

# Information and Communication Technology and Youth Employment in Calabar Municipality, Cross River State, Nigeria

Angioha, P. Unim<sup>1,\*</sup> & Ugal, B. Upeh<sup>2</sup>

<sup>1</sup>Graduate Students, Department of Sociology, University of Calabar, Nigeria,

<sup>2</sup>Department of Social Work, University of Calabar, Nigeria

\*Corresponding Author

**Abstract:**-The issue of unemployment is not a new phenomenon in Nigeria. Thus, in recent years the rate has caused great concern not only to individuals but also to the general public as well as the policy makers. This study examine the effect information and communication technology have on youth employment in Calabar Municipality, Cross River state, Nigeria, in order to achieve the objective of this study, two specific objectives were raised for the study. To Examine the relationship between call center operator and youth employment in Calabar Municipality, Cross River State, Nigeria and to Assess if internet Café operator relates to youth employment in Calabar Municipality, Cross River State, Nigeria. The survey research design was adopted for the study. The study was carried out in Calabar Municipality. The population of the study is both male and female youths that reside in the study area. The study made use of two hundred (200) samples selected using the purposive sampling technique. The questionnaire was adopted as the main instrument for data collection. Data collected from the field was coded and analyzed hypothesis by hypothesis and Pearson product moment correlation coefficient was the statistical tool for data analysis. Out of the 200 administered questionnaires for this study, only 157 respondents returned questionnaire were properly filled without missing values and mutilation, therefore the said number was used for the data analysis. Result revealed that there is statistical considerable relationship between call center operator and youth employment in Calabar Municipality, Cross River State, Nigeria and Internet Café operator statistical considerable relate to youth employment in Calabar Municipality, Cross River State, Nigeria. The study recommends amongst others that both the state and federal Government should as a matter of urgency provide all necessary facilities for the training of youth in ICT management so as to provide job opportunities for the teaming unemployed youth Calabar Municipality.

**Keyword:** Information and communications technology, youth employment, call center operator, internet Café operator.

## I. INTRODUCTION

Information communication technology (ICT) since its inception has contributed greatly to our world such that it is present in our everyday life. The world has become a global village since the advent of ICT, as every activity that concerns man is influenced by it. Information technology has become so influential that it is now a significant factor in all human

endeavors, be it political social and economically. Adebayo and Akinola (2008) in their study maintain that information communication technology has made globalization a reality. Information communication technology refers to those diverse set of technology used in communication and also to create, store, manage and disseminate information (Tinio, 2015). It implies those technological tools that consist of associated human interactive materials and electronic devices that allow the users a wide range of learning and teaching processes. These technologies include computers, the Internet, broadcasting technologies (radio and television), and telephony. Advocate of ICTs argue that ICT innovations increase efficiency, provide access to new markets and services, create job opportunities, generate new activities and in turn improve employment (Smolny, 1998; Vivarelli & Pianta, 2000).

In the past few years, third world countries such as those in Africa have witness a tremendous revolution in the employment of ICT based technology in all sphere of life. Current statistics reveals that two thirds of adults population of Sub-Saharan Africa make use of mobile phones and about 46 percent have access to the internet (International Confederation of Free Trade Union (ICFTU), (2017). In fact, it is expected that the economic problems faced by most African nations will be solved by ICT, such as high inflation, unemployment and under employment. This is because most of the countries in Sub-Saharan Africa suffer from the challenges of unemployment and inflation.

