INFORMATION COMMUNICATION TECHNOLOGY (ICT) FOR EFFECTIVE HUMAN RESOURCE DEVELOPMENT IN NIGERIA

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Abstract

Information flow is the core of every management system, whether public or private. Thus, information is a vital tool at the personal, organizational and national level. Today, technology has reduced the world to a global village. Knowledge in information technology is one way Nigeria as a nation can be part of this global village. One of the challenges confronting Nigeria today is that greater percentage of its workforce cannot be said to be ICT compliant. This has therefore denied Nigeria, particularly its workforce of the benefits of ICT as an instrument for economic, educational and technological advancement as well as serving as a means for empowering the youth for national development. This paper therefore takes a critical look at the application and challenges of information communication technology (ICT) in the development of human resources in Nigeria and concludes that the only way Nigeria can develop a workforce that can be part of the global village is by embracing ICT in every facet of her economy.

Despite the failure of successive Nigerian governments to meet the yearnings and aspirations of its citizens, the lesson cannot be lost to the people that the development and introduction of new information and communication technologies (ICTs) is pervasively and positively promoting the efficiency and effectiveness of all organizations that strategically exploit these technologies. Therefore, developing human

resources in Nigeria through information and communication technology (ICT) is no exception to this global trend.

In the world today, the primary means of reaching each other is predicated on information and communication technology. ICT is an instrument for economic and technological development as computers have been known to serve in different areas of life. According to Kiragu (2002), Southeast Asia "Tiger" economies are taking advantage of the new technologies to plan for quantum leaps in the transformation of their public administration systems. Malaysia's ambitious initiative to develop a paperless government is particularly significant. To him, as is the case for other countries, the most promising direction in improving public services in South Sahara African (SSA) countries is office automation through the development of information technology. Computerization will lead to the development and the utilization of such technologies in public services to support managerial decision-making as well as more sophisticated computerized management information systems (MIS).

According to Idogho and Ainabor (2010), business organizations as well as educational systems operate in a complex and competitive environment characterized by changing conditions and highly unpredictable economic climate. From the global perspective and within the context of national boundary of individual organizations, these changing environmental constraints not only affect their internal structure but also their survival, growth and development. To this end, information and communication technology (ICT) is at the centre of this global change curve. Laudon and Laudon (1991) cited in Idogho and Ainabor (2010), have argued that managers cannot ignore information system because they play critical role in contemporary organizations. Information and communication technology directly affects how managers decide, how they plan and what products and services are produced. It is on this basis that this paper examines the application and challenges of ICT in human resources development in Nigeria

Human Resources Management

According to Onah (2008) Human Resources, easily recognized as the most important out of the resources required for the production of goods and services, are the key to rapid socio-economic development and efficient service delivery. To Barney (1995:50), human resources include all experiences, skills, judgment, abilities, knowledge, contacts, risk-taking and wisdom of individuals and associates in an organization. Human Resource Management on the other hand is a distinctive approach to employment management which seeks to achieve competitive advantage through strategic deployment of a highly committed and capable workforce, using an integrated array of cultural, structural and personnel techniques (Storey, 1995 cited in Olowu & Adamolekun, 2002). However, Frank(1974) sees human resource management as "a series of activities in which the job, the individual and the organization all interact as each develops and changes".

Information and Communication Technology (ICT)

Information technology (IT) has been defined by Oketunji (2000) as the application of computer and other technology in the acquisition, organization, storage, retrieval and dissemination of information. Information and Communication Technology (ICT) on the other hand, has been defined by Abdullahi (2006) as the level of literacy required in the collection of data, processing and dissemination together with their related methods and management through the use of computer and telecommunication technology. ICT is classified under two categories of software scientist and hardware engineer, which consist of software development, system programming, system maintenance and repair, system network engineering, project management, system analysis, system administration/management, enterprise resource planning, database administration, management information system, internet/intranet applications, web designing, multimedia technologies etc (Anujeonye, 2008).

ICT for Human Resource Management

Human resource management is a set of organizational activities directed at attracting, developing and maintaining an effective workforce. Without an adequate, skilled and well-motivated workforce operating within a sound human resource management programme, development is not possible. According to Akpan and Udoh (2010), inspite of the ups and downs, it cannot be denied the fact that the development and introduction of new information and communication technologies (ICTS) is pervasively and positively affecting the efficiency and effectiveness of public service in Nigeria. To Kiragu (2002), new ICTs are breaking down bureaucratic boundaries and creating unique opportunities for improving the conduct of government work and the quality of its services to the public by creating new devices for services delivery, generating new services activities and reducing the cost of services. Therefore, for Nigeria as a nation to reap the benefit of this new technology and key into the world that has now become a global village, there is a need to consciously develop a workforce through the effective use of information and communication technology.

