

# THE IMPERATIVE OF INFORMATION AND COMMUNICATION TECHNOLOGY IN REDUCING UNEMPLOYMENT AMONG NIGERIAN GRADUATES

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## ABSTRACT

*Unemployment is the cankerworm that eats deep into the development of the economy and thus has a lot of negative consequences such as youth restiveness, juvenile delinquency, high incidence of armed robbery among others. This paper examined the imperatives of ICT in reducing unemployment among Nigerian graduates. It also exposed why graduate unemployment rate is high and the requisite skills to meet the job requirements of employers. It was revealed that ICT has impacted the economic and social relationship of Nigeria with an increase in negotiating financial power. Therefore, it is plausible for all stakeholders in the industry to encourage the practice of ICT in order to have a vibrant economy.*

**Keywords:** *unemployment, Nigerian graduates, society, ICT, active population*

## INTRODUCTION

The potential of Information Communication Technology (ICT) to make a difference in the lives of people globally is a fact that has come to be accepted by all. With development and innovation going hand in hand and knowledge becoming one of the most important factors in determining the standard of living of people everywhere, most advanced economies and company today are those that play the knowledge cards as a tool to drive development. ICTs provide a viable platform for using sophisticated technologies to provide solutions to many of the problems of people everywhere, especially in the face of grinding poverty faced by many nations of the world. This fact is the main driver of current calls globally for poor nations to rise up and take advantage of the potentials posed by development tools like that of ICTs to advance their economies and their people.

With the current global fact sheet showing that advanced countries were far ahead in the deployment of technological and access to the internet and other forms of communication technology, the developing nations if they hope to make any meaningful impact and grow have to as well embrace ICTs fully. This is in the light of the fact that various statistics on ICTs show that since the beginning of this century, in spite of increased awareness on the benefits of ICTs to drive development, the internet penetration rate on an average in developed countries was more than 10 times higher than what is obtainable in developing countries.

With the ICTs increasingly becoming a key factor in driving production and development, a knowledge-based and driven economy is not negotiable and is one in which the generation, adoption and exploitation of knowledge play a key role in the creation of wealth especially (employment) in emerging economies. This is because ICT is a viable platform for generating wealth especially as it releases people's creative potential and knowledge. The result of various studies has shown that the ICT sector has a powerful multiplier effect in the overall economy of most nations when compared with manufacturing. Employment generation is becoming more closely tied to the capacity to add value using ICT products and services (Efem Nkanga, 2008).

Analysis of labour statistics and employer surveys indicate that the

unemployment rate for university graduates may be 22 percent and that their prospects for employment have worsened over time. In addition, the share of graduates obtaining employment in the public sector has fallen drastically. The messages from the managers of surveyed firms are clear: (a) university graduates are poorly trained and unproductive on the job; (b) graduate skills have steadily deteriorated over the past decade; and (c) shortcomings are particularly severe in oral and written communication, and in applied technical skills (International association of universities, 2001). The aim of this paper is to explore all the opportunities and possibilities available in ICT in reducing unemployment among Nigerian graduates as a result of lack of requisite skills especially in ICT.

### **UNEMPLOYMENT IN NIGERIA**

There seems to be a consensus on the definition of unemployment. The International Labor Organization (ILO) defines the unemployed as the number of the economically active population who are without work but available for and seeking work, including people who have lost their jobs and those who have voluntarily left work (World Bank, 1998). Although there seems to be convergence on this concept, its applications have been bedeviled with series of problems across countries. First, most published unemployment rates are recorded open unemployment. People's attitude on this varies from country to country. While this may be high in developed countries and where government is committed to resolving unemployment problems, it is likely to be very low in countries with the opposite attributes.

Unemployment in Nigeria is one of the most critical problems the country is facing. The years of corruption, civil war, military rule, and mismanagement have hindered economic growth of the country. Nigeria is endowed with diverse and infinite resources, both human and material. However, years of negligence and adverse policies have led to the under-utilization of these resources. These resources have not been effectively utilized in order to yield maximum economic benefits. This is one of the primary causes of unemployment and poverty in Nigeria.

As per the report of the World Bank, the GDP at purchasing power parity of Nigeria was \$170.7 billion during 2005. Unemployment in Nigeria is a major problem both economically and socially. Unemployment in

Nigeria has resulted in more and more people who do not have purchasing power. Less consumption has led to lower production and economic growth has been hampered. Unemployment also has social consequences as it increases the rate of crime.

