THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) FOR JOB CREATION AND SUSTAINABLE DEVELOPMENT IN NIGERIA

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Abstract  
Information explosion and the need to keep abreast of development the world over have made Information and Communication Technology (ICT) an all pervading revolution, which must be embraced by every society. This paper views ICT as a veritable tool towards poverty eradication as outlined in the National Policy of Information Technology (2000). The paper looks into various ways of using ICT to create massive employment for the Nigerian citizens especially unemployed youths. Various problems confronting the ICT in creating massive jobs in Nigeria were fully discussed in this paper. The paper concludes by explaining the possible solutions to some of the problems confronting the use of ICT for job creation and economic growth in Nigeria.

Introduction  
In any economic setting, the level of technology determines the level of economic growth. Technology is known for its ability to improve the way things are done in the past in order to achieve better output. Indeed, Information and Communication Technology (ICT) is changing everything and we must respond to this innovation. It is only through the appropriate Information and Communication Technology (ICT) that the poor and the unemployed can be engaged
all the year round. Nigeria being a poor country and in recognition of the need to create jobs for the unemployed and tackle poverty, has mapped our programmes aimed at alleviating poverty among her citizens through effective use of ICT.

Within the last few years, Nigeria has been witnessing rapid and accelerating advent of information and Communication Technology which is so powerful, novel, widespread and influential, that one may even refer to it as era of industrial revolution.

Information Technology has been recognized by the Federal Government as a veritable tool for poverty alleviation. This is because no nation can grow economically if poverty is persistent. (Idih, 2002). Information Technology has always come with massive job cuts in developing countries like Nigeria. It creates new types of jobs and new wealth within the economy. This could create socio-economic problems especially if the economy has many cases of unemployment and underemployment. On the other hand, employment success, job attractiveness and salary levels appear to be greater for students and individuals with more extensive Information Technology related education (Boritz, 2001).

The National Policy on Information Technology (2001) has an enviable objective of providing gainful employment and self employment opportunities for unemployed youths in both the rural and urban areas. Since this programme is meant for the poor, how will the government convince and encourage the already discouraged poor to participate in the programme. The writer is of the view that acquisition of gainful skills in Information Technology (IT) is the only channel to poverty alleviation and massive job creation.

Information Communication Technology (ICT)

The National policy on Information Technology (2001) sees ICT as the bedrock for national survival and development in a rapidly changing global environments. Information and Communication Technology has been described in several ways to include the use of modern electronic gadgets such as DSTV, computers, laptops, projectors, DVD players and even mobile phone to send, receive, process and store information data. Jimohn (2007) described ICT as a concept, a method, a process and a system of collecting, analyzing, processing and sharing information using electronic equipment or technological tools. Also Adekunle (1997) referred ICT to a process of information transfer and reception. Of all these wondrous technological devices, the group tagged ‘videogrammes’ by Dames (2002) (i.e. video cassette, VCD, DVD and the CD-ROM) as well as internet are very remarkable because of their versatility. The DVDs and CD-ROMS for instance, can store very large amounts of data and be put to a wise variety of uses ranging from home, movie entertainment to interactive games and storage of database and multimedia materials. The CD-ROMS’ of
particular importance to researcher for it can contain a large amounts of documents, the size of an encyclopedia. The most versatile of these devices is of course the internet. According to Commer (2007), ‘the internet is a computer based global information system. It composed of a network of many interconnected computers. The internet has made it is possible for people all over the world to communicate with one another effectively and un-expensively.

