

**BRIDGING DIGITAL DIVIDE AMONG LOCAL GOVERNMENT EMPLOYEE IN
EBONYI STATE-NIGERIA FOR SUSTAINABLE ECONOMIC DEVELOPMENT:
A PARADIGM SHIFT.**

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ABSTRACT

The application of Information and Communication Technologies (ICT) to support improvements in productivity, management effectiveness, community development and ultimately, the quality of services offered to citizens at the grassroots is pertinent. However, the inequalities that exist among local government area employee are the source of a significant anxiety and needs to be bridged. Such inequalities need to be detected and addressed and build best practices that can give leeway to equality among the employee within the system. This qualitative study discusses the digital divide among local government employee by using ICT access/skills and inadequate ICT facilities in local government in Nigeria. Results obtained revealed that there is presence of digital divide in the local government in Ebonyi State environment. Such inequalities with respect to technology imply inadequacy of ICT resources available and difficulty to access the facilities. It is noteworthy the fact that not all Local government employee use ICT in carrying out their daily tasks and functions, but they use such ICT facilities more frequently for social/personal gains.

Keyword: Bridging, Digital Divide, Local Government, Employee, Ebonyi State.

1 INTRODUCTION

The assumption that the new generation of ICT's inequality among local government employee in Ebonyi State and Nigerian at large has attracted widespread attention and prompted debate among professionals and the research community. Digital divide Researchers into ICTs as found at the different educational levels, is derived from innovative experiences and highlights the relevance of ICTs for collection and dissemination of information, communications within the educational community, online collaboration, etc. Cavusa and Kanbulb (2010) indicated some of the advantages of using e-learning platforms such as for sending and receiving works/exercises, providing immediate feedback in tests, communicating with teachers and other colleagues, accessing training information and carrying out collaborative work. Other authors pointed to the

importance of ICTs to follow-up learning, develop communications and plan the teaching process (Cavus, 2010; Lonn and Teasley, 2009; cited by Ricoy, Feliz & Couto 2013).

Significant percentage of the local government personnel secured their appointments in the Ebonyi State local government-Nigeria with inadequate ICT access/competence of using technology. Other challenges are considered like skills and confidence Economic viability and Inadequate ICT facilities as some struggle to participate fully in the learning practice may be a nightmare. Bridging the digital divide is not the responsibility of individual employee only, but it is the function of the Federal, State and Local Government of Nigeria. It is the responsibilities of policy makers and stakeholders in the three levels of government to fashion out ways of improving the needed ICT facilities for the overall objective and philosophy of the system. In keeping with the above assertion, the Government of Ebonyi State in 2013, proposed a proactive measure to forestall the ICT inequalities among its employee through training with the view to align in the global community.

There is widespread research interest in information and communication technologies (ICTs). According to Crede & Mansell (1998), ICTs are crucially important for sustainable development in developing countries. Thioune (2003) notes that for the past two decades most developed countries have witnessed significant changes that can be traced to ICTs. These multi-dimensional changes have been observed in almost all aspects of life: economics, education, communication, and travel. In a technology driven society, getting information quickly is important for both sender and receiver. ICTs have made it possible to quickly find and distribute information. Thoiune (2003) indicates that many initiatives have been taken at the international level to support Africa's efforts to develop a communication infrastructure and these efforts are designed to enable African countries, including Nigeria, to find faster ways to achieving durable and sustainable development, (Ogbomo and Ogbomo, 2008).

Similarly, the employee of the Ebonyi State local government might needs more information required but do not have the needed skills and competencies and economic constraints, thus timely and accurate dissemination of information is jeopardized. This view is supported by Oji-Okoro (2006), who asserted that it is a tool for sustainable livelihoods; mobile telephones for instance provide employment for many who could have been idle. According to Marcelle (2000), the availability of this new technology has been reshaping the material basis of the society as well as bringing about a profound restructuring of economic, political, and cultural relations among states. Nigeria is not an exception. Access to ICT facilities is crucial for economic, political and social development, thereby bringing government closer to the people but on the contrary, Ebonyi State local government is crippled with paucity of the needed facilities and significant low access by the employee thereby making the extent they can achieve the function of the local government to be in doubt.

