# Challenges of Implementing Electronic Governance in Public Sector Organizations in Nigeria

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## Abstract

*As a global partner, Nigeria public sector has opted for electronic government in the conduct of government business. To ensure that this is realizable, government has strategized many policy, programme and project options to ensure its viability. Unfortunately, these policy, programmes and projects that are mapped out by government over the years to ensure smooth implementation of e-governance in its business are not yielding positive results. It is in line with this development that this paper sought to explore the challenges that militate against its actualization and proffer some solutions that will help to cushion the effects of these obstacles that have become a cog in the wheels of e-governance in Nigerian public sector. Various literature were reviewed and the paper after sitting through the problems makes recommendations and concludes with a call for more research in the subject matter-of-governance.*

## 1. Introduction

The world in the present time has gone digital. Almost every aspect of life is digitalized (Duru & Anigbata, 2015). Thus there are modern trends in all aspects of life endeavours such as medicine–telemedicine, commerce-e-commerce, banking-e-banking, learning-e-learning, production-e-production etc. These phenomena make transactions and interactions in the globe to be more effective and efficient. The world is now a global village and any nation that wants to join the comity of nations must adopt the global trends and join the moving train or be left behind (Akindele, 2014).

The whole world activities are interconnected in a single web and this makes access to virtually every information in the world to be very easy.

For example, a person can sit right in his/her room and transact businesses to any country within some few seconds with a click of the mouse. In a bid to carry all citizens along, government has gone electronic in the recent times the world over. Essentially, e-government delivery models can help to transform every sector of the economy and the public sector in particular.

Furthermore, e-governance is a widely celebrated concept today. The reasons for it are not far-fetched. It can be applied in all governments' reforms and activities. The fusion of various information and communications technologies (ICTs) has offered faster and reliable communication, efficient and economical storage, retrieval and processing of data and exchange of utilization of information to its users, be they individuals, groups, businesses, organizations and governments.

Most importantly, many governments too, have realized the benefits of computerization, internet connectivity and web enablement, and have ventured into process re-engineering, promising services to citizens and business anytime, anywhere.

The effectiveness of electronic government (e-government.) depends on the sound, reliable and well articulated electronic governance. (E-governance is the tool for effective e-government (Duru & Anigbata, 2015).

Nigeria public sector has not had it so well with this current trend in governance. In the recent past, various government information, communication, business and activities were still in the analogue system. The development has hampered the efficacy, effectiveness, efficiency and fast tracking of business of governance (Ndubuisi, 2000). Vital information which would have been placed at the disposal of citizenry via the electronic gadgets of E-governance are hindered and thus causing what Obi (2008) called "Total black out in government activities."

However, in the recent times, Nigeria public began to adopt the e-governance policy option as the panacea for the backwardness and decay that are often seen in the sector. Many programmes and projects to that effect have sprung up through the Ministry of Communications which wants to connect all government ministries, agencies, parastatals and departments to the World Wide Web.

In doing this, there are lots of challenges; bottlenecks and 'bureaucratic red tapism' that seem to be in surmountable. This is the basis of this paper to explore the possible challenges and proffer some solutions to their effect. It is on this backdrop that it becomes imperative for us to explicate how these challenges of the e-government and e-governance in the public sector can be fully actualized with less complication.

## 1.1. Conceptual Definitions

E-governance can be defined according to Duru and Anigbata (2015) as the use of (ICTs) Information and Communications Technologies as tools for achieving better governance. In the words of Obi (2008) it is the development, deployment and enforcement of the policies, laws and regulations necessary to support the functioning of a knowledge society as well as of e-government.

Ndubuisi (2000) sees it as the use of ICTs by different actors of the society with the aim to improve their access to information and to build their capacities. Akindele (2014) describes it as the public sectors use of information and communications 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.

According to UNESCO and Communication and Information Sector Resources (2000) e-governance is a project aimed at promoting the use of ICTs tools in municipalities and public sectors to enhance good governance through the development of training modules for local decision-makers in Africa and Latin America. Mohammed and Drew (2013) define it as the way for governments to use the most innovative information and communication technologies, particularly web-based internet applications to provide citizens and businesses with more convenient access to government information and services, to improve the quality of the services and to provide greater opportunities to participate in democratic institutions and processes.

