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# The strategic Role of Information Communication Technology on Business Development: Nigerian Perspective

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#### **Abstract**

There has been series of debate in recent times as adoption whether the of Information Communication Technology (ICT) improves or worsens the development of a country. Based on these contentions, this study therefore assessed the strategic role of information communication technology (ICT) on the development of businesses in Nigeria. Stratified technique was used to select a sample of three hundred and fifty three (353) respondents from a working population of three thousand (3.000) employees. Primary data was collected through the use of structured questionnaire. The data obtained were analysed using descriptive and inferential statistics. Findings from the study revealed that there is a significant effect of ICT on

business development ( $R^2 = 0.183$ , Adjusted  $R^2 =$ 0.149, P=0.000). The results also indicated a moderate positive relationship between Ecommerce (r = 0.462, P<0.01), and Social media (r = 0.382, P < 0.01) on business development. The study concluded that the adoption of ICT by business owners can lead to expansion of the geographical scope of potential markets, as well reduction in transaction cost, improving productivity. It was recommended that organizational management should considered ICT as tool to increase the level of profitability, gaining entrance to speedy flow of information and shape inter-organizational coordination.

**Keywords**: ICT; Business Development; Social Media; E-commerce; Productivity.

#### Introduction

Across the globe, information communication technology (ICT) is increasingly becoming acknowledged by both private and public sectors, meanwhile; modern society now depends heavily on communication, processing and storage of information in order to remain in market (Adewoye and Abioro, 2017). The use of ICT as a catalyst to address the issue of business development in today's competitive market is still much in process. This is because, investigation revealed that appreciable number of employees in the United States work from home for a substantial period of the year, while others work on the move (mobile) (Drunker, 1995). This signifies the series of prospects provided by ICT, which serve as an essential instrument to achieve different goals in organizations and civic institutions. Nevertheless, more recognition is given to ICT based on the fact that it serves as a tool for development and a drive for both fiscal and monetary policy enablement of any nation, especially the developing country. Not only that, ICT open up new opportunities, increase organizational capabilities, assist establishments to overheads and it support inter-organizational harmonization (Onugu, 2005). This revolution shows that technological advancement and adoption of information technology (IT) will remain to exist. It is logical therefore to say that, the revolution in ICT has transformed not simply the lives of an individual, but also the manner through which people transact business.

ICT is said to be a universal word symbolizing the technologies used for storage, editing, gathering and passing on information in several firms (Brown, 2000; Tapscott and Caston, 1993). Today, there are various ways through which organization perform and transact their businesses, such as e-commerce, e-marketing, social media network, efinance, e-banking, e-learning etc. It is pertinent therefore to say that, information technology is one of the relevant component assisting businesses to penetrate fresh markets and generate inventive products and services. Another major invention for businesses in the area of ICT is that organizations are no longer counting on tracks of paperwork to do everyday communications. Administrators now recognize that ICT can actually be used as an instrument to quick up procedures, eradicate or moderate form-filling, increase the value of productivity and service delivery and improve information distribution among others. However, as key establishments rethink their dealings in terms of the internet, precisely its accessibility, wide spread and ever changing abilities, they are also using electronic-business to get deliveries from other corporations, conduct joint study and pool resources on sales promotions.

Sequel to the assertions above, the role of ICT on business development is still based on diverse management tactics and the method of application. Hence, the following pertinent questions were put forward in order to put the study in proper perspective. What challenges are businesses facing in adopting ICT? In what ways is ICT augmenting development in the Nigerian enterprises? What are the businesses effort in raising their output and productivity through the process of ICT? The above questions structure the argument and prerequisites for enquiry into ICT adoption, whether it improves or worsens business development in Nigeria and this is the fundamental framework that has informed the basis for this study.

### **Research Hypotheses**

The following hypotheses were stated in a null form:

- $i.~H_0$ : there is no significant relationship between ICT and business development.
- ii.  $H_0$ : there is no significant effect of ICT on business development.