In Nigeria however, the functions and responsibilities of Local Government is contained in Fourth paragraph 8 & 9 of the 1999 constitutions of the Federal Republic of Nigeria and some of these functions that are of relevance to health services are also contained. Section 7(1) specified the establishment and maintenance of cemeteries, burial ground and homes for the destitute or infirm. - Establishment, maintenance and regulation of slaughter houses, slaughter slabs, markets, motor parks and public conveniences; - Provision and maintenance of public conveniences, sewage and refuse disposal. - Registration of all births, deaths. - Control and regulation of movement and keeping of pets of all description, restaurants, bakeries and other places of sale of food to the public. It is disheartening, that adequate knowledge and usage of ICT facilities in such highlighted

functions and responsibilities of Nigerian local government are left unattained because of lack of ICT awareness in Nigerian local government area in 21st century.

ICT's upgrades, in most time are quickly in response to commercial social drivers. It is almost impossible for busy local government personnel to stay up to date with all the latest developments. For the 'net generation', technology choices are an aspect of lifestyle and identity. There are challenges for everyone involved in administration to support the diversity of chosen devices and ways of working with such devices to better serve the public. Thus currently, Local governments are judged on the quality of the services they offer to the grassroots development and timely responses in case of emergencies in meeting their responsibilities in their own diverse environment. Inadequate of ICT facilities are scrutinized closely by the researchers and the result was significantly affecting the performance of their daily tasks. However, resources of digital know-how and expertise are less visible and are less obvious targets for investment. Given what is obtainable in other parts of the world, it has become obvious that ICT facilities ought to be available and affordable, so as to enhance performance, timely submission of information for developmental projects in the various thirteen (13) local governments in Ebonyi State and social networking development but these inequalities have hampered their roles to a very serious extent.

In a study conducted by Ricoy, Feliz & Couto (2013), it was observed that the available ICT resources, their usefulness and the training needs of employee can provide important information to teachers, the scientific community, institutions and politicians. Of special interest to the development of the training process, is the adaptation of methodological strategies to incorporate ICTs in order to respond to the expectations and demands of contemporary society. One of the greatest challenges to ICT is positive attitude to change, whether it's a change of job, or pedagogy, a change in a relationship, or a change in economic status considering the benefits of adopting ICT 'whatever-it takes', attitude when confronted by technology innovation. ICT provides new opportunities to explore high cognitive activities such as, autonomy, creativity, problem solving and teamwork. It equally provides with the means to take into account individual needs of employees, especially, while using web based technology, (Aduke 2008).

However, considering the Nigerian Local Government Area employee relational environmental factors and access/skill in ICT for sustainable economic development to reasonable extent has paved way for digital divide which has affected their performance.

2. ICT THEORY

This study is anchored on technological determinism theory. The technological determinism theory according to Lievrouw and Livingstone (2006) is of the belief that ICTs have an overwhelming power to drive human actions socially, economically, as well as production and development. These are points emphasized in this study as the study sees the use of ICTs to bring about changes that would lead to sustainable development in Nigerian local governments. If quality project services and high productivity are to be achieved and sustained as being clamoured for by the Local government commission, it will be relevant for Policy-makers and stakeholders in government to take ICT serious same the government, people and ICTs, are vital tools in this regard.

All these issues are part of the tenets of technological determinism theory, and will be exhaustively explored in this study. Apparently, the relevance of technological determinism theory to this study is indisputable as it provides the springboard on which the study rests upon. In essence, technological determinism theory presupposes that the ability of the organizations to face

environmental challenges and progress depends largely on the extent such organizations embrace ICT.

The knowledge of the theory will assist the policy makers, various stakeholders and professionals to be better equipped in bridging the digital divide and encourage the local government in Ebonyi State to gain the adequate ICT knowledge and usage to encourage them on ICT skills and secure global competitive advantage. It is assumed that every practice is anchored on theory, it is important that bridging the digital divide in Ebonyi State Local government among the employee, be closed through manpower development training and provision of adequate ICT facilities to reposition the Nigerian Local system for a better performance.