According to Angioha, Nwagboso, Ironbar and Ishie (2018) and Agba, Agba and Nwosu, (2015), Unemployment is a major problem among the youths in developing countries and it is a common problem in Nigeria. Odi and Odi (2013) in their analysis of unemployment in Nigeria maintain that, unemployment was put at about 19.7 per cent above world average of 14.2 per cent by the World Bank and with 41.6 percent unemployment rate reported for youth in the 18 to 24 years age bracket. Okonjo-Iweala, the former Nigeria's former Minister of Finance corroborating this stand reported that that 1.8 million Nigerian youths enter the labour market annually and not all are absorbed. The unemployment crisis

particularly in Nigeria is traceably to the disequilibrium between labour market requirements and lack of essential employable skills by the graduates. These critical skills gap inhibit the development of the entire nation (Diejonah & Orimolade, 1991; Dabaler, Oni & Adekola, 2000; Agba & Ushie, 2010; Angioha, Nwagboso, Ironbar & Ishie, 2018). Interestingly governments, parents and even youths themselves have recognized the capacity of information and communication technologies (ICTs) education to ameliorate the situation, hence the development of ICT training centers in every part of the nation. It is against this backdrop that this study is aimed at examining the relationship between information and communication Technology and youth employment in Calabar Municipality, Cross River State, Nigeria.

#### *Statement of the Problem*

Nearly all the developed nation of the world are face with the problem of youth unemployment, especially in Africa. The International Labour Organization (ILO), reported that the world youth unemployment rate reduced from 12.3 per cent in 2009 to 11.3 per cent in 2011, increased again to 12.4 per cent in 2012 and grew to 12.6 per cent in 2013. By the end of 2018, it is projected to rise to 12.8 per cent. However, 74.5 million youths under the age of 25 are currently unemployed globally (ILO, 2018). In fact, in many of the countries, youth unemployment is about two times the national unemployment rate. In Nigeria, youth unemployment is five times the national average. The most worrisome of the situation is the number of unemployed youth who have graduate from tertiary institutions in the nation.

In Calabar, the Unemployment situation has affected the youths and the development of the Calabar. It is obvious that the situation is critical, especially for the youths, as it affects their progress in several ways. According to Angioha, Nwagboso, Ironbar and Ishie, (2018), with the current economic situation and the increasing rate of unemployment in the society, unemployed youths have been forced to take up jobs that they are far overqualified. Apart from the economic waste it brings to the state, it also constitute a reason for the youth involvement in anti-social vices.

A recent policy note released by the World Bank says that information and communication technologies (ICTs) are transforming the world of work, creating new job opportunities and making labour markets more innovative, inclusive, and global (World Bank Group, 2012). ICTs are influencing employment both as an industry that creates jobs and as a tool that empowers workers to access new forms of work, in new and more flexible ways (Samuelson, 2008). In a recent report published by the National Information Technology Development Agency, NITDA, it revealed that the ICT sector had boosted the Federal Government's job creation efforts by creating over 12 million jobs. It described this current contribution as an improvement on the job opportunities created by other sectors. The ICT sector in

Nigeria is currently boosting the federal government's effort in job creation with the creation on an average of about 12 million jobs from 2012 to date, that is, a significant improvement on the 2.5 million jobs the sector created between 2002 and 2012. This is in addition to contributing about nine percent to the growth of Nigeria's GDP.

It is as a result of the above statement that this study is set out to examine the effect that information and communication technology has on youth employment in Calabar, Cross river state, Nigeria.

#### *Objective of the Study*

The main objective of the study is to examine the relationship between information and communications technology and youth employment in Calabar Municipality, Cross River State, Nigeria. Specifically, the study is aimed at;

- I. Examine the relationship between call center operator and youth employment in Calabar Municipality, Cross River State, Nigeria
- II. Assess if internet Café operator relates to youth employment in Calabar Municipality, Cross River State, Nigeria.

#### *Statement of Hypotheses*

The following hypothetical questions are raised for the study;

- I. There is no significant relationship between call center operator and youth employment in Calabar Municipality, Cross River State, Nigeria.
- II. Internet Café operator does not relate to youth employment in Calabar Municipality, Cross River State, Nigeria.

#### *Scope of the Study*

The study aim at examining the relationship between information and communication technology and youth employment in Calabar Municipality, Cross River State, Nigeria. This study aim at looking at call center operator and internet Café operator (independent Variable) relates with youth employment (dependent Variable). The study will be carried out in Calabar Municipality. The time scope of the study is two weeks.