#### Literature review

The adoption of digital technology in operating business increases productivity, hence, any enterprise that fails to adopt the approach may likely find it difficult to compete favorably in the labor market (Minton, 2003). Meanwhile, being linked to the internet, enterprises have the prospect to study quicker, develop websites that stimulate their products, and observed consumer behavior. It is often said that a well-structured business practices are transformed from physical authenticity to digital realism based (Barisha-Namani, 2010). Information communication technology (ICT) plays a significant role in assisting business enterprise to have upper hand above competitors in areas of openness to international markets. A study by Egan, Clancy and O'Toole (2003) ascertained that the adoption of ICT in several societies has aided in decreasing cost of transactions, control of distance constraints and have access through geographic borders thus helping to increase direction between structural boundaries.

It is also worthy of note to state that the internet represent a technological innovation, whose effects varied from interaction to communication, but, its prospect and usage has not been completely explored (Hoffman, Novak and Peterson, 1997). A recent study conducted by Miniwatts Marketing group in 2014 shows users of internet in the world by regions. These are: Asia (45.7%), Europe (19.2%), Latin American (10.5%), North America (10.2%), Africa (9.8%), Middle East (3.7%), Oceanic/Australia (0.9%). The analysis confirmed that Africa as a continent still has a long way to go in order to meet up with the Asian countries' having (45.7%). However, the intention of professionals in the area of ICT in Africa is to create an atmosphere that inspires networking of facilities and application; encouraging commerce and skill advancement programmes for goods and services; supporting online services and strengthening network security (Miles, 2001).

## **Conceptual Clarification: ICT Overview**

Information communication technology (ICT) can add hugely to a nation Gross Domestic Product (GDP) and can enhance the market attractiveness of a product and service. In the same vein, it can also contribute effectively in the international economic integration, expand standard of living and improve bio-diversity utilization and management.

(2010)explains information Akunyili communication technology as that umbrella which envelopes all other technical means in order to communicate and process information. African Development Bank (2003) described ICT as a set of actions that is facilitated by electronics means for the process and displaying of information. A study by Lymer (1997) explains that ICT application in any system has the capacity to moderate cost overheads and grow the level of productivity. Sajuvigbe and Alabi (2012) opined that ICT are being adopted for management of data, decision making at top management level, teamwork, customers accessibility, strategic management, communication and knowledge management, since it assist to offer a framework for an operational means of organizational efficiency and good delivery of service.

The adoption of ICT has brought about development in many organizations. However, there are still some challenges associated with the adoption of ICT for business. Some of these challenges are: ICT skills and facilities shortage, monetary resources limitation and private public partnership inadequacy. However, the above challenges can be fixed through the use of public-private smart partnership.

## Information Communication Technology vis-à-vis Business Development

A business is said to be a means of selling a small group of product to a specific customers. However, business development has to do with successful creation of profitable business ventures. It encompasses the definition, evaluation and direction leading to profitable business ventures. The advancement of technology impacts considerably on business by shifting the industry structure, operations and the principles for the advent of competitive benefits for those corporations that are implementing ICT in their business practices.

Information communication technology (ICT) has become the key component in business undertakings in the 21<sup>st</sup> century (Dimovski and Skerlaraj, 2004). The implementation of ICT by business operators offers the capability of swift access to data, valuation, handling and distribution of enormous data volumes. A report by OECD (2004) stated a number of elements that impede ICT utilization by enterprise owners which negatively affect business development in Nigeria. These include (i) communication networks infrastructure and computer inadequacy;

(ii) inconsistency in policy by the regulatory body in relation to ICT

adaptation for business; (iii) inadequate understanding and managerial abilities of ICT deployment; (vi) business processes mismatched; (v) security deficiency of ICT application and trust; (vi) cost of expansion and preservation of automated systems (Hardware), and (vii) other related encounters which has to do with electronic business practices.

However, according to Ongori and Migiro (2010), the study opined that only those business owners which use the ultramodern technologies have the prospect to enter the global market and stay competitive regardless of the encounters of liberalization, technical progress and globalization. ICT solution therefore assists organization to advance their output and realize better business performance growth (Ryssel, Ritter and Gemunden, 2004).