3 THE CONCEPTS OF DIGITAL DIVIDE

Inadequate ICT facilities such as telephones, personal computers, and the internet are increasingly critical to socio-economic development and personal advancement. There is a gap separating the world's information "Have" and "Have nots" which is what is now mostly called the digital divide – the divide between those with access to new info-communications technologies and those without. The initiation of ICT for example has been variously seen as being important for individuals and the society as the socio-economic development in areas of research and community development. It is worrisome to inform who have not used the ICT facilities how it has the potentials to change lives, to create social networks, new business or facilitate easy delivery of courses during lectures in the classrooms. Some Local Government employee especially those at the senior cadre witness at the first time computer projector during their seminars and workshop and not knowing what it is used and its uses in the course of delivery. Digital divide is fundamentally about social differences and similarities in usage of Inadequate ICT facilities. According to Annan (2002) cited in Ogbom & Ogbom (2008) that the information society is a way for human capacity to be expanded, built up, nourished, and liberated by giving people access to tools and technologies, with the education and training to use them effectively. There is a unique opportunity to connect and assist those living in the poorest and most isolated regions of the world. Informatization of society is a major hurdle that most nations, especially developing countries, are encountering. The information society or information age is a phenomenon that began after 1950, which brings challenges as we seek to integrate and expand the universe of print and multimedia sources. The two terms are often used to describe a cybernetic society in which there is a great dependence on the use of computers and data transmission linkages to generate and transmit information (Bruce: 1995). In Nigeria, and other part of developing nation, the access/skills, and intrinsic and extrinsic challenges has widen the gap that existed between the have and have nots and unless proactive steps are taken, meeting the demand competitively is a nightmare.

An information society is one that makes the best possible use of ICTs. Martin (1995) supports this view by describing it as a society in which the quality of life, as well as prospects for social change and economic development, depends increasingly upon information and its exploitation. In such a society, living standards, patterns of work and leisure, the education system, and marketplace are all influenced by advances in information and knowledge. This is evidenced by an increasing array of information intensive products and services (Martin: 1988) cited in Ogbom & Ogbom, (2008). It is imaginable to align the views of other researchers, that such clamoured information society will boost employee's morale and increase the job turnover in the system.

In a study conducted by The Organization for Economic Co-Operation and Development (OECD, 2001) defines the concept of "Digital Divide" was defined as the inequality of access to ICTs among geographic areas and people from different socio-economic levels. Digital divide is a problem that influences Nigerian Local Government employee across the nation with a special emphasis on Ebonyi State to a reasonable extent. The inventors, researchers and scientists have tried to analyze the concepts at different levels of developments among individual's life in an attempt to realize the fundamental problems and give answers and possible solutions. In the words of Anyakoha (1991), information technology is "the use of manmade tools for the collection, generation, communication, recording, re-management and exploitation of information. It includes those applications and commodities, by which information is transferred, recorded, edited, stored, manipulated or disseminated". Thus, it is an innovation that adds values to the society through application of resource in unusual way to improve service to humanity and organization at large.

The Digital Divide problem is complex and lacks an easy solution. Simply put, the Digital Divide refers to a significant difference in the access to and equity of technology experience based on categories such as income, race, gender, location, or education. It is easy to have conversations about why there is a Digital Divide, the need for more funding, and the creation of ideal training environments. What is problematic is finding practical and workable solutions for classroom teachers. Yet there are some beginning steps that all teachers can take. (Pearson & Swain: 2001). Thus to a great extent what is needed in this angle is a proactive step for the employee of Local government in Ebonyi State for continuous practice and training in computer laboratory or ICT's service providers within the environment to encourage high level of competence using the ICT's facilities in order to avoid not playing within the framework of global village.