## II. LITERATURE REVIEW

### *Information and Communications Technology and Youth Employment*

In the recent years, Information and Communication Technology (ICT) has been recognized across the globe as a veritable tool for massive job creation. This is possible through the appropriate use of various technologies embedded in ICT. Boritz (2001), claimed that no Nation can grow economically if poverty, unemployment and under employment are still persisted. However employment success, job attractiveness and salary level appear to be

greater for individuals that possessed good knowledge and skills in ICT.

UNCTAD (2011) study showed that Information and communication technology has an impact in the creation of employment and self-employment opportunities. The study argued that the impact can be indirect through multiplier effects or direct, through growth of ICT-using industries or the ICT sector. The paper concludes that even though ICT can lead to loss of employment as systems and tasks are automated, when a country supports ICT initiatives, individuals can also benefit by enhancing their opportunities for employment through acquiring ICT skills.

Sepehrdoust and Khodaei (2013) study focused on the effects of information and communication technology (ICT) on the employment level of selected Organization of Islamic Conference (OIC) countries. The study used econometric panel data model to analyze the relationship between ICT and employment rate of OIC countries for the period 2000 to 2009. Adopting the Constant Elasticity Substitution (CES) category of production function, the findings showed that the introduction of technology has led to major structural changes in the economy of OIC member countries and there is also a positive and significant effect of the ICTs on employment rate, but the effects are diversified among oil-based as well as non-oil economies.

Oladunjoye, and Audu, (2014) investigates the relationship between vocational opportunities of youths and ICT in Nigeria. Using data from both primary and secondary data, the study argues that ICT development will enhance vocational opportunities to the youths if the application of ICT is encouraged among the youths. Ebaidalla (2014) paper focused impact of Information and Communication Technologies (ICTs) on youth unemployment in the Sub-Saharan African (SSA) during the period 1995-2010. The study employs a dynamic panel data method for a sample of 30 SSA countries, measuring the ICT facilities by mobile cellular subscriptions and the number of internet users. The empirical results show that mobile subscriptions have a negative and significant effect on youth unemployment in SSA countries, implying that communications boom in the last decades has promoted the youth employment.

Hafiz, Shaari, and Saleh (2013) carried out a study on an exploratory evidence of youth's ICT empowerment in Nigeria. An exploratory factor analysis was run on 389 valid responses from 3 geo-political zones in Bauchi state, Nigeria within the ages of 18-35 years. Using SPSS version 16 to check skewness and kurtosis. Utilising the maximum likelihood procedure which was followed by Varimax, rotation to get a better understanding of the factor structure. Findings revealed that ICT has an impact on job creation, increase in the stock of technologies and skills, ease of communication, expansion of trade, etc.

### *Mobile Phones and Youth Employment*

The mobile technology revolution is unique in a way since it has achieved unparalleled status as an agent of socio economic change where landline telephones or other communication technology faltered. Rural area which shelters around 69 percent of the world population is marred by poor infrastructure, education, healthcare facilities. Mobile phones have emerged as an important development tool (Mehta, 2013) and in some cases considered as a solution to reduce rural-urban divide by delivering socioeconomic information (Aker & Mbiti, 2010). The ability of mobile phone to act as a change agent is because it can facilitate need-based and user-centric information and services at affordable costs (Mehta 2013).

Ovum (2006) found that the mobile telephony industry created about 3.6 million jobs in India, directly and indirectly. This figure is expected to increase by 30% per year. Deloitte and Touche (2008) found that, in the 6 countries analyzed, mobile sector employment in 2007 was significant, ranging from 244,000 FTEs in Pakistan to 36,000 FTEs in Serbia. Although the mobile operators themselves only create limited employment, jobs they do create are highly paid and sought after, and there is a major knock-on effect in retail.