From the foregoing definitions, one can deduce that:
1. E-governance is not about business as usual, but focuses on the use of ICTs to transform the structures, operations and most importantly, the culture of government.
2. E-government is an important component in terms of overall reform agenda because it serves as tool for reform.
3. E-government/governance renews interest in public management reforms, highlights internal consistencies, and underscores commitments to good governance objectives.

## 1.2. Types of E-Governance

According to Mohammed and Drew (2013) e-governance offers services to those within its authority to transact electronically with the government. E-governance can be typified in four main categories.

A. **Government-to-Citizen (G2C):** The majority of government services come under this application, towards providing citizens and others with comprehensive electronic resources to respond to individuals' routine concerns and government transactions. In the words of Duru and Anigbata (2015) government and citizens will continuously communicate when implementing e-government, thus supporting accountability, democracy and improvements of public services. The primary goal of e-government is to serve the citizens and facilitate citizens interaction with government by making public information more accessible through the use of websites, as well as reducing the time and cost to conduct a transaction (Nduo, 2004).

B. **Government-to-Business (G2B):** This is the second major type of e-governance category. It can bring significant efficiency to both governments and businesses. It also includes various services exchanged between government and the business sectors, including distribution of policies memoranda rules and regulations. The services offered through government-to-business also play specifically, the development of Small and Medium Enterprise (SMEs) (Pascua, 2003). Fang (2002) submits also that G2B applications actively drive e-transaction initiatives such as: e-procurements and the development of an electronic market place for government purchases. This will in turn increase the quality and transparency of government contracts and projects (Moon, 2002).

C. **Government-to-Government (G2G):** This is the online communications between government organizations, departments and agencies based on a super-government database. In a simple language, it is referred to as the relationship between government and its employees. This can be practically evidenced in the following:
1. Improves inter-governmental and organizational processes.
2. Streamlines cooperation and co-ordination of government activities.
3. Automates and streamlines inter-governmental business processes such as regulatory compliances, service delivery and enhancements.

**D. Governments-to-Employees (G2E):** This is the least in the typologies of e-governance. The purpose of this relationship according to Riley (2001) is to serve the employees and offer some online services such as applying online for an annual leave, checking the balance of leave and reviewing of salary payment records among other things. This can be seen also as the combination of information and services offered by government institutions to their employees to interact with each other and their management. It is also a vital way to providing e-learning, bringing employees together and to encourage knowledge sharing among them. This equally gives employees the possibility of accessing relevant information regarding compensation, benefits policies wages and salary administration, training and development and opportunities of accessing their benefits online with an easy and fast communication models and modems

### 1.3. Benefits of E-Governance

The ultimate goal of the e-government and e-governance is to be able to offer an increased portfolio of public services to citizens in an efficient and cost effective manner.

E-government allows government transparency and accountability. Government transparency is very important because it allows the public to be informed about what the government is working on as well as the policies they are trying to implement (Duru & Anigbata, 2015). Complex task may be easier to perform through electronic governance.

E-governance helps to achieve specific policy outcomes by enabling stakeholders to share information and ideas. Government economic policies objectives can equally be promoted via the e-governance commerce and globalization. This also helps to build trust between governments and their citizens.

Furthermore, it has potential for stronger institutional capacity building for better service delivery to citizens and businesses, for reduction of corruption by increasing transparency and social control (United Nations Division, 2001).

They are equally convenient, cost-effective for businesses and public benefits by getting easy access to the most current information available without having to spend time, energy and money to get it. E-governance helps to simplify processes and makes access to government information more easily accessible for public sector agencies and citizens. It helps also to increase efficiency in governmental activities, improved services, better accessibility of public services, sustainable community development and more transparency and accountability.

This will facilitate better delivery of government services to citizens, improved support and simplify governance for government, citizens and businesses. The ICTs can connect all the three parties and support process and activities. Another key point of e-governance according to Duru and Anigbata (2015) are to make government administration more transparent, speedy, accountable, accessible and effective, while addressing the society's needs and expectations through efficient public services and effective interactions between the people, business and government.