## **Empirical Review**

It is often said that access to information is one of the most essential business services. Basically, the development of information technology in business has occupied the attention of researchers (Chatfield and Yetton, 2000; Leek et al., 2003). According to Chau (1995), ICT enhances the invention procedure in the organizations, because technology monitoring can be adopted to reduce the count of supervisors needed for the process. Moreso, Brynjolsson and Hitt (2003) agree that there is a considerable lasting productivity advantage with the practice of ICT in any organizations.

Information technology is mostly recognized as a tactical device for enterprises to boost their competitive advantages due to increasing level of uncertainty (King, Grove and Hufnagel, 1989). Therefore, the impression that information technology can be a source of optimization of business assets, allow and enhances business development, is recognized and sustained by several empirical research (Croteau and Bergeron, 2001). In a related study, Bahalis (2003) opined that the introduction of ICT can provides the business with both tactical and strategic tools when they are applied appropriately. Another potency of ICT deployment is in the area of contributing to business product variability, improved response rate to customers' requests, product adjustment and improvement in total market share. Not only is the intensity of the use of ICT, but also the eminence of the use of ICT is an essential element for business development (Berisha-Namani, 2010).

A research by Dewan and Kraemar (2001) and Pahjola (2001) where data was collected from 36 affluent and developed countries of

various continents concluded that a highly significant relationship exist between ICT and business development. Likewise, Onugu (2005) supports that ICT adoption empowers business enterprise to form interorganizational directions, grow organizational competences and cut costs to the minimum level. A study conducted by OECD (2004) also revealed that ICT has the capacity to increase business-to-business (B2B) consistency, promptness and business-to-consumer (B2C) transactions. Lauder and Westhall (1997) concluded that ICT impact on business entails communication at a quick and low-cost rate, improved customer service, well-organized marketing, enhanced information accessibility and good product development. Therefore, this study intends to contribute to this ongoing discussion by investigating the strategic role played by ICT on the development of businesses in Nigeria.

### Roles of ICT on Business Development in Nigeria

The collective role of information and communication technology (ICT) in all sectors of the economy via the internet to enrich business development in Nigeria cannot be over emphasized. Not only that, it brings about collaboration with the people and a different network of communication among the general public and government in the country. It is a record for this country that, the advent of ICT improved the socio-economic and democratic rule immediately after Nigeria returned to democracy in 1999.

However, ICT has been acknowledged as the instrument for development and the foundation of emergence for the economic and social enablement of any nation, most especially the developing countries (Ogidan, 2017). The Nigerian technological space is said to have been improved in recent time. As a result of the operating license awarded to three companies in January 2001 to operate Global System for Mobile communication (GSM) in the country, since then, there has being a significant growth in the Nigerian digital mobile network (Oladimeji and Folayan, 2018).

Not only that, ICT has also contributed to business enterprise in both private and public sector of the economy, in that it serves as a tool for national development and expansion. It generates a friendly business environment and prospects for firms in a semi-rural centers, and also link up suppliers with their respective clients.

In the same vein, service industries like real estate, insurance and finance industries will not be able to operate without the use of ICT. Therefore, ICT has been able to contribute to development of business in the following ways:

- i. Reduction in transaction costs thereby improving productivity.
- ii. It offers business with immediate connectivity.
- iii. It gives channel knowledge and information at all levels.
- iv. Provides alternative choice for customers in the market place for goods and services which are not available.

A World Bank survey revealed that organizations using ICT will experience swift employment progression, growth in terms of sales and increase in the level of productivity e.g. Jumia, Konga, Dealdey etc.

#### Methodology

This study adopts a survey research method. Primary source of data was used to get information from the respondent through a well-structured questionnaire. The study population consists of all employees in Jumia Nigeria Limited totaling three thousand (3,000). Simple random sampling techniques were used to select employees so as to give them equal chance of being selected. A sample size of three hundred and fifty three (353) respondents from the total population constitutes the sample size for questionnaire that was administered. However, from the 353 questionnaire distributed, only 270 were filled and returned appropriately. Both descriptive and inferential statistics was used to analyze the data collected and test of hypotheses.