The core issues in any human resource plan are anticipated and current skill requirement of an organization, vacancies, departmental growth and reductions, feedback from the labour market and the role of computers (Onah, 2008). Information and communication technology, which involves the use of computer, empowers an organization to achieve efficient human resources inventory, forecast, auditing and planning. Thus, the use of ICT will help an organization to identify areas of human resource deficits and surpluses. Also, necessary changes in the form of transfers, redeployment and secondment can be effected, thus enabling an organization to make efficient allocation and utilization of its human resources. All these can be facilitated through the development of ICT.

The relevance of Information and Communication Technology in human resource management in Nigeria cannot be down played. Onah (2008) has observed that the place of communication in identifying vacancies, advertising those vacancies,

interviewing, selecting the right candidate, placing the candidate on the job and other external factors such as feedback from the labour market cannot be overemphasized. He went further to say that it is only through effective, adequately timed and focused communication that an organization can achieve the foregoing human resource management functions.

Training and development are important aspects of human resource management. Training and development can be facilitated in an organization through information and communication technology ICT. According to Ahmod et al cited in Sadiq(2007), the computer revolution is more than just a technological development; it may well change the society as radically as did the industrial revolution. Various innovations exist through the use of computer technology in lecture delivery. It facilitates visualization which consolidates the understanding of abstract processes. Information technology has also been used to facilitate co-operative learning process, higher order thinking skills such as abstract thinking, applying theoretical construct in practical exercise, teaching the capacity to express ideas logically and fluently and teaching collaborative problem-solving are all possible use of information technology. With the development of ICT, lectures, seminars and symposia are made easy through well-focused communication strategies and instruments.

Performance appraisal, reward and motivation in organizations become unrealizable without appropriate standards and objectives. Standards and objectives must be well set and structured (Onah, 2008). This is a function of Information and Communication Technology. ICT can help facilitate and specify output-reward correlation. This according to Onah (2008), must be fair, just and competitive for employees to be adequately motivated.

Socialization, which encompasses learning the organizational culture, policies, responsibilities, expected behaviour and group relations, needs effective communication to facilitate learning. It therefore follows that instructions, mission statements, goals and objectives must be clearly expressed and appropriate channels used in order to ensure that employees internalize organizational values.

In human resource management, managers need to plan, organize, lead, and control effectively the workforce of the organization. However, managers cannot do this unless they have access to information. According to Omaghomi, Ojo and Nomuoja (2010), rapid advances in the power of information technology specifically, through the use of computers are having a fundamental impact on information systems and on many managers and their organizations. So important are these advances in information technology that many experts argue that organizations that do not adopt new information technology will become uncompetitive with those that do.

As regards issues of promotion, transfer, demotion and other means of severance, the intention of management must be conveyed in fair, open, transparent tone

and nature. This can be achieved if an organization is able to develop an effective Information and Communication Technology (ICT).

Electronic mail for instance has been used in public service as a way of speeding the transmission of text messages within the organization as a substitute for internal messenger systems and perhaps, even for the services offered by the post office. The use of electronic mail has resulted in a reduction in the number of telephone calls made and in the volume of letters that come through the post office. The argument is that the substitution of text messages for telephone calls should be a major characteristic of electronic mail systems within the civil service. Apart from helping to address some of the traditional drawbacks of the telephone such as the high percentage of wasted calls, constantly interrupting the receiver of the call, the use of the system to transmit one-way information and so on, electronic mail fits properly into the public service culture. This is only possible through effective development of information communication technology (ICT).

ICT and its Challenges in Nigeria

` In these past years, developing ICT in Nigeria has been faced with a number of challenges. According to the country Self-Assessment Report (2008), the number of ICT operators in Nigeria has increased dramatically since 1999 resulting in a growth rate of 120 percent in private sector investment from 50million dollars to over 6milllion dollars between 1999 and 2005. As a result of this phenomenal expansion, the number of telephone lines increased on an annual basis to reach a teledensity growth rate of 16.7 percent in 2000; 46.9 percent in 2001, 162.5 percent in 2002, 77.8 percent in 2003, 153 percent in 2004 and 85 percent in 2005 (APRM) Country Review Report, 2008)

The decline in 2005 may be attributed to the shift in emphasis to the development of improved ICT infrastructure by mobile operators. The country had a teledensity of 15.72 as at July, 2005, up from 0.49 percent in 2000. In terms of coverage, all the 36 states are covered by either fixed or mobile telephony. Spurred by competition to boost their customer base, most mobile operators have extended their coverage to very remote communities. The Nigerian government itself has embarked on major communication projects totaling above 38.5 billion naira designed to extend telecommunications to rural communities (Idogho and Ainabor, 2010).

Although there is still a long way to go to achieve global standards of telecommunications in Nigeria, all indications are that the country is on the right path. Nigeria is the only sub-Saharan African country with its own communication satellite space. The government's privatization and Liberalization programme in the telecommunications sector has led to dramatic growth in the Information and Communication Technology (ICT) sector. According to APRM Country Review Report (2008), the challenge for broadband applications based on fibre optics is now being widely considered. The implementation of this application would support a wide range of frequencies typically from audio up to video frequencies. It could carry multiple,

independent band with channels, where each channel operates only on a specific range of frequencies. There are other grand-breaking initiatives in ICT sector in Nigeria. Sources indicate that current internet service providers (ISP) are enhancing their coverage capacity while new operators are being approved to implement the broadband services.