One of the most direct economic impacts of mobile phones in Africa is through job creation. With an increase in the number of mobile phone operators and greater mobile phone coverage, labor demand within these sectors has increased. For example, formal sector employment in the private transport and communications sector in Kenya rose by 130 percent between 2003 and 2007 (CCK, 2008), suggesting that mobile phones have contributed to job creation. The mobile phone sector has also spawned a wide variety of business and entrepreneurship opportunities in the informal sector. While we would expect job creation in any new growth sector, many of these employment opportunities are directly related to the specific business strategies of mobile phone companies in Africa. For example, because most Africans use pre-paid phones (or "pay as you go"), mobile phone companies had to create extensive phone credit distribution networks in partnership with the formal and informal sector. Thus, small shops that have traditionally sold dietary staples and soap now sell mobile phone credit (airtime), particularly in small denominations. Young men and women are often found selling airtime cards in the streets. Numerous small-scale (and often informal) firms have also opened shops to sell, repair and charge mobile phone handsets, either using car batteries or small generators.

### *Internet Café and Youth employment*

Internet cafés are techno-social spaces where people access ICT and interact with global cultural flows. Annual ICT usage surveys conducted by Turkish Statistic Institution (TUIK) have showed that Internet cafés covers about one fifth of Internet usage (TUIK, 2010). A research study on Turkish students between the age of 12 and 18 concluded that almost

three quarter of them visited Internet cafés regularly (Tahiroglu, Celik, Uzel, Ozcan, & Avci, 2008). Cyber café in developing countries offer opportunities for ordinary people to obtain access to information, opportunities to communicate and create employment (Furuholt & Kristiansen, 2007). A microeconomic study by Ericsson (2013), using survey data of both developing and developed countries established that doubling broadband speed can increase employment opportunity by 0.3%.

Navarro (2010) study argues that Internet café use by individuals in six Latin American countries is associated with increased earnings and better living for the operator. The study found significant differences between salaried and self-employed workers after controlling for factors such as wealth before internet adoption and education. For the former, there was a significant positive large return to Internet use on earnings for all countries except Paraguay, where the difference was large but not statistically significant. The earnings advantage ranged between 18 per cent in Mexico to 30 per cent in Brazil and Honduras. Results showed a positive and statistically significant effect of use only at work and this was always greater than the return to use only at other places, including home. However, use at work as well as other places displayed higher returns than use only at work. For self-employed workers, results were similar, with Internet users having higher earnings. Difficulties controlling for pre-existing characteristics indicate that the results show an upper bound on the impact of Internet use on earnings. Oladunjoye and Audu, (2014), investigated the relationship between vocational opportunities of youths and internet in Nigeria. Using data from both primary and secondary data, the study argues that internet development will enhance vocational opportunities to the youths if the application of internet is encouraged among the youths.

### III. THEORETICAL FRAMEWORK

The study adopts the diffusion of innovation theory. Diffusion entails communicating or spreading of the news of the innovation to the group for which it is intended. Adoption however, is the commitment to and continued use of the innovation (Rogers, 1995). Rogers' diffusion of innovation theory postulate that diffusion of innovation occur as potential users become aware of the innovation, judge its relative value and make a decision based on their judgment, to either implement or reject the innovation. An innovation was defined by Denning (2004) as 'a transformation of practice in a community'. It essentially is an idea, practice or object that is perceived to be new by a person or adopting entity. The theory consists of three components: 'the innovation decision process, characteristics of an innovation and adopter characteristics (Bates, Manuel & Oppenheim, 2007). The 'innovation decision process' categorizes the steps an individual or organization takes from awareness of an innovation, through the formulation of an attitude to the

innovation, on to the decision as to whether to implement or adopt such innovation.

There are more than four thousand articles across many disciplines published on Diffusion of Innovations, with a vast majority written after Rogers created a systematic theory; there have been few widely adopted changes to the theory. Although each study applies the theory in slightly different ways, this lack of cohesion has left the theory stagnant and difficult to apply with consistency to new problems. Diffusion is difficult to quantify because humans and human networks are complex. It is extremely difficult, if not impossible; to measure what exactly causes adoption of an innovation. Diffusion theories can never account for all variables, and therefore might miss critical predictors of adoption. This variety of variables has also led to inconsistent results in research, reducing heuristic value.

