
E-Governance As A Tool For Public Sector Development In Nigeria

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Abstract

The ultimate goal of public service today, is to deliver services to Nigerians, in line with the democratic ideals of new Nigeria. Public service has to ensure that services are provided in an equitable and transparent manner to redress the service delivery laxity in the public sector. This informs the advocacy for the clutch of digital technology in public service in a bid to cope with organizational changes and new skills required to improve on public service delivery. As a response to growing level of digital technological impact, the Federal Executive Council (FEC) of Nigeria in 2001 approved the Nigerian National Information Technology (IT) policy. This vision is to make Nigeria an IT capable country in Africa and a key player in information society by the year 2020, using IT as the engine for sustainable development and global competitiveness. Today, modernizing the state without e-governance is not thinkable anymore both in theory and in practice. A growing number of developing countries have advanced in their practice of e-governance. Nigeria, as a nation, cannot relish in the disadvantages of being left behind in a globalizing world. Hence the call for the introduction of the use of e-governance in the Nigerian public sector administrative practices. Expectantly, this calls for the examination in this paper, of the problems and prospects associated with this new development in Nigeria, a developing nation. Like many other emerging economies, she has been making efforts to implement e-governance processes. E-governance is based on the premise that the more a government does its business online, the more it is trusted by the citizens and the less violent conflicts the society would have to contend with. Nigeria like many other emerging economies has been making efforts to implement e-governance processes. In fact, no aspect of ICTs touches so many as profoundly as does E-governance, especially in the areas of delivery of services, decision-making, knowledge management, communication, human resources, financial management and regulations. Out of necessity and importance, internet services should be made easily affordable to every Nigerian, reduce the digital divide problem, reduce the internet cost and solve. Therefore, the search for effective and efficient service delivery in the public sector informs the need for the adoption of e-governance in Nigeria.

Introduction

When certain events take place, they have epoch-making consequences in the world. The industrial revolution era ended the feudal, rural based, localized socio-economic system and ushered in industrial, urban, capitalist nation-state system enabling the expansion of trade and commerce at hitherto unprecedented level. Similar events have taken place in the second half of the 20th and the beginning of the 21st centuries. It is the greatest revolution described as the technological revolution based on two core technologies the-computer technology and the communication technology, generally referred to as the Information and Communication Technology (ICT) (Sardana, 2007:21).

The breathtaking pace of technological change is transforming every institution. Human knowledge is doubling every seven to ten years. Like other technological innovations, from the movable type printing press in the fifteenth century, the telegraph in 1844, and the telephone in 1876, to the rise of radio in the 1920s and coast-to-coast television broad casting in 1946, digital technological innovation has sparked speculation about its larger-term impact in various aspects of the society. The digital revolution started in the year 1989 as a new information communication technology known as World Wide Web (www) and a hyper-text language for global information sharing (internet) invented by T.M Berners in Geneva and subsequently released in 1991 as the first client browser software for accessing materials on the internet (Noris, 2001: 27).

The Information and Communication Technology is making its in-road and impact on everything like, commerce, health, agriculture and even in governance. Communication is now nearly instantaneous. These changes are causing staggering upheaval in the familiar systems including governance (Sardana and Sharma, 2007).

The application of Information and Communication Technologies (ICTs) to the processes of government functioning to accomplish simple accountable, speedy, responsive and transparent governance is called E-governance (Electronic governance). It is not simply automating the government's current ways of doing work. According to Henry, it is the introduction of government websites and portals (portals are integrated websites for targeted services) that furnish information, services and facilitate governmental processes, for citizens, businesses and governments themselves (Henry, 2007: 139).

E-governance is also a democratic practice that is gradually gaining universal acceptance and applicability. It refers to a governmental type aimed at achieving effective service delivery from government to citizens, moving governance from traditionalist bureaucratization to modernist participatory administration. E-governance is not just merely computerizing existing government; it is transforming the existing government. E-governance is the ICT-enabled route to achieving good governance.

Nigeria is a major producer of crude oil in the world. Indeed, it is the 6th largest producer of crude oil in the whole world. During the oil boom era of 1970s, Nigeria had the 33rd highest per capita income in the world. It became the 19th poorest nation in 1989 and by 1997 it had moved to be the 13th poorest nation in the world. In the words of the United Nations:

Nigeria poverty is both avoidable and unfortunate, caused not by the poor but created and sustained by the system. It is policy failure that degrades the people-those who suffer it and those who tolerate it" (Raji et al, 2006).

Nigeria has since been earning huge amounts of foreign exchange from oil but the average citizen has little or nothing to show for the nation's oil wealth. So while the country may be said to be rich, her people are poor. The result of all these is that most Nigerians live a life of poverty and misery and Nigeria ranks very low in all human development indices used to access oil producing nations.

India is an example of a developing country that has positioned itself to take advantage of the booming global IT generated economic market place. India has systematically invested in educating its population to produce high quality software to support the IT driven global economy. As a result of this investment, it is expected that very soon, India's software export will be worth approximately 100 billion US dollars (UNDP choices the Human Development Magazine, June, 2000).