4. The Concept of Local Government Area in Nigeria

Nigeria as a nation is a federation of 36 states grouped under six geo-political zones, with 774 local government areas, a population estimated above 148 million, World Bank Report (2009). With a land mass of about 923,768 square kilometres, huge oil and gas reserves as well as commercial deposits of solid minerals of international demands. In these and potentials although, about 70% of the population are classified as poor while about 54.4%, are absolutely poor and live below the global US\$1 benchmark, with life expectancy flirting between 45 and 47 years. These less than desirable indicators suggest a huge performance lapse on the side of government at all levels; but then, since about 70% of the population live in the rural areas, Ifinedo, (2008) cited in Achimugu, Chukwurah & Ochala, (2013). The local governments have huge responsibilities to bring development closer to the people and by implication engender the much needed socio-economic turnaround Nigeria desires. Nigerian local governments are however known to be symbols of non performance, corruption, slow administrative processes, incompetent workforce, lack of/resistance to innovations etc, Ihome, (2003) cited in Achimugu, Chukwurah & Ochala, (2013). Similarly, what is obtainable in the country from the above assertion is not different from the 774 local government areas or third tier. It is where the godfatherism exercises their control arbitrary without taking into consideration what the local government stands to serve and the need to adequately install ICT facilities.

Therefore, bridging the digital divide among the local government employees may tremendously move the system forward in the 21st century with higher quality, cost effective government services and a better relationship between citizens and government which is nearer to the people, Fang

(2002). In western part of the globe, they have taken proactive steps in adopting ICT use, and adding values to the lives of the local people by widening local access and skills, opening up interactive services for local debates and increasing the participation of citizens on promotion and management of its environment, (Graham and Aurigi, 1997).

5. **Digital Divide in Ebonyi Local Government Area**

ICT's were originally used by scientists for calculating numbers, and have gradually become useful in offices and industries. In recent times, simplified models that can be used by almost everybody have become common in schools and homes for accomplishing many varied tasks and applications (Madu 2000).

The few local government that have ICT facilities do not have sufficient modern telecommunication facilities that enable both the employee and top management of local government to access their e-mail, social networks, search engines at will or when necessary. This affects the extent the local communities do network within their environment and other local government around the globe and as well reduce the extent of information dissemination and learning among the employee is seriously played down.

Related to the issue of insufficient allocation of fund is the problem of irregular power supply. ICT facilities need regular power supply for regular usage. In a situation where power supply is irregular, the cost of using ICT facilities increases, especially as premium motor spirits (PMS) and generating sets require huge amount of money to be provided and maintained. Not all the local employee in Ebonyi State considering the economic constraints let alone the top management personnel can afford to procure PMS for some of them that have the facilities.

Again, majority of the local government employee in Nigerian rely heavily on manual and traditional practices handling their daily tasks without ICT facilities. With this approach, the appreciation of ICT and its usage is played-down. ICT usage is not given the priority that it deserves, thereby making ICT knowledge and usage difficult; competence in its usage is thereby jeopardized. Consequently, the paucity of technical competence is one of the greatest challenges facing the Nigerian Local Government System.

In a review of previous studies of computer anxiety, or what may be called digital divide was conducted by Selwyn (1997) cited in Preston, Cox & Cox (1999), found that a major deterrent to the use of computers by teachers was computer phobia, the experience of teachers are likely not different from the local government employees it is the same. These teacher anxieties could be caused by:

- psychological factors such as having little or no control over the activity, thinking that they might damage the computer, and feeling that one's self esteem is threatened;
- sociological factors such as ICT being regarded as a solitary activity, needing to be clever to use one, and being replaced by the computer;
- operational factors such as being beyond one's abilities, having to cope with unfriendly jargon, and the likelihood of the technology going wrong.

These factors highlighted as identified are catalyst for digital divide among the employees in Nigerian local government system as elsewhere.

5. **Closing Digital Divide through Manpower Training**

Closing the digital divide in Nigerian local governments are necessary because it will enhance training opportunities for the employees and increase their ICT skills and needed technical competencies. According to Tiemo (2006) the importance of information cannot be overemphasized. People need information to plan and carry out their decisions. More than 90 percent of Africa's population could greatly benefit from information on better choice of food, safe water and basic nutrition, child care, family planning, immunization, prevention and control of endemic diseases. The combination of modern communication devices could play significant roles in the collection and dissemination of global information. Thus, it is assumed that the employee may be provided with long time manpower training and adequately procure ICT facilities for the continued practice within the system and outside maybe at their leisure. The role of local government in Nigeria is a sine-qua-non and must be put into consideration and environmental dispositions, their readiness for affordability of ICT infrastructure, high quality of continuous training and high moral justification to dispense the need for the employee without sacrificing such at the altar of bribery and corruption.