From the above definitions, Information and Communication Technology (ICT) can therefore be regarded as any equipment or interconnected system or sub-system of equipment, that is used automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission or reception of data or information (IT National Policy 2001). It is one of the forces that are responsible for changes in nations. It is also one of the great trends of the tail end of the last century. It is changing everything and will continue to change things in the present century. The I.T National policy (2001) in its mission statement, emphasized that IT would be used for:

* Creation of wealth
* Poverty alleviation
* Job creation
* Global competitiveness

**Objectives of Information Communication Technology (ICT)**

The following are the general objectives of Information Technology according to IT policy (2001)

* To ensure that IT resources are readily available for efficient National Development
* To guarantee that the country benefits maximally and contributes meaningfully to the global solution of information age challenges
* To empower children, women and the disabled by providing special programmes for the acquisition of IT skills
* To empower the youth with IT skills and prepare them for global competitiveness
* To create IT awareness and ensure universal access in order to promote IT diffusion in all sectors of National life
* To establish an IT infrastructure and maximize its use national wide
* To build a mass pool of IT literate man power
* To develop human capital with emphasis on creating and supporting a knowledge-based society
* To sit up advisory standard for education, working practices and industry.
* To establish appropriate institutional framework to achieve the goal stated above

The policy also focuses on the development of competitive man power in IT and related disciplines and added these general objectives.
(i) To increase the availability of trained personnel
(ii) To provide attractive carriers opportunities
(iii) To develop requisite skills in various aspects of IT poverty and poverty alleviation.

Information Communication Technology (ICT) for Job Creation

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 underemployment 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. Recently, a number of communication service providers such as MTN, Zain, Mtel, Glo, etc sprang up and created thousands of jobs for some Nigerians who were unemployed. Besides, many homes, offices, business centres such as cyber café, telephone booth along every street in major cities, towns and villages are parts of the winds of growth and developments brought to Nigeria economy through ICT.

Furthermore Omotade (2010) emphasized areas of exploiting ICT in creating job/ employments for Nigeria citizens thus:

* Simple food processing e.g. ice cream, Soya milk
* Computer training
* GSM phone services
* Retailing GSM recharge cards
* Photocopying
* Photography e.g. digital camera, wait and get picture etc
* Engraving
* Sale of hand sets

Information Communication Technology (ICT) also contributes to better employment opportunities in Nigeria both through improved labour market facilitation and direct employment. Using electronic job market places, employers and employees match labour skills and availability to satisfy their demands. For instance information for job opportunities are provided for the entrepreneurs through internet on local websites. In addition, the establishment of local telecenters in some busy areas in Nigeria has created direct employment for thousand of men and women in the country.

Information Communication Technology (ICT) can contribute to income generation and poverty reduction. It enables people and enterprises to capture economic opportunities by increasing process of efficiency, promoting participation in expanded economic networks, and creating opportunities for employment.

In the area of economic opportunities, ICT enhances rural productivities, solution sharing between local people and communities, providing access to practical information on small business accounting, weather trends and
farming practices. For instance, timely access to market information via communication network, also helps farmers make astute decision about what crops to plant and where to sell their product and buy inputs.

Furthermore, ICT enables improved business process efficiency and productivity. Business can reduce operational cost by decreasing materials, procurement and transaction cost, resulting in lower prices for intermediate and finished goods, and they can also use more and better information to improve the value of their outputs.

ICT further facilitates global connectivity, resulting in new ways of creating and delivering products and services on a global scale. New business model and market configurations enabled by ICT, including business process outsourcing, value chain integration and distribution provide developing countries like Nigeria with access to new market and new sources of competitive advantage from which to derive income growth. For instance, local craftsmen in Nigeria and in other developing countries are increasing their income through people’s link global artisans trading exchange.

**Information Communication Technology (ICT) and Development**

Former British Prime Minister, Tony Blair (2000) said ‘impertation of knowledge holds the key to tackling poverty and extending opportunity in the developing world’. He further remarked that ‘the new technologies have great potential to aid the effort to spread knowledge. Certainly, ICT cannot by itself, bring an end to world poverty. ICT could be regarded as simple tools. In addition, no single set of tools can solve a global problem with such multiple and complex courses. ICT provide powerful ammunition in the fight against poverty and the usefulness depends on how they are employed to address basic developmental goals (Brown, 2001). The impact of information communication technologies is felt in education, research, medicine, government, business and entertainment, in many parts of the world but unfortunately, the benefits have reached only about 5% of the world population (Brun and Mangstii, 2001). It is also the belief of diverse groups and experts that the use of ICT could enable the poor in developing nations to overcome various problems of developing like poverty, illiteracy, disease, unemployment, hunger, corruption, and social inequalities in order to move rapidly into the modern information age.

