fund transfer; having response rates that are near 10%. However, other ICT tool which are used by SMEs with response rate less than 5% include intranet connection, google cloud, skype application, Microsoft cloud, fax machine, and amazon cloud.

**Table 2. Extent of ICT tools use.**

Extent of ICT tools use.	Very High	High	Low	Very Low	Undecided	Mean	Std. Dev
	Freq. (%)						
Printers	285 (91.9)	12 (3.9)	1 (0.3)	-	1 (0.3)	4.94	.322
Internet facilities	205 (66.1)	84 (27.1)	5 (1.6)	6 (1.9)	2 (0.6)	4.59	.736
Scanners	133 (42.9)	59 (19.0)	3 (1.0)	2 (0.6)	4 (1.3)	4.57	.759
Photocopiers	62 (20.0)	242 (78.1)	1 (0.3)	-	-	4.20	.409
Smartphones	109 (35.2)	181 (58.4)	7 (2.3)	4 (1.3)	3 (1.0)	4.28	.668
Intranet connection	200 (64.5)	2 (0.6)	2 (0.6)	-	104 (33.5)	3.63	1.889
Electronic fund transfer	3 (1.0)	122 (39.4)	181 (58.4)	1 (0.3)	1 (0.3)	3.41	.536
Fax machines	5 (1.6)	5 (1.6)	68 (21.9)	228 (73.5)	-	2.30	.586
Skype applications	5 (1.6)	13 (4.2)	7 (2.3)	173 (55.8)	104 (33.5)	1.81	.810
Amazon cloud	9 (2.9)	5 (1.6)	8 (2.6)	102 (32.9)	182 (58.7)	1.55	.868
Google cloud	8 (2.6)	8 (2.6)	6 (1.9)	106 (34.2)	180 (58.1)	1.56	.869
Microsoft cloud	15 (4.8)	12 (3.9)	50 (16.1)	-	155 (50.0)	1.63	1.151
Point of sale systems	55 (17.7)	8 (2.6)	107 (34.5)	8 (2.6)	124 (40.0)	2.54	1.491

Results from Table 2 reveals that the ICT tools that are highly used by SMEs in Port-Harcourt, Nigeria are printers  $X=4.94$ . This is followed by Internet facilities  $X=4.59$  scanners  $X=4.57$ . Smart phones  $X=4.28$  and photocopiers  $X=4.20$ . However, respondents reported a low usage rate of ICT tools such as electronic fund transfer, fax machine, websites, and skype application.

**Hypothesis: ICT use will not significantly influence the performance of SMEs in Port-Harcourt Nigeria**

**Table 3: Regression results on the influence of ICT use on the performance of SMEs in Port-Harcourt Nigeria**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
1	(Constant)	1.177	.199	5.915	.000	
	Use of ICT	.747	.065	.551	11.503	.000

a. Dependent Variable: Performance of SMEs

R = 0.551      R<sup>2</sup> = 0.303      F = 132.312      Sig. = 0.000

b.

**Source: Field Survey, 2018**

Table 3. Reveals that the independent variable (Use of ICT) has a positive coefficient, which proves that the use of ICT tool has a positive influence on the performance of SMEs in Port-Harcourt. The result also shows an R value of 0.551 which shows that there exists 55.1% correlation between use of ICT and the performance of SMEs in Port-Harcourt. The R<sup>2</sup> value of 0.303 further shows that the independent variable (use of ICT) accounts for 30.3% of the variations on the performance of SMEs in Port-Harcourt.

Also, the results further reveal that while holding the influence of ICT tools use constant, the performance of SMEs in Port-Harcourt will stand at a value of 1.177. Meanwhile, the coefficient of ICT use ( $\beta = 0.747$ ), further shows that one unit increase in the rate of use of ICT tools among SMEs in Port-Harcourt, will result in 0.747 unit increase in the performance of the SMEs. Therefore, with an F statistics of 132.312 which is significant at  $p < 0.05$ , we will reject the null hypothesis which states that ICT tools use will not significantly influence the performance of SMEs in Port-Harcourt Nigeria. The findings from the accepted hypothesis supports the assertion of Mutua and Wasike (2009) who

stated that adoption and use of ICT is a key factor to helping enterprises to raise their productivity and competitiveness. There seems to be a common knowledge among researchers that Information communication technology is an enabler in the growth of any business entity. However, other ICT tools that are not very much used by SMEs as indicated by the result include intranet connection, google cloud, skype application, Microsoft cloud, fax machine, and amazon cloud. Iwona (2014) enumerated the cost of using cloud based applications for business such as: Cost reduction which lays emphasis on the amount used to purchase hardware and software infrastructure for running a business which might be too expensive for small business to acquire. Therefore, if SMEs will strive to reduce cost in business operability within the context of purchases and maintaining of business IT hardware is essential.

### **Conclusion and recommendation**

The purpose for this study was to find out if ICT use will influence the performance of Small and Medium Enterprises in Port-Harcourt Nigeria. The findings of this study indicated that Information Communication Technology use as an independent predictor has a significant influence on the performance of SMEs in Port-Harcourt Nigeria. With the findings of this study the researcher can assert that the performance of SMEs in Port-Harcourt is predicated on ICT use of the proprietors of the SMEs. Therefore the study recommends that in order to foster authenticity in business decisions. Small and Medium Enterprises should adopt the use of cloud based ICT solutions and sustain the use of existing conventional ICT tools like desktops and laptops for business operations and transactions. The use of cloud based ICT tools will help reduce the cost of business operation and significantly cut down the cost of maintaining and upgrading traditional ICT tools. SMEs should learn to adjust to current trends especially in ICT adoption and use which will facilitate the performance of their business.

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