Most importantly, many governments the world over have realized the benefits of computerization, internet connectivity and web-enablement, and have ventured into the process of re-engineering, reinvigorating and revamping of analogue system so as to be in the front line of global best practices in modern governmental and business transactions.

In fact, e-governance is a sure way to national integration. It brings about greater citizen participation in affairs of their government. A government could theoretically move more towards a true democracy with the proper application of e-governance. This will therefore make government transparency which gives insights to the public on how decisions are made or taken and hold elected officials or public servants accountable for their actions and inactions.

### 1.4. Threats and Demerits of E-Governance

As the concept is celebrated globally because of its benefits, it has equally potential threats that came with it. These threats are enumerated hereunder according to Duru and Anigbata (2015).

**Danger of Software Hacking:** All over the world, one hears about the hacking of internet software of some organizations of government's departments or agencies etc. The reason is because all the information in the whole world is stored in global web pages and with a click of the mouse; an outsider can study, hijack or track the system inside his/her room. Once confidential and top secret information of a nation or organization is being divulged, that nation or organization is in serious trouble as all their confidential documents will be exposed to their own disadvantage. That is why Kaylor (2001) lamented that:

> *"There are considerations and potential implications of implementing and designing e-governance; including doing disintermediation of the government and its citizens impacts on economic, social and political factors, vulnerability to cyber attacks and disturbances to status quo in these areas".*

**Hyper-Surveillance:** Increased contact between government and its citizens goes both ways once- e-governance begins to develop and becomes more sophisticated; citizens will be forced to interact electronically with the government on a larger scale. This could potentially lead to a lack of privacy for citizens as the government obtains more information on them. That is why Jeong (2007) decry the excesses in e-governance when he opines thus:

> *"In a worst case scenario with so much information being passed electronically between government and citizens, a totalitarian-like system could develop. When government has easy access to countless information on its citizens, personal privacy is lost".*

**False Sense of Transparency and Accountability:** Critics of e-governance argues that online governmental transparency is very dubious because it is maintained by the government themselves. Information can be added or removed from the systematically time or moment without proper notification of the citizens. To this day, only very few organizations monitor and provide accountability for these modifications. In the words of Duru and Anigbata (2015):

> *"Even the governments themselves do not always keep track of the information they insert or delete. Again, since the government is the owner of the system that contain their vital information, they can doctor or mutate anything, anytime to their advantage and commendation".*

**Accessibility:** Not all citizens are literate, and not all literate citizens are Information and Communication Technologies compliant or can operate a computer system. Moreover, the citizens in the remotest part of their country cannot access vital government information.

Therefore, accessibility of information that government makes available to the disposal of the populace via e-government becomes a tough issue. When the citizens cannot access the vital information provided for their consumption and utilization, it thwarts the very fundamental and cardinal objectives of the e-governance and e-government.

**Cost Implications:** some government official use the opportunity of introducing e-governance to embark on prodigality, profligacy and flamboyant spending of public funds. This is because the outcomes and effects of trial internet based government are difficult to gauge or measure.

Government then continues to spend huge amount of money to maintain, construct and train experts to handle these sophisticated communication gadgets. This is where some public servants may hide and siphon huge amount of funds made available for infrastructural digitization.

## 2. Challenges of E-Governance in Nigerian Public Sector

There are several challenges that can delay progress towards realizing the promise of e-governance. The variety and complexity of e-governance initiatives implies the existence of a wide range of challenges and barriers to its implementation and management. Some of these challenges will be outlined as follows:

1.  **Information and Communication Technologies Infrastructure:** The practical implementation of e-governance initiatives in Nigerian public sector faces some technological difficulties such as lack of shared standard and compatible infrastructure among departments and agencies. Internet working is required to enable appropriate sharing of information and open up new channels for communication and delivery of new services (Nduo, 2004). For a sound transition to electronic government to be actualized and architecture providing a uniform guiding set of principles, models and standards are needed. Unfortunately, in Nigerian public sector, this fundamental aspect of electronic governance application is yet to be established.