The fear being entertained by various ICT-based developmental initiatives has been whether providing access to information and communication technologies can play a significant role in reducing poverty. The skeptics according to Arunachalam, (2002) draw supports from many experts and conceived ICT projects in developing world as inappropriate and failed to appreciate the social and cultural issues that are keys to communication strategy. ICT is important and should be supported. If ICT can benefit the rich there is no reason why we should not work towards spreading the benefits of ICT to the poor
(Arunachalam, 2002). The Committee of African Development’s experience is a clear testimony of the impact of ICT. The project brought tangible and measurable improvement to the people’s standards of living because of enhanced access to relevant information sources and systems.

Problems of Effective Utilization of Information and Communication (ICT) in Nigeria

Despite series of growth and developments experienced in nearly all the sectors of Nigeria economy through the effective utilization of Information and Communication Technology, a lot of problems are still militating against effective applications of ICT in Nigeria. Some of these problems could be attributed to the following:

- **Inconsistency in Government Policy**: Effective application of Information and Communication Technology in Nigeria is lacking behind due to frequent change in government policies. This could be attributed to frequent change in government. This always results to frequent change in leadership. For instance, Nigeria has witnessed frequent change in ministerial appointments.

- **Infrastructure**: The basic infrastructural facilities required for effective utilization of ICT are not readily available in the right quantities and qualities. Facilities like constant power supply, production of ICT equipment locally, etc are inadequate, and this is negatively affecting effective utilization of ICT in the country.

- **Inadequate Manpower and Technical Know-how**: This is another factor militating against the effective use of ICT in Nigeria. Information Communication Technology experts are very few in Nigeria. Serious efforts were not made by the governments until recently to organize training programmes, workshops and seminars for Nigerians on ICT.

- **Cost**: Despite the fact that ICT is applicable to nearly all human endeavours, the high cost of ICT equipment does not allow for it’s wide utilization in Nigeria. Many Nigerian can not afford the cost of common personal computer until recently that the cost is gradually coming down.

- **Insecurity**: Insecurity coupled with political instability in Nigeria
is among problems militating against effective utilization of ICT. The constant political unrest in Nigeria with little or no security on ICT tends to discourage foreign investor on Information Communication Technology.

- **Corruption:** The rate of corruption is alarming in Nigeria, and this has been given bad image to the country and Nigerians at large. The implication of this is that foreign investors are discouraged from investing on ICT in the country.

**Conclusion and Recommendations**

No nation can survive in this present generation without information and the advent of new Information Technology machines which has made information very easy for the people. For Nigeria to be able to catch up with the rest of the world in the access to latest information in business, science education, medicine, research and other fields, efforts must be made on link up our Universities, Colleges of Education, Polytechnics, Libraries, Research Centres, Teaching Hospitals, Firms, Industries and Government Departments with Internet. No doubt, this will be expensive; however, the country stands to gain more than what will be lost. Internet of economic growth and development.

For effective application and utilization of ICT system in Nigeria, the following recommendations are made:

* Computer learning should be introduced right from primary schools to higher institutions so that everyone can be computer literate even when dropped out along the line

* It is necessary for all institutions especially research institutions to have Information Technology system, for the purpose of exchanging vital information and for research activities.

* Efforts should also be made by Nigerian government to equip all sectors of the economy with ICT equipment to enhance service delivery

* The price of Information Technology machines should be at a subsidized rate so that an average earner can afford to buy item. Government will contribute more to this if only the import duties for importation of ICT accessories are reduced and if possible, scrapped.

* Basic infrastructural facilities should be provided for effective utilization of ICT.

**References**

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