Information and communication Technology ICT is a technology such as computers, software, peripherals and internet connections, infrastructure required to support information processing and communication functions (UNDP, 2001). ICT is also defined by Sesan as the convergence of micro electronics, computing and telecommunications which has become a global phenomenon of great importance and concern in all spheres of human endeavor, spanning across education, governance, business, market share, labour, productivity, agriculture, trade, commerce, etc (Sesan, 2001). Governments and people around the world have started appreciating the ability of information and communication technology to stimulate rapid growth in all sectors of the economy. It is redefining the way we do almost everything and it is ready for all strata of the society.

The Nature of E-Governance

According to the Centre for African Training and Research in Administration and Development (CAFRAD), they defined e-governance as "the use of ICTs, and especially the internet, to adopt a new conception and attitude of governing and managing where participation and efficiency are required of all the partners linked in a network" (Misuraca, 2007). The meaning of "e-governance" is better appreciated by juxtaposing it with the concept of e-governance. The latter refers to the ways public sector institutions use on-line resources to conduct business of government and share information with members of the public. On the other hand, e-governance refers to the processes (vision, strategies, planning, leadership and resources) for ensuring e-government (Ekot-Uma 2000, Holmes, 2001; Caston and Tapscott, 1992).

E-governance targets three related objectives which are "improving government processes (e-administration), connecting citizens (e-citizens and e-services) and building external interactions (e-society)" (Heeks, 2001). In other words, e-governance enhances popular political participation and democratic processes in general. Secondly, areas in which this has manifested in some parts of the world are online voting and online consultation. The other areas that are less talked about are input into policy making, public yearnings, online campaigns and building of online (political) communities.

Complementary to the concept of e-governance is e-democracy. The latter deals with how citizens influence state policies, public sector process and legislative processes

through the use of the new Information and Communication Technologies (ICTs). The main benefit of e-democracy is the improvement in citizen's acquisition of vital government information and enhanced opportunity to make input into governance. All these empower, and better equip citizens to ask those ruling them or representing their interests in the parliament the right questions (Norris, 2001).

According to UNESCO, e-governance is "the public sector's use of information and communication technologies with the aim of improving information and service delivery, encouraging citizen participation in the decision-making process and making government more accountable, transparent and effective (UNESCO, 2003). The Pacific Institute of Management in India considers it to be "application of ICTs to the process of government functioning to achieve simple, moral, accountable, responsive and transparent governance" (Misuraca, 2007).

E-governance represents a significant opportunity to move forward with qualitative, cost effective government services and a better relationship between citizens and government (Fang, 2002). Governments now realize that governance is more than just floating government websites on the internet. It is a process of making simpler and improving democratic government and business aspects of governance through an application of electronic means in the interaction between citizens and government, businesses and government, and also in internal government operations (Backus, 2001). The potential benefits of using ICT in government have gone beyond efficiency and effectiveness. By making available interactive access to and use of information by people who use government services, e-governance initiatives hope to empower citizens (Gage, 2002).

Backus (2001) also refers to Gartner's e-governance model where e-governance can be nurtured through the following four phases:

- a) Information – Presence: E-governance means being present on the web, providing the public with relevant information.
- b) Interaction – intake processes: The interaction between the government and the public is stimulated by various applications.
- c) Transaction – complete transactions: The complexity of technology is increasing, but customer value is also higher. Complete transaction can also be done without going to an office – example online services from income tax, property tax, renewal of licenses, visa and passports and online voting.
- d) Transformation – Integration and exchange: All information systems are integrated and the public can get services at one visual counter.

However, Gartner's e-governance model does not imply that all institutions have to go through all phases simultaneously. Different departments can be in different and appropriate phases depending on where the benefits are highest and also where technological capacity is higher.

E-governance can bring the central government closer to the people by bypassing the unnecessary bureaucratic interference by the local government authorities or by the oligarchic regimes. At the same time, local governance operations can be made more transparent and accountable by initiating e-governance. Today, people can get a lot of useful information with their governments around the world. For example, Germany with a population of 540,000, Bremen, has reached ahead to become one of the country's leading lights in e-governance. (EU, 2003). Nordic welfare states are sharing useful information with their citizens everyday. This is really reforming public administration, modes of governance,

thus reducing the workload of the public offices. The citizens are enjoying direct access to useful information by bypassing the bureaucrats and the conventional and conservative bureaucratic systems. Inter-governmental relations are gradually becoming possible through the online governance systems.

E-governance also refers to the delivery of information and services on-line through the internet or other digital means. "It is not only the computerization of a government system, but a belief in the ability of technology to achieve high levels of improvement in various areas of government, thus transforming the nature of politics and the relations between governments and citizens" (Dada 2006:1). Shilubane (2001) also views e-governance as the use of information technology, in particular the internet, to deliver public services in a much more convenient-customer oriented and cost effective way. Unlike traditional structures, which are hierarchical, linear, and one-way, internet delivery system are non-hierarchical, non linear, two way, and available 24hrs a day, seven days a week. The non-hierarchical characters of internet delivery free citizens to seek information at their own convenience not just when a government office is open.