In adapting this theory to this study, this study sees diffusion of Innovation as there being a new innovation available that can employment for the unemployed. The individual becoming aware or come in contact with such information and recognize that this new innovation will bring in income and will create employment, make a conscious decision to adopt these new innovation.

### IV. METHODOLOGY

#### *Research Design*

The study adopted the descriptive survey design. Descriptive survey design is aimed at gathering information about prevailing conditions or situations for the purpose of description and interpretation. This type of research method is not simply amassing and tabulating facts but includes proper analyses, interpretation, comparisons, identification of trends and relationships the design is adoption of this study as it enables the researcher to focus on respondents' opinion, attitude and behaviour in relation to information and communications technology (ICT) and youth employment in Calabar Municipality, Cross River State, Nigeria.

#### *Population of the Study*

The population of the study is both male and female youths that reside in the study area. According to the 2006 population census, the population of Calabar municipal stands at 183,681 (NPC, 2006). The population of the youths stands at 91,568 (NPC, 2006). It is from this population that the sample will be selected from.

#### *Sample and Sampling Technique*

The study made use of two hundred (200) samples selected using the purposive sampling technique. The purposive sampling technique was used in selecting two areas in Calabar south. The areas are Eta Agbor and Mariam. These areas were selected because, they are the business hub of the local government area. From the two areas selected, the researcher purposively selected two hundred ICT business

centers. These were selected because the businesses were operated by young men and women they had firsthand knowledge of the topic under discussion.

*Instrument of Data Collection*

The instruments used in eliciting information for this study was the questionnaire. The questionnaire was adopted as the main instrument for data collection. The questionnaire was divided into 3 parts. part A required the respondents to give details on their demographic data such as sex, age, marital and educational status. Part B required information on the independent variables under investigation. This part consists of six (6) questions, carefully drafted to elicit the required information on the independent variables. part C contained 2 questions on the dependent variable.

*Method of Data Analysis*

Data collected from the field was coded and analyzed hypothesis by hypothesis. Out of the 200 administered questionnaire for this study, only 157. respondents returned questionnaire were properly filled without missing values and mutilation, therefore the said number was used for the data analysis. The statistical tool for data analysis was Pearson product moment correlation coefficient. The hypotheses were tested at 0.05 confidence level.

V. RESULTS

*Hypothesis One*

There is no significant relationship between call center operator and youth employment in Calabar Municipality, Cross River State, Nigeria. The independent variable in this hypothesis is call center operator while the dependent variable is youth employment. Pearson product moment correlation coefficient was used to test this hypothesis at 0.05 level of significance and the result is presented in Table 2.

Table 1:

Pearson Product Moment Correlation of Call Centre Operator and Youth Employment

Variable	N	Mean	SD	r-value	Sig.
Call centre Operator	157	15.24	2.63	0.447**	.000
Youth Employment	157	11.08	2.66		

\*significant at 0.05 level; df = 155; critical r value = 0.098

Source: Field survey, 2018

The result in Table 2 revealed that the calculated r – value of 0.447\*\* is greater than the critical r-value of 0.098 at 0.05 level of significance with 155 degrees of freedom. By this result, the null hypothesis which states that, There is no significant relationship between call center operator and youth employment in Calabar Municipality, Cross River State, Nigeria is rejected while the alternate hypothesis is accepted.

The correlation coefficient is a standardized measure of an observed effect, it is a commonly used measure of the size of an effect and that values of ±.1 represent a small effect, ±.3 is a medium effect and ±.5 is a large effect

Therefore, the squared correlation (0.447)<sup>2</sup> which is a measure of effect size indicates the proportion of explained variance on the dependent variable. Therefore, 19.9% of the variance in Youth Employment is accounted for by call centre operator. The magnitude of effect is moderate; therefore, we can conclude that, there is statistical considerable relationship between call center operator and youth employment in Calabar Municipality, Cross River State, Nigeria.