#### Data Presentation

Table no. 1 shows the total number of questionnaire which was three hundred and fifty three (353) administered to the respondent. Two hundred and seventy (270) questionnaire representing 76.5% were returned and eighty three (83) questionnaire representing 23.5% were not returned. This means that the number of returned questionnaire is good enough to make valid conclusions.

**Table no. 1.** Analysis of response rate

QUESTIONNAIRE	RESPONSE	PERCENTAGE
		(%)
Returned	270	76.5
Not Returned	83	23.5
Total Distributed	353	100

Table no. 2 shows details about the organization that participated in the research. Jumia Nigeria Limited with 3,000 employees was analyzed in our study. However, out of the 353 questionnaire distributed, only 270 was filled and returned appropriately, as illustrated in table no.1.

**Table no. 2.** Brief presentation of the analysed organization

S/N	NAME OF COMPANY	NUMBER OF	DISTRIBUTED
		EMPLOYEES	QUESTIONNAIRE
1.	Jumia Nigeria Limited	3,000	353
	Total	3,000	353

Source: Author Field Survey, 2018

#### Measurement of Research Variables

This section evaluates the sources of the variables used for this research. The variable of the research is information communication technology (ICT) as independent variable, with two analyzed elements: e-commerce and social media, as well as the dependent variable: business development.

Table no. 3 revealed that, the mean scores of E-commerce as independent variable ranged between 2.36 and 3.86 (above the average), with their corresponding standard deviation of 0.52 and 1.88; mean scores of Social media as independent variable ranged between 2.57 - 3.99 (above the average), while their standard deviation of 0.12 and 1.91; and the mean scores of Business development as dependent variable ranged between 2.83 - 4.57 (above the average), while their standard deviation of 0.97 - 1.95 respectively.

**Table no. 3.** Descriptive Statistics of ICT and Business Development.

·	N	Mean	Std. Deviation
E-COMMERCE			
My enterprise receives orders for goods and services placed via online website	270	3.86	1.38
We use the internet mostly to transact our businesses	270	2.36	1.77
Customers can track their order placed on our dedicated website	270	3.59	1.01
We received and sent E-invoices to our customers through our online platform	270	3.45	0.52
Sales have significantly increased as a result of internet adoption in my enterprise.	270	3.22	1.88
SOCIAL MEDIA  My company uses the social media platform on the internet to			
advertise our various product and services	270	3.41	1.91
Social media is a platform for customer service and product delivery in my enterprise	270	3.29	0.12
The use of selected social media, networks, blogs as improved the sales of our product	270	2.57	1.46
Customers link up to my company social media profiles to transact their business.	270	3.57	1.11
Through social media, we are able to reach and communicate to numerous online customers.	270	3.99	1.89
BUSINESS DEVELOPMENT			
The introduction of ICT has improved the sales and revenue base of our products	270	3.43	1.95
ICT is a veritable tool that should be adopted for business growth in Nigeria	270	2.83	1.59
We have competitive edge and advantage over other competitors due to our online sales platform	270	3.73	1.36
We achieve and get more sales through our online platform	270	3.19	0.97
There are security facilities on our online platform to protect our customers' interest against scam and fraud.	270	4.57	1.04
AVERAGE		3.47	

**Source:** Authors computation, 2018

# **Test of Hypotheses**

# **Hypothesis I**

 $\mathbf{H}_0$ : there is no significant relationship between ICT and business development.

**Table no. 4.** Correlation test - Relationship between E-commerce and Business development

	Business de verei	,1110110	
		E-commerce	Business
			Development
E-commerce	Pearson Correlation	1	.462**
	Sig. (2-tailed)		.000
	N	270	270
Business Development	Pearson Correlation	.462**	1
	Sig. (2-tailed)	.000	
	N	270	270

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

**Table no. 5.** Correlation test - Relationship between Social media and Business development

		Social Media	Business
			Development
Social Medial	Pearson Correlation	1	.382**
	Sig. (2-tailed)		.000
	N	270	270
Business Development	Pearson Correlation	.382**	1
	Sig. (2-tailed)	.000	
	N	270	270

<sup>\*\*</sup>Correlation is significant at the 0.01 level (2-tailed).