E-governance is spreading in different states. In India, for instance, Gyandoot (messenger of information) project, the country's most successful government-to-citizen internet project, set up over 30 internet-connected kiosks in villages in a district in Madhya Pradesh to provide user-charge based services to the rural people. The services/facilities offered are prices of agricultural produce at different auction centers, on-line registration of applications for obtaining income/caste/domicile certificates, on-line public grievances redressed, a fee-based e-mailing facility, etc. In Kerala, integrated service centers called FRIENDS meaning (Fast, Reliable, instant, Efficient Network for Disbursement of Services) have been set up with a view to enabling a smooth and transparent citizen-to-government interface. These centers accept all utility bills, taxes and fees pertaining to the participating departments and offer quality services to the citizens. These centers have been established in all the 14 districts of Kerala (Sharma, 2007:24).

In 2004, the National E-government strategies limited were established to co-ordinate the framework for the gradual roll-out of national e-governance activities. Although, Nigerian government has made it mandatory for public officers to undergo ICT training for the purpose of furthering e-governance in public service. Some agencies of federal government of Nigeria that have been fully integrated into the e-initiative include;

- E-passport programmed of Nigerian immigration,
- Abuja Geographical Information System (AGIS) online land registration.
- National Youth Service Corps (NYSC online)
- West African Examination Council (WAEC) direct
- Joint Admissions and Matriculation Board (JAMB)
- Automated System for Customs Data (ASTCUDA)
- National Examination Council (NECO)
- Post-cash of Nigeria postal service.
- National Open University of Nigeria (NOUN)
- Electronic Voters Registrations.
- On-line payment of fees in most tertiary institutions
- On-line display of admission into most Nigerian Universities (Obasanjo, 2004).

These and other areas as polynet, Electronically Central Motor Registration (ECMR) records, and other proposed electronic public service delivery exists in public

service agencies. As the report of an e-government benchmark study conducted by the American Society for Public Administration (ASPA, 2001) reveals, nearly all 32 countries at emerging stage of an on-line presence were developing nations, characterized by static and insufficient information that is infrequently updated, few interactive features and non-existent online services. E-government potentially empowers individual citizens by providing them with an alternative channel for accessing information and services and interacting with government” (UN-DPEPA, 2001:6). This perspective adopts e-government as a development agent that induces citizen to become more literate so as to benefit from the advantages presented by technology (UN-HDR, 2001).

Undoubtedly, if electronic service delivery infrastructure is available, affordable and accessible, it will benefit everybody. But the fact is that only few elites enjoy the ICT facilities, mostly the residents in urban centers where it is often available. The peculiarity of technological advancement in Nigeria, which is at low stage no doubt, will widen the gap between the government and the citizens if electronic service delivery in public sector is embraced. In the view of Cloete (2004), the causes of inefficiency in e-governance application in public service include;

- Insufficient appreciation of the utility of such tools;
- Open suspicion of and even deliberate resistance against the increased use of electronic tools in public management, linked to the complexity of digitizing existing programmers, and
- Low level of computer literacy, and serious resource constraints in the face of different priorities, especially in developing country.

In order to scale up more convenient user-friendly and wider application of electronic service delivery initiative in public service, Ciborra (2005) asserts that the notion of e-governance on its own is not suited for developing countries to obtain the associated benefits; instead political and social changes are required alongside the implementation of electronic mediums. He adds that failures due to governance breakdown, corruption, rent seeking, distortions in markets and the absence of democracy, should be addressed before e-governance can be implemented. Impliedly, good governance therefore is the bedrock for successful application of digital technology in public service delivery. The leadership of governments in Nigeria has not demonstrated sufficient commitments to development of e-governance as only the federal government and few state governments are still at the stage of having web presence only.

However, for the e-enabled, who can both contribute and retrieve information from the web, e-governance holds the promise of effectiveness, efficiency, accuracy and transparency in the public service delivery. This is corroborated by European commission study (2003) which asserts that, e-governance enables the public sector to maintain and strengthen good governance in the knowledgeable society, creates a public sector that is open and transparent, governments that are understandable, accountable to the citizens and open to democratic involvement and soothing. It also ensures that a public sector is at the service of all, promotes a productive public sector that delivers maximum value for taxpayers’ money, less time is wasted standing in queues, errors are drastically reduced and the jobs of public servants can become rewarding. Asserting along this thought, Ndou (2004) observes that, if developing nations appropriately apply e-governance initiative, it will reduce the number of inefficiencies in processes by allowing file and data sharing across government department, thereby contributing to the elimination of mistakes from manual procedures, reducing the

required time for transactions. The issue of appropriateness is a vital condition for sustainable public service delivery through electronic means since traditional style of public administration provides for long and time consuming period resulting from red-tape in its bureaucracy.

E-Governance and Digital Divide Problem

Today Governments worldwide are under increasing pressure to change the way in which they function and operate. There is a realization that the government no longer needs to undertake all the functions by itself and that efficient government today must involve forming partnerships with other organizations. This requirement arises as a consequence of:

- More pressure to demonstrate greater performance with more competition, more choice, more focused services, better responsiveness and better quality of service.
- The need to deliver services through a range of market-based tools (eg competitive sourcing of delivery of services, public private partnerships, contracting out and privatization).
- There is greater delegation of responsibilities, both managerial and financial, to government managers linked to greater accountability (eg introduction of performance budgeting).
- There is a greater need to provide and deliver services that meet the needs of citizens eg. Now services delivered through single points of service.
- The growth of communication networks allow citizens to be engaged in government decision and policy making through electronic consultation, e-mail comments being delivered online, regular surveys undertaken and blog sites (web logs).
- Today there is much less stability and demands on government are much tougher. This requires a high degree of responsiveness to cater for natural disaster, civil strife. Refugees and terrorism (Oghassabian 2007).