2.  **Privacy Issue:** Privacy and security are critical obstacles in implementing an e-governance in citizenry. This refers to the guarantee of an appropriate level of protection regarding information attributed to an individual. Government has an obligation to ensure citizens rights regarding privacy, processing and collecting personal data for legitimate purposes only. The situation whereby confidential information and data that are needed to be stored and secured by the government are exposed to the general public is a big barrier to this e-government acceptability by the citizenry as no one likes one's confidential data to be vilified in the public.

3.  **Security of Information that are Gathered:** Security of an information system means protection of information and systems against accident or intentional disclosure or unauthorized access or unauthorized modifications (Layton, 2007) of security is of paramount importance in e-government businesses, transactions and policies. Hence there are no guarantees of security of information; the whole process of electronic government becomes thwarted. Nigerian public service is yet to develop a parameter that will ensure restrictions to unauthorized persons to public information. This is a challenge. The frequent leakages of passwords and keywords of some government organizations and Banks is a true evidence the fact that we have a long way to go in this development.

4.  **Lack of Qualified Personnel and Training:** Training is the most and veritable tool of ensuring the sustenance of e-government in Nigerian public sector. Right now, there are lack of qualified personnel and professional that will handle the entire digitization of the public service. Many civil and public servants are not trained to be computer literate. This has hampered the development of e-governance in the public

sector. No matter how educated one is, without the knowledge of basic computer application in the contemporary times, such a person is lagging behind in the scheme of events. In fact, basic computer knowledge is a predetermined option and precondition for ensuring effective e-governance and e-government. Nigerian public service is indeed in need of these professionals and also a well trained work force in basic computer knowledge and techniques.

5. **Lack of Partnership and Collaboration:** No man is an island and no country is self-contained. There is need for regional partnership and international collaborations in order to ensure global best practices in e-governance. Unfortunately, Nigeria has not gathered the momentum for such partnership neither is it showing the sign of regional collaboration in this issue. For any country to thrive in this digital era, it must go globally, seek partnership and collaborate with other advanced economies who have got to the stage of reference. This is a challenge to the public sector in Nigeria and not until this is addressed, all efforts towards e-governance in the public sector economy will not yield positive results. We need to partner and collaborate with advanced nations.

6. **Lack of Political will on the Part of Government:** political will is the propelling force that moves political office holders to doing or embarking on radical developmental strides. The government in question has not shown or demonstrated political willingness toward mainstreaming our public service in the global web pages. This inability to muster courage by the government has slowed the pace of e-governance in the public sector. This is evident where some important and top secret documents are still lying in the official files whereas these could have been stored in a retrieval system using computer and other electronic gadgets. For us to ensure that this is done, there must be a strong will power on the part of the politicians.

7. **Digital Divide:** This is another grey area that needs to be addressed. Digital Divide is the distances between the computer literate and the computer illiterates. The vast number of people in the public service that cannot operate a computer system can attest to the fact that the digital divide in the system is a big challenge. For any country to ensure that it achieves e-government option, the number of computer illiterates must be brought down to the slightest decimal digits.

## 3. Way Forward/Recommendations

No problem is without solution. And an identified problem has been solved halfway. Below are the ways forward to ensuring smooth e-governance in the public service.

a. Value Reorientation and Attitudinal Change. The way our public service went about their business over the years is a clear indication of lack of value in digitization. There should be first of all value reorientation and change of attitudes of our public servants towards computer system. This is the first and fundamental step to take.

b. There should be a massive training of public and civil servants in ICTs and its related packages. This is as a matter of urgent national issue if the policy of e-governance will be realized.

c. Politicians should muster courage in order to revamp the entire public and civil service. Transformational government is the answer to this challenge.

d. In doing their business, governments should ensure maintenance of privacy rights. The incessant hacking of public information should be checked. This can be done through appropriate pass wording and encoding of confidential information/data so that unauthorized person(s) will not have access to public information.

## 4. Conclusion

The paper has contributed very immensely in bridging the literature gap in knowledge of e-governance and government so far. What follows is to make proper utilization of the findings and recommendations of the work. Knowing full well, that e-governance is answer to global call of paradigm shift from analogue to digitization or e-governance. This has equally indicated that more research is needed in this aspect so as to explore avenues of surmounting obstacles that prevent government establishments and public service in Nigeria from enjoying e-global participation abound in globalized nations.

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