E-Governance and Its Implementation Challenges in the Nigerian Public Service

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Abstract: E-governance has become one of the reform tools geared towards effective public service delivery, which is premised on the assumption that the appreciable use of Information and Communication Technologies (ICT) method in the day to day activities of government will bring effective service delivery. However, there are lots of challenges that hamper the effective implementation of e-governance in Nigerian public service. It is based on this, that this article identifies some of the challenges to e-governance implementation in Nigerian public service. Although, no robust statistical analysis was done, as the article relied on archival analysis of relevant literature on the subject matter and inferences drawn from it. Based on its findings, it was concluded that e-governance remain the best in encouraging transparency and accountability in government business. The paper therefore, recommends that, government should be more committed to the implementation e-governance as well as embark on adequate enlightenment about the concept.

Keywords: accountability; information and communication technologies (ICT); service delivery; transparency

1. Introduction

The importance and impact of e-governance on public service delivery cannot be over emphasized, nor can it be down played. In fact, the benefit of e-governance to the operation of Nigeria's public service is not in doubt. E-governance in Nigeria can be traced to the formulation of the Nigerian National Information Technology (NNIT) policy in the year 2000. The essence of the policy was to make Nigeria an Information Technology (IT) capable country in Africa and a key player in the information society and also use IT for education; creation of wealth; poverty eradication; job creation; governance; health; agriculture (NITP, 2000).

Despite the lofty ideas and aims of the policy which were geared towards ensuring that public sector organisations provide an expanded range of services to citizens in

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a manner that is systematic and cost effective leveraging on the adoption of Information and Communication Technology (ICT) in its day to day activities. However, the public sector organisations seem not to fare well in the implementation of e-governance in their services consequent upon some challenges faced by the public sector, which if not tackled will make the adoption of e-governance a mirage. Some of the challenges identified are lack of IT infrastructure; epileptic power/electricity supply; lack of trained and qualified personnel, the resistance to change attitude by most public servants and so on (Gberevbie; Ayo; Iyoha; Duruji & Abasilim, 2015; Olaopa, 2014; Bansode & Patil, 2011; Okwueze, 2010; Abdel-Fattah & Galal-Edeen, 2008; Ayo & Ekong, 2008 and Dode, 2007).

It is based on this that the main thrust of this paper is advanced. The main objective of this paper is to identify the challenges facing e-governance implementation in Nigeria's public service and suggest ways in which these challenges can be taken care of if e-governance implementation must be realized in Nigeria's public service. This paper is subdivided into four sections. The first section present a brief background on the emergence of e-governance. The second dwells on the conceptual clarification of e-governance and public service. The third section deals with the identification of the challenges to e-governance implementation in Nigeria's public service. While in the fourth section, recommendations and conclusion are made.

2. Conceptual Clarifications

The concepts of e-governance and public service are explained in this section.

2.1. Understanding E-Governance

The concept *e-governance* has been broadly defined especially as it relates to the public sector. In fact, researchers vary in their definitions of the concept, thereby presenting diverse definitions of what e-governance is all about (Shilubane, 2001; Budhiraja, 2003; Ojo, 2014). According to Shilubane (2001), e-governance is simply the use of information communication technologies (ICTs) to carry out public services, that is to say, the use of the internet to ensure that services are delivered in a much more convenient, customer oriented and cost effective manner. Budhiraja (2003) defines e-governance as the application of Information

Technology to the process of government functioning in order to achieve a Simple, Moral, Accountable, Responsive and Transparent (SMART) Governance.

In a similar vein, Ojo (2014, p. 79) also sees e-governance as "the application of information communication technology (ICT) by the government to enhance accountability, create awareness and ensures transparency in the management of governmental business." He also states that e-governance can be seen as a political strategy of government through which their activities can be showcased to the public. Ayo (2014, p. 76) defined e-governance as "the governing of a state/country using ICT." Meaning that, e-governance is the application of ICT in executing government businesses. From the definitions so far, it can be deduced that e-governance is simply the use of ICTs in the operations of government businesses, put in another way, it is the shift from the traditional method of carrying out government activities which is mainly hierarchical, linear, and one-way to the use of internet which enables the public seek information at their own convenience and not really having to visit the office in person or when government office is open.