Electronic service delivery as we know optimizes government operations in service delivery but the extent of citizens' participation is threatened by digital divide. Digital divide refers to the gap between those who can effectively benefit from information and communication technologies (ICTs) and those who cannot. The term "digital divide" is a social construction that emerged in the latter half of the 1990s after the internet came into the public domain and the World Wide Web exploded into history's largest repository of human knowledge. In his study Norris (2001) classified digital divide into:

- A global divide revealing different capabilities between the industrialized and developing nations.
- A social divide referring to inequalities within a given population and
- A democratic divide allowing for different levels of civic participation by means of ICTs.

Although these three divides exist, each affects and determines the outcome of the other. Therefore, the understanding of the nature of digital divide in Nigeria public service ought to be perceived from the global, social and democratic perspectives. This is necessary since digital divide raises ethical questions of universal access to government goods and services.

Digital divide, like access to food, access to essential information has moral and ethical implications that merit consideration in the formation of public policy (Ryder 2006). This implies that IT policy is meaningful in public service delivery if it does not exacerbate gap in access to public goods. This concern arises as 2003 study shows that only seven

percent of the world's 6.4 billion people have access to the World Wide Web (Nielsen Net Ratings 2003). In the same vein, Heeks (2003) notes, the implementation of e-governance in developing countries fall, with 35% being classified as total failures and 50% as partial failures. This is a challenge and a disturbing fact for a developing country like Nigeria that has lots of limitations. This is why some e-initiative studies portend the promises of e-governance as utopian since the benefits apply only to an elite few. The existing evidence suggests that income, education and age are important social determinants of internet access and that older people and those with low incomes are much less likely to use the internet

E-Government & the Internet

Internet technologies are qualitatively different from earlier information technologies. They offer new potential for organizations to become externally facing, and lend themselves to different development styles. Private sector companies at the forefront of web-based developments have found that such developments have lent themselves to a 'build-and-lean' technique (Dunleavy and Margetts, 1999), whereby web-based developments become part of a process of continual organizational learning and customer's reactions.

Although the 'dot.com' crash of 2000 stilled the rush for internet gold (and dampened political enthusiasm for e-government), there is no doubt that the internet has proved a major new channel of communication by which increasing number of citizens are making transactions with a wide range of organizations. Many countries however, have introduced targets for the percentage of government services that would be available on the internet. The U.S. was the first when, as part of the 1994 national performance review, Al Gore promised to provide all citizens with electronic access to government by 2000, by connecting every classroom, library, hospital and clinic to a national information's infrastructure. In the UK in 1997 the then prime minister, Tony Blair, pledged that by 2002 at least 25 percent of all government interactions with citizens would be electronic. By April 1999 the modernizing government white paper put in place later targets of 50 percent 'electronic' interactions by 2005 and 100 percent by 2008 Dunleavy & Margetts,(1999) This commitment was later brought forward to 2005. In Australia, also in 1997 the prime minister pledged that by the end of 2001, all appropriate services would be available on-line via internet.

In response to these targets and to increasing use of the internet more generally, there has definitely been internet driven change across government organizations, to varying degrees across and within governments. Most government agencies now have websites which provide at least basic information about the agency and figures have grown rapidly in recent years. (Peters and Pierre, 2008).Government has spend a lot of money to do what they called public services network which is (Psnet) with the integration of the ministries. At this moment, about eight or more ministries have been integrated, including the national assembly itself (Agunloye 2007).

According to Ndukwe, (2009), information and communication Technology (ICT) facilities have become critical tools especially in the informal sector where people are disenfranchised, saying that ICT remains the only tool that could be used to strengthen their capacity to achieving a common goal of Millennium Development Goals (MDGs). He described broad band as the future of the world and said that we are in a digital revolution and for Nigeria to be part of the transformation, broadband and mobile communication access in Nigeria must be made available to the undeserved areas, as the duo he said have

engendered what he called ubiquitous access to network in the communication world. Former governor of Cross River State, Donald Duke said that technology remains the backbone of every economy. He posited that no nation can develop only on its natural resources without exploiting its technology potentials and attributed the strident ravaging African countries on economic woes due to their neglect of technology.

According to Henry, (2006), in America, digital government (e-governance) is enormously popular among Americans. More than eight out of ten Americans who have visited a government website say that the information they receive is reliable. Even more profoundly, e-government may be restoring American's faith in government. More than six out of ten of the public believe that e-governance will have a positive effect on government and think that e-government can make governments more accountable. Public administrators he said are even more delighted with e-governance than are citizens, with more than nine out of ten believing that digital government will have a positive impact on government. This, however, could change as the public information resource grows evermore heuristic and accessible. On the one hand, computers are increasingly able to make decisions that once were the exclusive preserve of public administrators. On the other, computers increasingly are facilitating the ability of citizens to make their own decisions that had been made for them by public administrators.

There is no little irony in public administrators' comfort with the computer. But only one thing is certain: "putting services on the web does not just change how governments interact with citizens. It can equally change how governments are run.