*Hypothesis Two*

Internet Café operator does not relate to youth employment in Calabar Municipality, Cross River State, Nigeria. The independent variable in this hypothesis is Internet Café operator while the dependent variable is youth employment. Pearson product moment correlation coefficient was used to test this hypothesis at 0.05 level of significance and the result is presented in Table 3.

Table 2:

Pearson product moment correlation of Internet Café Operator and Youth Employment

Variable	N	Mean	SD	r-value	Sig.
Internet Café operator	157	15.02	1.99	0.153*	.042
youth employment	157	11.08	2.66		

\*significant at 0.05 level; df = 155; critical r value = 0.098

Source: Field survey, 2018

The result in Table 3 revealed that the calculated r – value of 0.153\* is greater than the critical r-value of 0.098 at 0.05 level of significance with 155 degrees of freedom. By this result, the null hypothesis which states that, Internet Café operator does not relate to youth employment in Calabar Municipality, Cross River State, Nigeria is rejected while the alternate hypothesis is accepted. The correlation coefficient is a standardized measure of an observed effect, it is a commonly used measure of the size of an effect and that values of ±.1 represent a small effect, ±.3 is a medium effect and ±.5 is a large effect

The squared correlation (0.153)<sup>2</sup> which is a measure of effect size indicates the proportion of explained variance on the dependent variable. Therefore, 2.3% of the variance in youth employment through ICT is accounted for by Internet Café operator. The magnitude of effect is small. Therefore, we can conclude from this result that, Internet Café operator statistical considerable relate to youth employment in Calabar Municipality, Cross River State, Nigeria.

## VI. DISCUSSION

*Call Centre Operator and Youth Employment*

Result from the analysis of the first hypothesis reveals that there is statistical considerable relationship between call center operator and youth employment in Calabar Municipality, Cross River State, Nigeria. The result is because the calculated  $r$  – value of 0.447\*\* is greater than the critical  $r$ -value of 0.098 at 0.05 level of significance with 155 degrees of freedom. This implies that call centre operator which is a part of ICT creates employment for youths in Calabar Municipality. The result of this study is supported by the findings of Ovum (2006), who found that the mobile telephony industry created about 3.6 million jobs in India, directly and indirectly. Deloitte (2008) found that, in the 6 countries analyzed, mobile sector employment in 2007 was significant, ranging from 244,000 FTEs in Pakistan to 36,000 FTEs in Serbia.

*Internet Café Operator and Youth Employment*

Result from the second hypothesis revealed that Internet Café operator statistical considerable relate to youth employment in Calabar Municipality, Cross River State, Nigeria. This result is because the the calculated  $r$  – value of 0.153\* is greater than the critical  $r$ -value of 0.098 at 0.05 level of significance with 155 degrees of freedom. This result implies that internet café crates employment opportunity for youths in Calabar Municipality, Cross River state, Nigeria. This result is in line with that of Navarro (2010) who study argues that Internet café use by individuals in six Latin American countries is associated with increased earnings and better living for the operator. The study found significant differences between salaried and self-employed workers after controlling for factors such as wealth before internet adoption and education. Oladunjoye and Audu, (2014), investigated the relationship between vocational opportunities of youths and internet in Nigeria. Using data from both primary and secondary data, the study argues that internet development will enhance vocational opportunities to the youths if the application of internet is encouraged among the youths.

## VII. CONCLUSION AND RECOMMENDATION

The finding of this study concludes that there is a significant relationship between Information and communication technology and youth employment in Calabar Municipality Cross River state, Nigeria. Consequent upon the findings of this research, the following recommendations are made;

1. The potentials of youths towards development of ICT should be harnessed to improve their horizon and create employment.
2. Both the state and federal Government should as a matter of urgency provide all necessary facilities for the training of youth in ICT management so as to

provide job opportunities for the teaming unemployed youth Calabar Municipality.

3. The government should find out those areas of technology which have particular importance to domestic product industries and the country has particular strength or possible areas for future competitiveness
4. The current in security challenges faced in Calabar Municipality and its environs should be vigorously tackled so as to provide a safe business environment that would encourage both local and foreign investors to invest in ICT

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