Therefore, it is pertinent to encourage the local government employee on manpower training and developments as well encourage the economic policy instrument to improve the ICT facilities to ensure equal access and usage. If a good policy is adopted, the present and future of the employee will develop an efficient cognitive, technical and proficient knowledge on ICT facilities and bring government nearer to the people with the sole aim of improving the lives in the rural areas, thereby reducing the level of poverty.

A report from OECD (1998) found that availability of technology was a driver as well as an enabler of change by making certain types of government functions more feasible and creating new expectations from them. The report claimed that "e-government can be a major contributor to reform" and that "ICTs (information and communication technologies) have underpinned reforms in many areas". Various researchers and policy analysts are also optimistic or convinced about the potential of e-government to reform bureaucracy. In line with earlier research conducted in the field of ICT's like Golden, M., Hughes, M., & Scott, M., (2003), the head of a public policy think tank assumed "they see electronic government as being a more collaborative style of government, featuring: More collaboration with external sectors in making policy and in delivering services: More collaboration with citizens more collaboration within and among governments, domestic and international more collaboration within the workplace" In a related study conducted by Bellamy & Taylor (1998) it was revealed that such views, that government can be reinvented via ICT, on the basis of the challenging boundary and nature of information, ICT enables new information flows that challenge odd norms in the system. In a similar study, Beetham, (1974) asserted that e-government initiatives can allow public administration to transcend its traditional hierarchical structures of accountability. ICT has the potentials to bring government closer to the citizenry and give closer alliances and partnerships with diverse communities of interest, practice, expertise, conviction and inter-dependence within the context of national development agendas" (Ukot- Uma: 2003).

Closing the gap of the ICT skills and competences is highly needed, this is because the employee may be economically viable and ICT facilities is available and affordable but the access/skills and the humanware is not playing, the problem is not solved. The local government employee need to be trained and motivated to use ICT facilities in carrying out their respective assignment from their subordinate from time to time. Sahin (2006) believes that there is a possibility that an individual may have all the necessary knowledge (awareness about the existence

of an ICT) and yet refuse to adopt and use it consequent upon relational and environmental factors. However, in most cases peers and colleagues do persuade an individual, institutions or organizations to either adopt or reject an innovation. The decision to do so is usually seen as closing the gap.

It is the assumption of the researchers that the employee if trained may be disposed to examine the relevant/needed software and how they are used to determine whether the software is meeting the needs of the system or not. It may interest us to note that many experienced local government employees have technology and are keen in using it for playing games. The question now is, are we adopting technology to its full potential with all its potentials. The relevant packages like statistical software should be taught to enable them possess the research knowledge on the need of the analysis of data gathered especially employee in Health, Agriculture, Works and indeed any other unit that may deem it necessary using data.

In addition, this systems approach recognizes that while learning occurs within the individual, it takes place within a social context which makes social interaction central to the learning process (Anderson: 2003; Holmes, et al: 2001; Grabinger & Dunlap: 2000; Cormier: 2008). Assumptions about the role of social interaction arising from tacit learning relationships need to be made explicit when designing effective ICT enabled learning environments. The concept of learning relationships (Fowler & Mayes, 2000) drawing upon insights gained from psychology and anthropology about situated learning can provide an example of a theoretical framework which implements a technology of education approach in the design of learning environments which effectively incorporate ICTs. Fowler and Mayes (2000) define the concept of a learning relationship as inherently a social one in that we learn from and through others. (Sullivan Samarawickrema 2008). To support the assertion, manpower training in any social organization is a catalyst for success/failure, because the economic viability and ICT facility depends greatly on manpower to close the digital divide.

The study of Goode (2010) cited in Ricoy, C. Feliz, T. & Couto, M. J. (2013), highlights the high costs of technologies and states that employee who do not have enough resources and experience would probably lose out on training opportunities. Similarly, the employee who are not economically viable may not be opportune have the ICT facilities let alone the training. Such findings correlate the situation in the local government employee in the state, from the study since they do not possess the ICT competences required to use the facilities, manpower development training and adequate provision of ICT facilities are one of the strategy to close the digital divide in the system.