Measuring Nigerian's E-Readiness

What is the state of e-readiness in Nigeria? "E-readiness, according to Ifinedo (2005), refers to "How nations across the globe fare in terms of creating, diffusing, adopting and using the various components of a networked economy". Existing tools for calculating this relates more to a nation's readiness for business or economic growth, and those that focus on the ability of the entire society to benefit from ICT. E-readiness has both economic and political aspects. Our focus in this paper is on e-governance rather than e-commerce. The two are, however, interlinked.

"E-readiness" refers to the availability of requisite technological infrastructures, legal frameworks, institutional and human resources and political will to use ICTs to promote good governance or promote a nation's economic, social and political interests on the international scene (Isaac, 2009). Several things are involved in the process. On the connectivity side, the issues to be taken into consideration in e-readiness include ICT access and availability, ICT affordability, ICT quality and reliability, and electrical supply and delivery system. On the political side, the issues include political leaders' vision and priority; strategy, planning and co-ordination, public-private partnership and digital inclusion. What is the level of information security in the society? Can networked information be trusted? The issues to be considered here include the legal framework for information dissemination, enforcement and prosecution of misuse of information, internal system security. How knowledgeable is the society about ICT? The last question can be answered by taking a critical look at the extent to which primary, secondary and post secondary education systems incorporate knowledge of ICTs (Isaac, 2009).

Table I Connectivity Access: PC penetration

Categories	Countries
Medium-High	Mauritius
Medium Levels	Botswana, South Africa
Low-Medium Levels	Namibia, Togo and Senegal
Low levels	Angola, Benin, Burundi, Burkina Faso, Cameroon, Chad, Congo, Cote d'ivoire, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea Bissau, Guinea, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Niger, Nigeria, Rwanda, Zimbabwe

Source: Docktor 2001

Table II E-Leadership Vision and Planning: National Strategy

Categories	Countries
Medium-High	South Africa
Medium Levels	Benin, Cameroon, Cote d'ivoire Ghana, Kenya, Mauritania Mozambique, Rwanda, Senegal, Uganda.
Low levels	Angola, Burundi, Burkina Faso, Eritrea, Gabon, Gambia, Guinea, Guinea-Bissau, Lesotho, Liberia, Malawi, Niger, Nigeria.

Source: Docktor, 2001

Table (iii) Leadership – Usage: Government Web Pages

Categories	Countries
Medium-High	Nigeria, Senegal, South Africa, Zimbabwe.
Medium Levels	Angola, Burkina Faso, Cameroon, Cote d'ivoire Ethiopia, Ghana, Kenya, Lesotho, Madagascar, Mozambique, Namibia, Rwanda, Sudan, Swaziland Tanzania, Uganda.
Low-Medium Levels	Burundi, Chad, Gabon, Gambia, Guinea Bissau Liberia, Malawi, Mali, Mauritania, Mauritius, Niger, Sierra Leone, Togo, Zambia.
Low levels	Benin, Congo, Guinea, Eritrea, Somalia

Source: Docktor 2001

Isaac Olawale Albort(2009) Culled from *African journal of political science and international relations* vol. 3 (4) pp. 133-141. April, 2009

Tables 1-3 above shows that, on the whole, South Africa has the best e-readiness ranking in Africa. Followed by Botswana. South Africa has the 35th position in the global e-readiness rankings of the Economist Intelligence Unit (EIU, 2007) of 2007 with 6.10 points while Nigeria, another giant on the continent, occupied the 60th position with 3.92 points. In the 2008 rankings, south Africa moved down to the 39th position with 5.95 points and Nigeria got the 62nd position with an improved 4.25 score (EIU 2008). This shows that the gap between South Africa and Nigeria are gradually narrowing down.

Nigeria's Model of E-Governance

Nigerian government adopted a model of electronic governance (e-governance) called the Public Private Partnership (PPP) model. This model has made an appreciable progress in Nigeria so far. The United Nations (UN), the leading organ for global development, has endorsed the Nigerian model of electronic governance as a viable option for successful deployment of e-governance across the world.

Economic experts have claimed that Public Private Partnership is the key to the nation's sustainable economic development. In Kwara state for example, public-private partnership has been adopted as a state policy. This has brought back to life many moribund state owned companies. It has also helped set up several new ones, all running effectively and profitably, thus creating thousands of jobs for the people, and making the state one of the fastest growing sub-national economies in Nigeria. This is one of the promises of the Bukola Saraki-led administration in Kwara State meant to ensure rapid industrialization, through which jobs can be created and the economy of the state improved. The problem about it is the implementation because everybody seems to have his own job and in this case, the provider is allowed to participate, not only because he was appointed to be a stakeholder but also because of the fund, resources and the discipline.

E-Governance Implementation in Nigeria

Nigeria is considered, globally, to be an interesting paradox. Though supposed to be among the richest countries given its better macroeconomic outlook due to expanded production of oil and gas, it ranks among the poorest of the poor countries in the world. This is the extent that the country ranks among those in which citizens have the lowest level of P.C. penetration in the African continent. Though the country ranks among the African countries with the highest number of ICT students in tertiary institutions (Albert 2009). In other words, the country produces ICT experts it does not need. This symbolically explains why Nigerian experts are scattered all over the world today. Nigeria and South Africa have relatively larger amount of infrastructures, good education and technical endowments in Africa. Though the country is rated "medium high" for having functional government websites (Jaslez, sec 2 above), It hardly have as a national strategy the use of ICT for promoting good governance.