However, the use of ICT in Nigeria in developing human resources is faced with several impediments. These include cost, weak infrastructure, lack of qualified personnel, lack of relevant software and limited access to Internet.

Cost The establishment of ICT according to Anujeonye (2007) requires a lot of money. The cost of procuring ICT equipment and accessories are very high. Also high is the maintenance of these facilities. In addition, the provision of conducive atmosphere for maximum operation of the facilities and their gadgets requires a lot of money. It therefore means that any sector of Nigeria that cannot afford these facilities will deny itself and its workforce the benefits of ICT.

Weak Infrastructure One of the impediments to the use of ICT in the development of human resource in Nigeria is weak infrastructure such as electricity under the controlled conditions. It is fundamentally true that there is no part of Nigeria that can boast of 24 hours of electricity supply. Where electricity is not stable and constant as is the case of Nigeria, it is difficult to keep high technological equipment functioning. In Nigeria, most organizations cannot afford constant and stable electricity supply. These deny their staff of the usage of ICT and other electronic devices.

Inadequate Telecommunication Facilities One obstacle to the use of ICT in Nigeria in human resource development is inadequate telecommunication facilities. According to Aduwa-Ogiegbaen and Iyamu(2005), International Telecommunications Union (ITU) has rated Nigeria's telecommunications sector as the fastest group in Africa, majority of Nigerians still have no access to telephones. At the end of 1990, total private investment in telecommunications industry in the country was 50 million dollars and there were 700,000 lines with 450,000 connected. On the global system of Mobile communication (GSM), Nigeria is also ahead of most African countries with more than 2 million subscribers connected. But the connection fee for telecommunication facilities is too high for Nigerians.

Lack of Qualified Personnel There is lack of qualified personnel with requisite skills and knowledge to fully integrate ICT in human resource development in Nigeria. There are no adequate professionally trained personnel in this field. There is acute shortage of trained personnel in application of software operating systems, network administration and local technicians to service and repair ICT facilities. Seriously lacking also are spare parts needed for proper use of ICT facilities. In the words of Okebukola (1997), "those who are designated to use computers in Nigeria do not receive any training, at worst; do not receive any training at all".

Lack of Relevant Software Content and communication are the power of technology, and Nigeria lacks the relevant software for that. For example, the software that is appropriate and culturally suitable to the development of human resource is in short supplies. There is great discrepancy between relevant software supply and demands in developing countries like Nigeria (Anujeonye, 2008). Salome (1989) has observed that there are clear indications from many countries that the supply of relevant and appropriate software is a major obstacle to wider application of the computer. Even if Nigeria makes effort to resolve this problem by producing software that would suit its human resources development, there are two major obstacles still to be encountered, that is, the cost of producing the software and lack of qualified computer software designers.

Limited Access to Internet There are limited internet providers that provide internet services to Nigeria. Such internet providers, made up of Nigerians, are in partnership with foreign information and communication companies. It is a known fact that most of these companies provide poor services to customers. Those that render reliable services, charge high fees, hence limited access to the use of internet. This factor has continued to inhibit the desire of Nigeria to produce a workforce that is ICT compliant.

Conclusion

Information and communication technology has now reduced the world to a global village. To be part of this global village, Nigeria needs to develop a workforce that can effectively deploy the use of information and communication technology to the country's maximum benefits. To this end, the paper has attempted to examine the application and challenges of information and communication technology in the management of human resource in Nigeria. Although there are factors inhibiting the use of ICT in Nigeria, particularly in the development of human resource, there is need for Nigeria as a nation to embrace the use of ICT in all facets of the economy, if it must produce today's workforce that can be part of the global new trends.

Recommendations

As a result of the pivotal role that information and communication technology can play in the oiling of the engine of socio-economic development Nigeria, this paper recommends the following:

To be able to develop and have a workforce that is informed by important issues in the complex and globalized world in which we live, all Nigerian workers should have a sound knowledge in information and communication technology (ICT). To this end, seminars, workshops and training should be organized on regular basis for all categories of staff to enlighten them on the use of ICT in our various establishments.

In order to facilitate the training of staff, authorities concerned should endeavour to establish ICT centres in their various establishments. Such ICT centres should be made mandatory as a government policy.

To be able to explore the use of ICT facilities, staff of various organizations in Nigeria should be encouraged to acquire their own personal computers and laptops. To this end, management of these establishments should assist their staff to procure

personal computers and laptops at subsidized rates. This will enable them catch up with the use of ICT facilities.

There is also need for government to ensure that telecommunication and internet are improved to reach all establishments in both urban and rural areas. In addition, there is need for the connection fees to be reduced and made affordable.

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