According to structuralist theorists, technologies are intended to allow equal opportunities for users. DeSanctis and Poole (1994), asserted that the outcomes described above as a form of ironic appropriation. For instance, those members of society already at 'have not' from participation in much of society resource and opportunities, such as those at the low end of the income spectrum are being out from improving their situations because they are completely out from opportunities to change society's rules and resources. Thus it is an assumption that ICT defines society and anyone outside the context in 21st century is outside the society; on the contrary anyone within the context is in the society and such individual/group is closing the gap.

6 CONCLUSION

The digital divide not only affects Ebonyi State Local Government Employee access to institutional resources, but also affects their opportunities to use ICT facilities. Local Government Service Commission, the State Houses of Assembly should carry out periodic survey on the routine of local government with the active participation and ICT knowledge and usage. Lastly, the relevant stakeholder should take a bold step in training of manpower on ICTs and the development as this will give leeway from traditional method of administrative skills to a modern bureaucratic method with the help of Federal and State government setting the deadline and adequately provide the needed ICT facilities that will help in bridging the gap.

REFERENCE

- Aduke A. F. (2008), Usage of challenges of Information and Communication Technology (ICT) in teaching and learning in Nigerian Universities. *Asian Journal of Information and Technology* 7(7): 290-295.
- Anderson, D. M. (2003). Cautious Optimism About Online Politics and Citizenship. In Anderson, D. M. and Cornfield, M., eds. *The Civic Web*. New York: Rowman & Littlefield, pp. 19-34.
- Baume, D. (1996). Editorial International Journal for Academic Development, *Journal of the International Consortium for Educational Development*, 1,1, p1-5.
- Cavus, N. (2010). The evaluation of learning management systems using an artificial intelligence fuzzy logic algorithm. *Advances in Engineering Software*, 41(2), 248-254.
- Cavusa, N. & Kanbulb, S. (2010). Designation of Web 2.0 tools expected by the students on technology-based learning environment. *Procedia Social and Behavioral Sciences*, 2, 5824-5829.
- Cormier, D. (2008). Rhizomatic education: Community as curriculum. *Innovate* 4 (5).
- DeSanctis, G. and Poole, M. S. 1994. "Capturing the Complexity in Advanced Technology Use: Adaptive Structuration Theory." *Organization Science*, 5, pp.121-147.
- Epstein, D., Nisbet E.C. & Gillespie, T. (2011), Who's Responsible for the Digital Divide? Public Perceptions and Policy Implications. *The Information Society*, 27: 2, 92 — 104
- Fowler, C. J. H., & Mayes, T. J. (2000). Learning relationships from theory to design. In D. Squires, G. Conole & G. Jacobs (Eds.), *The Changing Face of LEARNING TECHNOLOGY*. Cardiff: University of Wales Press.
- Goode, J. (2010). Mind the gap: The digital dimension of college access. *The Journal of Higher Education*, 81,5, 583-618.

- Grabinger, R., & Dunlap, J.C. (2000). Rich environments for active learning: a definition. In D. Squires, G. Conole & G. Jacobs (Eds.), *The Changing Face of LEARNING TECHNOLOGY*. Cardiff: University of Wales Press.
- Holmes, B., Tangney, B., FitzGibbon, A., Savage, T. and Mehan, S. (2001). Communal Constructivism: students constructing learning **for** and **with** others. Centre for Research in IT in Education, Trinity College. Dublin: Ireland.
- ISC (2011) Supporting Learners in a Digital Age, brief paper.
- Lievrouw and Livingstone (2006): Technological determinism theory. A test of construct validity. *Computers and Nursing*. 14(3), 164 – 170.
- Lonn, S. & Teasley, S. D. (2009). Saving time or innovating practice: Investigating perceptions and uses of learning management systems. *Computers & Education*, 53(3), 686-694.
- Lowry (1997) Supporting adoption of Innovations. Kappa Delta Records, 34, 10-13.
- O’Sullivan, M.L. & Samarawickrema, G. (2008). Changing learning and teaching relationships in the educational technology landscape. In *Hello! Where are you in the landscape of educational technology? Proceedings ascilite Melbourne 2008*.
- OECD (2001). Understanding the digital divide. Paris: Organisation for Economic Co-operation and Development.
- Pearson T. & Swain C. (2001) Bridging the digital divide: a building block for teachers International Society for Technology in Education, vol. (28) 8.
- Preston, Cox & Cox (1999), What Motivates Teachers to Use ICT? Paper presented at the British Educational Research Association Annual Conference, University of Sussex at Brighton, September 2-5 1999
- Ricoy, C. Feliz, T. & Couto, M. J. (2013), the digital divide among University Freshmen, TOJET: The Turkish Online Journal of Educational Technology – April 2013, volume 12 Issue 2
- Sahin I. (2006) Detailed review review of Roger’s diffusion of innovations theory and educational technology. The Turkish Online Journal of Educational Technology 5(2) 14-23