Using United Nations (UN) ratings of 2005, it says that Nigeria was number 139 out of 291 countries, in 2004; the country was and number 141. This meant that we have only moved two spaces up the ladder. In Africa, out of 43 countries, we are number 24. We have countries like Rwanda that was rated higher than us, countries like Kenya, among others. But in reality, looking at Macao which is a small Island, next door to China and which is rated much better than us, they said the way that country implemented the e-government policy was absolutely fantastic. But there is just only one job that they do in Macao-gambling; every body gambles. Secondly it is only made up of 27,000 people which is less than one ward in Osun State.

When we talk about the rating in Nigeria, it is not taken into consideration. How do we get to the ministry of education through the net? Are they all connected together? When the ministry is linked together, it has about 22 parastatals and one of them, like the National University Commission (NUC), has about 80 universities. Another one is the national commission for colleges of education which has 87 colleges of education. Some of these parastatals are already more than the entire government in some of these other countries.

Comparing Nigeria with Singapore, which is believed to be the number one or number two in the world, in e-government compliant, it is the next to Canada and Sweden in that order. But Singapore is smaller than a local government in Nigeria (Agunloye, 2006). So irrespective of the level of illiteracy in the country, e-governance is actually on course and they are now ready to go out because the bottom line for the issue of e-strategy is the provision of e-services and we also know that most of the time, e-services actually promote themselves.

Victor Ogunmakin ,the then Director and Head of service at the presidency and a member of Nigerian delegation to international conference for electronic governance (ICEGOV 2007) said that the Seven point Agenda of the present administration is driven by IT. According to him, e-government is electronic administration of governance that is capable of helping to bridge the digital divide and which Nigeria must speed up implementation of so as not to be left behind in the comity of nations. Nigeria, according to him, cannot move ahead unless e-governance is rigorously implemented. So it is expedient that the nation quickly put in place a framework for compliance. Compliance not based on local internal standards rather international benchmarks. By deploying e-government, we are only attempting to keep in step with global trends, he remarked.

Internet access is low but it is growing gradually in Nigeria. Few years back, one million students went on-line for National Examination Council (NECO). One year ago, 2.5 million students went online for West African Examination Council (WAEC). Now 1.5 million teachers would have to go online to register to be licensed. Then, an estimated 10 million parents would have to go online to pay their children's school fees. And it is estimated that 1.5 million hospital patients and doctors were to go online to make payment. This is evolving and the banks are actively participating here. There are banks in every local government and they are all connected. So, as far as we are concerned, there is only one bank in Nigeria because all the 35 banks available are connected to inter switch and so from anywhere you can have access to your bank account (Angunloye, 2007).

The government of Nigeria has also directed that all ministries and agencies must obtain e-forms. Government has also directed that all civil servants must be e-literate; all state workers should be computer specialists as well as all the instructors and so on. That is why most government agencies are organizing computer training programmers for their workers from time to time.

Recently, the current minister of education, Prof. Ruquayyatu Ahmed Rufai, was lamenting on Nigeria's inability to effectively deploy Information and Communication Technology (ICT) in a sustainable manner; despite being aware of its transformational effects. According to her, electronic learning (e-learning) was becoming a common platform for enhancing education delivery all over the world. She said also that Nigeria had not always been consistent in the use of ICT and assured that e-learning initiative would be among her core areas of concentration in the next few months. Other ministries and agencies and private sector partners were also enjoined in the e-learning initiative implementation to play their roles, saying that President Goodluck Jonathan and the Federal Executive council had approved the deployment of e-

learning infrastructure across the education sector. The Minister further explained that, the initiative would be pursued through Public Private Partnership (PPP) under the guidance of the infrastructure concession regulatory commission to guarantee its sustainability. (Chukwulaka, 2010).

E-learning initiative would, among other things, aid the conduct of examinations on-line in the near future. So far, this study among other issues reveals a lot of benefits, challenges and prospects of applying electronic e-governance in public service delivery in Nigeria. It is against this background that this paper observes that e-governance, no doubt has introduced and will also introduce more positive impacts such as improved decision-making, more intensive and productive use of data bases and better communications in public service delivery. In this same vein, experts in technology including eminent Nigerians have said that information and technology driven economy is the only way to Nigeria's future.

Emmanuel Elebeke (2009), in his article "Eminent Nigerians drum support for ICT", posited that e-governance is the best system of governance that could enable Nigeria achieves her vision 2020 dreams. Again, technology and e-governance have become critical tools for achieving good and people oriented governance as evidenced in some developed countries and few states in Nigeria, as well as some federal government parastatals where it was adopted, adding that the system has proved to be the most transparent, accountable and fastest system of governance everywhere in the world, including Nigeria.

Problems militating against E-Governance in Nigeria

Even though it is accepted that electronic service delivery optimizes government operations in service delivery, the extent of citizen's participation is first threatened by digital divide. The digital divide refers to the gap between those who can effectively benefit from information and communication technologies (ICTs) and those who cannot.