Economic growth is not the only solution to curb unemployment in Nigeria, as the official statistics illustrate that previously unemployment did not always decline with the economic growth. Recently the experts have suggested some techniques, which can play important role in curbing Unemployment in Nigeria. These include:

- Computer training schools and clubs that specialize in teaching programming softwares such as Java, Oracle, Active Server Page(ASP), Cold fusion, digital photography, and video editing, etc.
- Setting up of provisional work agencies, which provide temporary staff to small companies.
- People with good web and programming skills can think of starting the following projects in order to deal with the problems of unemployment - program unique JAVA based applications to be used in 3G phones(a wireless communications technology designed to provide high-speed Internet access and transmission of text, digitized voice, video, and multimedia), a project to structure a complete phone directory of all Nigerian phone numbers, online map project of major Nigerian cities, and project, which can provide sufficient information about everything in Nigeria.

Other projects such as building solar powered water pump for use in rural areas, solar powered streetlights, hybrid powered generators using solar and battery power, can also generate employment in the Nigerian economy.

According to Emeka Ezekiel (2008), Lack of requisite skills to meet the job requirements of employers have been identified as one of the major reasons responsible for the high rate graduate unemployment in Nigeria. Tim Akano, chief executive officer of New Horizon Training Institute, told Business Day in an interview in Lagos that the high rate of unemployment in Nigeria was not as a result of unavailability of jobs but dearth of skilled manpower to fill existing job opportunities. According to

him, one of the major causes of graduate unemployment is not that there is scarcity of jobs but dearth of skilled manpower to fill the existing opportunities in the job market. Currently, over 70 percent of graduates from Nigerian universities and various tertiary institutions have difficulty in getting jobs. In fact seven out of 10 university graduates are unemployed, underemployed or unemployable.

There are lots of employers that want to expand their businesses and need people with the right skills. There are people in this country who are changing jobs almost every four months whereas others have been looking for job since the last five years. The reason for this contrasting situation is because of the type of skills they have. People go into the labour market thinking that their B.Sc or BA is sufficient for them to get a job. This is not enough because the B.Sc or BA only certifies you academically (Akano 2007). He however stated that employers are the look-out for people who are qualified professionally to solve professional and not academic problems, stressing that there was a mismatch between what the tertiary institutions produce and what employers need, hence the skill gap. Akano further noted that the country dreams of becoming one of the leading economies by the year 2020 would be a mirage unless government takes adequate steps to ensure that relevant agencies embrace Information and Communication Technology.

## **INFORMATION TECHNOLOGY AND EMPLOYMENT GENERATION IN NIGERIA**

The use of computers and telecommunications to create, manipulate, and distribute enlightenment and entertainment is simply known as ICT (Poppel and Goldstein, 1987). More technically, ICT is the totality of the means employed to systematically collect, process, store, present, and share information in support of human intellectual activities (National IT Sectoral Report, 1990-1991). It encompassed the use of computers, telecommunications, and office systems technologies as well as any technology that deals with modern application of computing or communication or both. Himes and Olmo (2002) are of the opinion that there is the unprecedented need to create more than a billion jobs to

accommodate new entrants and to reduce unemployment rate. Sesan (2004) also states that in developing countries there is an astronomic increase in unemployment. He was of the opinion that by 2010 over 700 million youths will enter the labour market in Nigeria.

According to him, the situation is more worrisome as two third of the total population are not sure of employment after the completion of their studies. The saving grace is the one-year compulsory national youth service programme for all university and higher national diploma graduate from recognized polytechnics. Other good news is that people are beginning to appreciate the potentials that ICT can offer. There is accelerated development through ICT. Philip (2002) quoting the South African Communication minister says. *"The knowledge revolution is upon us, we cannot wish it away. The question is how we respond to it."*

The minister therefore called on the Delegates to find imaginative ways by which the labour force can be educated to take up the advantages of job opportunities available through ICT. Today there is a shift from low skilled to high skilled labour force. She calls for comprehensive campaign to encourage more youths to acquire necessary skill in ICT. In Nigeria the youth have yielded to the call and are using ICT as a launching path to create entrepreneurial activities such as mobile telephoning, inter net cyber café' and computer services. In Africa, with the scourge of poverty generally acknowledged as a family next door neighbour of sorts to many, the potential of ICTs to make a change cannot be ignored. With most Africans living from hand to mouth and unable to make ends meet. Most Africans in spite of the technological advancements recorded globally are still largely uneducated and uninformed and unaware of the potential of ICTs to create employment.