- Selwyn, N. (1997), Teaching Information Technology to the 'Computer Shy': a theoretical perspective on a practical problem. *Journal of vocational education and training*. Vol. 10. No. 3. pp 395-408.
- Selwyn, N. 2004. Reconsidering political and popular understanding of the digital divide. *New Media and Society* 6(3):341–62.
- UNESCO (2008). *ICT competency standards for teachers*. Retrieved from
- Waycott, J., Bennett, S., Kennedy, G., Dalgarno, B. & Gray, K. (2010). Digital divides? student and staff perceptions of information and communication technologies. *Computers & Education*, 54(4), 1202-1211.
- Tiemo, P.A. (2006). Impact of global system of mobile (GSM) communication services on rural communities in Delta State. In Iyoha, C. C. (Ed.). *Mobile telephony: Leveraging strengths and opportunities for socio-economic transformation in Nigeria*. Lagos: Ezcell Communications Ltd. Pp.90-99.
- Martin, J.W. (1995). *The global information society*. England : Aslib, P.3.
- Oji-Okoro, M. (2006). Mobile telephony and sustainable livelihoods in Nigeri : Case studies from south east Nigeria, In Iyoha, C. C. (Ed.). *Mobile telephony: Leveraging strengths and opportunities for socioeconomic transformation in Nigeria*. Lagos: Ezcell Communications Ltd. Pp.53-56.
- OECD (1998) "Information Technology as an Instrument of Public Management Reform: A Study of five Countries, OECD Working Paper No. 99," OECD: Paris.
- Golden, M., Hughes, M., & Scott, M., (2003). "Implementing e-Government in Ireland: A roadmap for success" *Journal of Electronic Commerce in Organizations*, 1, 4, 17-28.
- Bellamy, C. & Taylor, J. (1998.) *Information Age*, Buckingham: Open University Press
- D. Beetham, (1974.) *Max Weber and the Theory of Modern Politics*, London: Bettles press

World Bank Report (2009). Washington D.C

Iheme, E., (2003). „The prohibition of Nigerian civil servants from political activities: A necessary derogation from freedom of association“*The International Journal of Not-for-Profit Law*, <http://www.icnl.org/JOURNAL/vol.6>

Ifinedo, P. (2008) ICT and Max Weber's Theory of Bureaucracy

Ogbomo M. O. & Ogbomo E. F. (2008) Importance of Information and Communication Technologies (ICTs) in Making a Healthy Information Society: A Case Study of Ethiopian Local Government Area of Delta State, Nigeria

Martin, J.W. (1995). *The global information society*. England : Aslib,

Annan, K. (2002). Information and communication development: Information society submit. P.7.

Anyakoha, M.W. (1991). Basic librarianship: Modern technologies in information work. Owerri: Totanpublisher, Pp. 106-108.

Bruce, O. (1995). Internet with a difference: Getting people hooked up. Available: www.zwren.org.zw/publications/information

Achimugu, Chukwurah & Ochala, (2013), Repositioning Nigerian Local Governments For Better Performance: What Potential Does The E-Government Option Hold? *Journal Of Humanities And Social Science (IOSR-JHSS)* Volume 12, Issue 2 (May. - Jun. 2013), PP 08-19