Digital divide according to Keniston is a problem of multiple dimensions that manifest into (1) a technical aspect referring to availability of the infrastructure, the hardware and the software of ICTs, and (2) the social aspect referring to the skills required to manipulate technical resources. Nigeria as a developing country has lots of limitations. This is why some e-initiative studies portend the promises of e-governance as utopian since the benefits apply only to an elite few. However, the gap between those who have technological access and those who don't is still widening. The existing evidence suggests that income, education and age are important social determinants of internet access, and that older people and those with low incomes are much less likely to use the internet. As it concerns digital divide, the awareness of the ICT benefits generally remains low among people living in poor communities.

Again, the chronic lack of qualified staff and inadequate human resources training has also been a problem for years. The problem hinges on the availability of human capacities that have technical skills, for installation, maintenance, designing and implementation of ICT infrastructure. Therefore, Nigerian government should show more interest and commitment in supporting ICT training and services as a strategy for addressing the digital gap especially the most valuable.

Another problem is the issue of computer crime. Computer crime encompasses a broad range of potentially illegal activities. Generally, however it may be divided into two categories

- 1) Crimes that target computer network or devices directly and
- 2) Crimes facilitated by computer networks the primary target of which is independent of the computer network device. Examples of crimes that primarily target computer networks or devices would include: Computer viruses, Denial-of-service attacks, Malware (malicious code)

Example of crimes that merely use computer networks or devices would include

Cyber stalking, Fraud and identify theft, Information welfare, Phishing scams (Wales, 2008).

A computer can be a source of evidence. Even though the computer is not directly used for criminal purposes, it is an excellent device for record keeping, particularly given the power to encrypt the data. If this evidence can be obtained and decrypted, it can be of great value to criminal investigators.

Net crime is another issue militating against the success of e-governance in Nigeria. Net crime refers to more precisely to criminal exploitation of the internet. Issues surrounding this type of crime have become high-profile, particularly those surrounding lacking, copyright infringement, child pornography, and child grooming. There are also problems of privacy when confidential information is lost or intercepted, lawfully and otherwise.

Computer fraud is equally very high in Nigeria. Computer fraud is any dishonest misrepresentation of facts intended to let another to do or refrain from doing something which causes loss. (Wales 2008). In this context, the fraud will result in obtaining a benefit by

- 1) Altering computer in an unauthorized way. This requires little technical expertise and is not an uncommon form of theft by employees altering the data before entry or entering false data, or by entering unauthorized instructions or using unauthorized processes.
- 2) Altering, destroying, suppressing, or stealing output, usually to conceal unauthorized transactions is obtained in Nigeria. This is difficult to detect.
- 3) Altering or deleting stored data;
- 4) Altering or misusing existing system tools or software packages, or altering or writing code for fraudulent purposes is also done in most Nigerian cyber cafes.

Other forms of fraud may be facilitated using computer systems, including bank fraud, identity theft, extortion, and theft of classified information. A variety of internet scams target consumers direct.

In the area of drug related crimes, drug traffickers are increasingly taking advantage of the internet to sell illegal substances through encrypted e-mail and other internet technology. Some drug traffickers arrange deals at internet cafes, use counter web sites to track illegal packages of pills and swamp recipes for amphetamines in restricted access chat rooms. The rise in internet drug trades could be attributed to the lack of face-to-face communication. These virtual exchanges allow more intimidated individuals to more comfortably purchase illegal drugs. The sketchy effects that are often associated with drug trades are severely minimized and the filtering process that comes with physical interaction fades away.

Taking the 2003 and 2007 elections as an example, the elections were characterized by different forms of malfeasance. The most disturbing of which include lack of access to

relevant public information, list of votes, location of polling booths, amount of money spent by politicians on campaign activities and the like. This limited the extent to which Nigerians could exercise their civil rights before, during and after elections. For example, may Nigerians never had the opportunity of checking their names on INEC's voters register during the 2007 elections simply because the electoral body failed to display the registers, whether publicly or electronically. African leaders have the problem of aversion of or open access to official information. It is not that these leaders do not know what democracy stands to benefit from e-democracy or e-governance. For eg. During the 2007 elections, in Nigeria, the government tried to force e-voting system on the country but this was rebuffed by Nigerians and the national assembly based on the argument that the process would contribute more significantly to the rigging of elections in the country. This is so especially as the reliability of e-voting is still debated in many parts of the world.

The incumbent governor of Lagos state, Mr. Babatunde Raji Fashola, has said that the introduction of e-governance in the state has reduced the incidences of corruption, nepotism and favoritism in Lagos. He went further to say that for people to reap the benefits of e-governance, apart from the provision of basic infrastructure, there is a need for adequate public enlightenment campaign and that governance is about the people. He said also that the adoption of e-governance will promote the best form of participatory democracy as it allows the constituencies direct participation in government activities without being physically present, re-engineers a new sense of citizenship as the people redefines their needs, welfare and responsibilities as well as enable the governed to communicate with their government, participate in government's policy making and decisions.

With the adoption of e-governance, government agencies are constantly put under the searchlight of the citizens, which ensures probity, responsibility and stewardship. Governance is promoted and the citizens become the ultimate beneficiaries.