ICT has the potential to power development and eradicates poverty and is a veritable weapon for promoting human development and accelerating economic growth. For Nigeria to achieve a sustainable socio-economic growth, it must deploy ICT to generate wealth for the masses and tackle poverty. Currently, the indicators of poverty in the nation is joblessness, inability to sustain self and dependants, lack of access to basic amenities like food, shelter, lack of material well being, lack of choice and opportunities, among others. It is a fact that the unemployment level of the

nation is currently at its highest with many able bodied men and women in the unemployment market, but Instead of waiting for the non-existent white collar jobs, most unemployed graduates have embraced ICTs through various platforms, especially mobile phones to create wealth for themselves.

Since ICT has become one of the most important channels through which a nation can impact on its citizens, there is no doubt that it can be used to drive sustainable development and eradicate poverty and unemployment. It has opened up business opportunities and become a veritable revenue generating tool for most disadvantaged people in Africa as a whole and Nigeria in particular. Many poor people use the mobile phone to conduct business as pay phones and make money by charging customers for the use of the phone, thus generating income for the owner.

In Nigeria, the introduction of the GSM has not only opened up the window for easy access to communication, but it has also opened up veritable windows of wealth generation for many and enabled the poor by providing the poor an opportunity to generate wealth. For most poor folks, the mobile phones have become a lifeline and bridge to jump out of scourge of poverty and unemployment. Most people now run their own call centers to create income. For example, most GSM operators have empowered several unemployed persons especially youth to own their franchises where they operate a phone kiosk sell recharge cards and render call services to generate income for their households (Efem Nkanga, 2008).

### **BASIC INFORMATION TECHNOLOGY SKILLS**

According to Tim Akano (2007, December 31), no matter how you look at it, life is strange. However, in the midst of all the life's riddles, certain things are sacrosanct. The axiom information is knowledge and knowledge is power when and if applied is eternally true. The world has witnessed several revolutions: the Agrarian, the Industrial and now the Information revolution, where technology and knowledge determine who get what when and how. Those who emerge champions are those who understand the "sign of the time." The world has been permanently altered by two major "disruptive events": the flattening of the world by the globalization and the negation of time and speed by internet ; and the fall of the Berlin wall which opened up hitherto closed nations coupled with the rise of Asian

Tigers, which gave birth to "do- or - die" competition among nations. The falling of the wall gave rise to the development of new Microsoft windows with the vision of putting a computer in every home. However, with the success consolidation of financial institutions coupled with the World free trade agreements, Organizations need professionals who have comprehensive knowledge of what it takes to tap opportunities in international markets.

This is why professionals with the skills and international certifications in business intelligence, knowledge management, customer relationship management, supply chain management (SCM), Cyber marketing, cyber law, enterprise resource planning, and disaster recovery are making waves in their respective organizations. MBA-e-Business is the hottest thing in the market globally today. Smart professionals use it as icing on their cake. The traditional MBA is now like the old gramophone: it has diminished in value.

Recruitment agencies keep looking for professionals who are "true project managers". The pressure is on organization to drive down cost, get to the market first, with zero tolerance for repeat jobs. According to an expert: "Employers want people who can ride herd, make sense of the project life cycle and truly project manage". However, the right candidates are fewer and farther between, and those that are there can be more picky on salaries and perks. As regards Information Security, organizations are increasingly interested in protecting their asset against cyber terrorism and internet and internal fraud. Electronic commerce brings along corresponding security threat. Employers are asking for ability to create a safe and secure environment either the person is running e-mail or e-banking or doing software development or even business plan. Employers are looking for security skills and certifications in all their job applicants, not just the ones for security positions. This is why professionals in Certified Ethical Hacker (CEH), Certified Hacking Foresinic Investigation (CHFI), E-Business Security, Network Security and Linux Security are hot cake nationally and internationally.