### **Interpretation**

The entries in table no. 4 and 5 explain the results using Pearson correlation which was used in order to establish a relationship between the independent variable (ICT) and the dependent variable (business development). Given the correlation analysis, the result shows that there is a moderate positive significant relationship between ICT and business development, where E-commerce (r = 0.462, P < 0.01); and social media (r = 0.382, P < 0.01). Therefore, we reject the null hypothesis ( $H_0$ ) and accept the alternative hypothesis ( $H_1$ ). This implies that a significant relationship exist between ICT and business development in Nigeria.

## Hypothesis II

 $H_0$ : there is no significant effect of ICT on business development.

**Table no. 6.** Regression test of E-commerce, Social media and Business development

Model Summary<sup>b</sup>

				Change Statistics				
			Std.	R				
		Adjusted	Error of	Square	F			Sig. F
R	R	R	the	change	Change	df1	df2	Change
	Square	Square	Estimate					
.521ª	.183	.149	2.47691	.183	10.846	2	132	.000

a. Predictors: (Constant), E-commerce, Social Media

b. Dependent Variable: Business Development

**Table no. 6.** (Continued) **ANOVA**<sup>a</sup>

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	321.011	2	57.467	10.846	.000 <sup>b</sup>
Residual	882.254	132	7.557		
Total	1203.265	134			ļ

a. Dependent Variable: Business

Development

b. Predictors: (Constant), E-commerce,

Social Media

**Table no. 6.** (Continued) **Coefficients**<sup>a</sup>

	Unstandardize	d Coefficients	Standardized Coefficients	
Model	В	Std. Error	Beta	t
1 (Constant)	6.589	1.732		3.916
E-commerce	.177	.084	.179	2.331
Social Media	.210	.079	.258	2.716

a. Dependent Variable: Business Development

Table no. 6 shows that there is a significant effect of ICT factors on business development, based on F-value (10.846), and the level of significance (Sig=0.001) less than 0.05. Correlation Coefficients (R=0.521) represent the strength of relationship between two variables which is positive, while the value of the coefficient of determination ( $R^2$  =0.183, Adjusted  $R^2$ =0.149, P=0.000) refers that 18.3% of the variance in business development can be explained by the variation in ICT.

Further analysis also reveals that of all the ICT factors, both E-commerce (17.9%) and Social media (25.8%) accounted for the variation in business development. It therefore implies that, the null hypothesis is hereby rejected and accepts the alternative hypothesis which states "there is a significant effect of ICT on business development". The result is in congruence with the findings of Dewan and Kraemar (2001) and Pahjola (2001): a highly significant relationship exists between ICT and business development. It also agrees with the study of Bahalis (2003) which state that ICT adoption provides businesses with both tactical and strategic tools when applied appropriately.

#### Conclusion and Recommendation

The contribution of information communication technology (ICT) to business development in the 21st century cannot be overemphasized. Hence, the study assesses the strategic role of ICT on the development of businesses in Nigeria. However, from the review, it was revealed that the introduction of ICT is an avenue for businesses to open up new opportunities, reduction in inventories and making services to be more tradeable. Some of the challenges being faced by business enterprise like: partial understanding and managerial expertise of ICT utilization, cost of expansion and maintenance of electronic system were also put into consideration. To overcome this identified challenges, enterprises are required to adopt the use of public private smart partnership. A critical analysis on the subject matter of this research was carried out and discoveries have been made. Two variables which are Ecommerce and Social media platform were used as a determinant of ICT for this study. The results revealed a moderate positive relationship of these identified factors on business development. The central findings from this study are that ICT offers the business with immediate connectivity and widen the geographic scope of potential markets. It is also worthy of note to state that the implementation and proper application of ICT will result into quality production of goods and services. It is therefore recommended that to achieve business development, management of the organizations should considered ICT as a strategic tool which can lead to business expanding to new markets, boosting of profitability level and generating competitive advantages.

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