E-Governance and reduction of Corruption in the Public Sector

Many developing countries are now realizing the need for e-governance in order to provide customer-focused, cost effective, and easy to use services for citizen and businesses and to improve the internal workings of government. In Nigeria, if corruption can be greatly reduced, then almost all of its problems would be solved. It is the major hindrance to the country's progress and development. The problems are known and their solutions clearly defined the resources and know how are available but implementation not carried out.

Corruption as we all know is very rampant in many countries. Transparency International's (TI) Corruption Perceptions Index (CPI) 2004 ranks a record, 146 countries as prone to high corruption. Corruption is perceived to be more acute in Bangladesh, Haiti, Nigeria, Chad, Myanmar, Azerbaijan and Paraguay. The poorest countries are in greatest need of support in fighting corruption (Transparency International, 2005).

Corruption can be broadly defined as the abuse of public power for the benefit of private individual (Rose- Ackerman, 1999). Initiative to combat corruption proposes that e-governance will help. Corruption also includes both monetary and non-monetary benefits. Common forms of corruption are bribery, extortion, influence peddling, nepotism, fraud and opportunism (Vinod, 2005). It is believed that all types of petty bureaucratic corruption can be diminished through the increased transparency achieved by using modern electronic

media. Generally, employment of Internet minimizes the opportunities for public officials to monopolize access to relevant information and to extract bribes from their clients. Some Latin American and Indian states have reduced Petty corruption through the application of e-governance. Further, the use of ICTs in government can also foster the anticorruption struggle against 'self-serving asset stripping by state officials and ICTs may potentially play an important role in preventing some types of grand political corruption.

In 2009, the Lagos state government said that e-governance has reduced indices of corruption, nepotism and favoritism in Lagos state. He noted that with the adoption of e-governance in the state, government agencies are constantly put under the searchlight of the citizens, which ensures probity, responsibility and stewardship, stating that governance is promoted and the citizen becomes the ultimate beneficiaries. A practical example which he pointed out is the recent magistracy reform bill signed by the government which makes it mandatory for magistrate to sit on Saturdays, suspect will no longer be unduly remanded in custody and that the practice of taking record in long hand would be replaced with electronic recording and processing.(Okoh 2009)

Finally, while e-governance holds great promise in many developing countries, substantial challenges needs to be faced. Many ICT project fail because of insufficient planning capacity and political instability. In order to overcome these challenges, successful implementation requires matching the right techniques with capable progressive reformers and government systems.

Conclusion

This work took a critical look at the state of e-governance in Nigeria and Africa as a whole from the demand and supply points of view. The supply side refers to the readiness of Nigeria to practice e-governance, while the demand segment refers to the capacity and motivation of citizens to force e-governance on their representatives in government. The paper revived the state of e-readiness in Nigeria and concluded that Nigeria and the entire African continent are far behind global standards. The problem is blamed on the pervasiveness of poverty in the continent which makes the necessary infrastructure of e-governance to be lacking. Again the digital divide problem was also discussed which refers to the gap between those who can effectively benefit from the Information and communication technologies (ICTs) and those who cannot. It raises ethical question of universal access to government goods and services. Some are privileged while others are not.

Old people and low income earners are much less likely to use the internet. Citizens of African states like Nigeria are not equally able to boost the state of e-governance in their societies largely because many of them are still bugged down with how to ensure daily survival in the harsh social, economic and political environments under which they live.

The issue of measuring Nigeria's e-readiness was also highlighted. E-readiness refers here to the availability of requisite technological infrastructures, etc to use ICTs to promote good

governance or promote a nation's economic, social and political interests on the international scene.

Recommendations

This paper recommends a re-assessment of the country's state of e-governance preparedness. It also recommends the application of proactive steps aimed at ensuring the adequate supply of electricity and the development of human resource capabilities of the populace with the aim of achieving high-level computer literacy. The interval convocation of stakeholders at Abuja for talk-shops is not enough. Rather, internet facilities and services must of necessity be made easily accessible at the lowest cost, to all Nigerians, irrespective of how remote their locations in the country may be. The world is on the move and Nigeria is an integral part of it, hence, should not lag behind.

Finally, Nigerians must come to terms with the realities and challenges in modern societies. The fact remains that we cannot continue to do things the same old ways we have been used to doing over the years and expect different results. To achieve the much desired results, there must be a clear departure from our old methods and we must inculcate and imbibe fresh ideas that will engineer growth and ensure development in critical sectors of the economy. The introduction of electronic service delivery (e-governance) in Nigeria's public sector no doubt is an innovation and transformation resulting from the benefits associated with applying information and communication technologies (ICTs) in public service delivery.

Therefore, our government must wake up and embrace e-governance. Their inability to achieve this is not because they lack the resources but because they lack ideas. The developed nations were able to achieve these for their children by dint of hard work without oil and gas, and if we put in effort, we can replicate same her in Nigeria. It is generally believed that no nation can prosper on the basis of its natural resources or inherited riches but on economy built on the basis of its natural resources or inherited riches but on economy built on ICT and e-governance. Mass education and enlightenment campaign on ICT and e-governance system, provision of enabling environment and power supply therefore, become inevitable. ICT and e-governance will put Nigeria on the right footings of transforming her riches to prosperity.

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