Professionals who want to major in networking must have a sound understanding of TCP/IP, Ethernet and fibre optics plus a networking



knowledge of distributed and networked environment. According to Mary Brandel of Computerworld, networking demands skill in wireless technology. As she rightly noted, “the proliferation of de-facto wireless standard such as Wi-Fi, WiMax and Bluetooth, securing wireless transmission is top in the mind of employers seeking technology talent. There are lots of wireless technologies taking hold and companies are concern about how these all fit together, and what security risks, which are much bigger than on wired networks”. This is why System Administrators who specialize in wireless technology are in great demand today.

The Software Engineers will continue to increase the growth of software market exponentially for the rest of this century. For instance, the IDC research shows that the world needs about 140,000 software applications to support the wireless telephony technology alone, a market that is estimated at \$350billion annually. Software engineers who have the requisite certificates and skills in ASP.Net, Virtual BASIC dot Net(VB.net),Extended Mark up Language( XML), Java, C Plus(C+) and C plus plus( C++), will continue to pick and choose jobs.

There is growing demand for Network Convergence Technicians or network engineers who are well versed in LANs, WANs, voice, the internet and how they all converge together since more companies are implementing voice over internet protocol (VOIP). According to Brandel, “there is a huge demand for people who have been to the phone world and understand what the Information Technology network is, or someone managing the network who understands the voice network and how it converges”.

## **CAREER PATHS AND OPPORTUNITIES**

Computers, the main information technology facilities are growing in popularity very rapidly. Almost everything from organizing records to directing traffic is being done by computers. The impact of computers on everyday living is monumental, though taken for granted. Every time a bank deposit, purchase items on a credit card, pay an insurance premium or rent a video movie are made, innumerable computer operations are involved. Making all these operation happen, behind the scene is the work of a vast array of professionals: Computer programmers, program analysts,

system analysts, hardware and software engineers, database managers, etc. As society become more computerized and technologically sophisticated, the need for highly skilled computer professionals increases accordingly (Alexis & Mathew Leon, 1999). According to ExecuTrain (2002), whether you're a creative type who likes to think outside the box or a logical type who likes to figure out the best way to construct the box-there's something for everyone.

Database Administrator is a person responsible for ensuring that the information within computer systems is organized, accessible and easy to use. Whether it's sales data for a corporate marketing department or storm data for a local meteorologist, you help people get the information they need, and when they need it most. A certified Internet Webmaster designs, develops and supports today's sophisticated interactive sites (websites).

Computer or System Analysts make a diagnosis of computer problems and performs preventive maintenance as well as help co-workers use computer systems by setting up passwords, providing training and answering day-to-day user questions.

A network specialist keeps people connected to an organization's computer systems; makes it possible for members of staff to download and work with files, share information; basically do the everyday computing tasks that help a business run. He also play a major role in systems security, keeping hackers and other unauthorized guests from accessing your company's critical data.

A computer Programmer is a linguist of the Information Technology world, fluent in the languages required to create new applications and computer systems. As a programmer, he designs, develops, tests and maintains computer programs for a variety of uses-from the latest business software to the best-selling video games.

As the captain of the software development team, the Software Engineer is responsible for the overall success of software projects, identifies customer requirements, communicates those requirements to the development team, and ensures that the final product works effectively and error-free. Technical Support team performs troubleshooting on specific

systems and software. In this regard, knowledge of recurring user problems and customer feedback plays a vital role in improving the performance and value of new technologies, while technical writers are responsible for translating often complex technical material into an easy-to-understand (plain English) format for non-technical readers. They can also produce materials such as users' manuals, installation manuals, online help for software and much more.

## CONCLUSION

A successful career in the ICT field depends on many factors including hard work, dedication, and industry trends that put certain jobs and skills in more demand than others. One thing certain about technology is that it is dynamic. This dynamism influences our way of life, work, pleasure and mode of communication. Whoever helps orchestrate such changes will be at the forefront of shaping the society's expectation in the 21st century. Information and communication technologies especially the mobile GSM have impacted micro enterprise on Nigerians positively. It has impacted the economic and social relationship of Nigeria with an increase in negotiating financial power. This seeming increase in the number of the unemployed graduates will be reduced drastically. It has equally increased the awareness of ICTs potentials; hence the impact of ICT in reducing unemployment cannot be neglected.

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