However, the major objectives of e-governance are to improve government processes (e-administration), connect citizens (e-citizens and e-services) and build external interactions (e-society) (Heeks, 2001). Despite these objectives, Godse & Garg (2009) stressed the fact that there are numerous factors to be considered in e-governance implementation. According to them, "*making and implementing decisions, proper leadership, putting in place organizational arrangements, ensuring resources and funding, establishing accountability and measuring success, telecommunications network, internal agency systems, cross-government systems, service delivery network access points, internet access and skilled staff, better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information and more efficient government management*" are the factors that must be taken into consideration for the success of e-governance implementation (Godse & Garg, 2009, p. 15). It is worthy of note that e-governance "*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, p. 1).

E-governance can also be understood by contrasting it with e-government. Although often used interchangeably by various authors and scholars (Kabir and

Baniamin, 2011) but these concepts are not the same. The former in the public sector is considered to be a broader, while e-government is a subset of e-governance (UNESCO, 2007). Supporting this view, Ayo (2014, pp. 76-77) sees e-governance as "*the application of ICT to transform the efficiency, effectiveness, transparency and accountability of exchange of information and transaction; with the objective of providing a SMARRT Government. The acronym SMARRT refers to Simple, Moral, Accountable, Responsive, Responsible and Transparent government.*" While Grant & Chau (2006) defines e-government as broad-based initiatives that leverage on the capabilities of ICT to deliver high quality, seamless and integrated public services; enable effective constituent relationship management; and support the economic and social development goals of citizens, business, and civil society at local, state, national and international levels.

Common Market for Eastern and Southern Africa (COMESA) also stated that, e-governance is a wider concept that defines and accesses the impacts of technologies on the administration and practices of governments. It also looks at the relationships that exist between public servants and the wider society. While e-government deals with the development of online government services to the citizen and businesses such as e-tax, e-transportation, e-procurement, e-participation amongst others and this is termed to be narrow in discipline.

Another distinction is that E-Governance is the application of electronic means in the interaction between government and citizens, government and businesses, as well as internal government operations to simplify and improve democratic government and business aspects of governance (Backus, 2003). While e-government is simply about the transformation, delivering services effectively and seamlessly, developing new forms of communication between government and the governed, and enhancing quality of lives through economic development and enhancing civil society (Worrall, 2011). In the words of Ayo (2014, p. 77), e-government is about "*increasing transparency, sharpening accountability, increased scrutiny, taking out hierarchies, changing working practices, changing cultures, changing behaviours and about radically changing power structure by making power more diffused and less concentrated among a small political and administrative elite.*"

E-government has been seen to have four primary delivery tracks namely: Government-to-Citizen or Government-to-Customer (G2C); Government-to-Business (G2B); Government-to-Government (G2G); and Government-to-

Employee (G2E) (Adeyemo, 2011). This delivery tracks are also known as the models of e-governance, which refer to the interaction that exist between and among government, citizens, business, employees and Non-Governmental Organisations (NGOs) respectively (Ayo, 2009 and Rabaiah & Vandijct, 2011). Flowing from the distinctions made, both concepts share some characteristics. They both depend on the application of information technology to achieve their aims and objectives with a view to ensuring effective, efficient, transparent, accountable service delivery among others from government establishment or the public service.

2.2. Public Service Defined

The concept of public service differs from country to country, but in this case, the concern is what it is in Nigeria. Section 318 of the 1999 constitution of the Federal Republic of Nigeria as amended defines the public service as "the service of the Federation in any capacity in respect of the Government of the Federation" and includes Service as:

a) clerk or other Staff of the National Assembly or of each House of the National Assembly;

b) member of Staff of the Supreme Court, the Court of Appeal, the Federal High Court, the High Court of the Federal Capital Territory Abuja, the Sharia Court of Appeal of FCT, the Customary Court of Appeal of FCT or other courts established for the Federation by this Constitution and by Act of the National Assembly;

c) member or Staff of any Commission or authority established for the Federation by this Constitution or by an Act of the National Assembly;

d) staff of any area Council;

e) staff of any Statutory Corporation established by an Act of the National Assembly;

f) staff of any educational institution established or financed principally by the Government of the Federation;

g) staff of any company or enterprises in which the Government of the Federation or its agency owns controlling shares or interest;

h) members or officers of the armed forces of the Federation or the Nigeria Police Force or other government security agencies established by law.

In a clearer view, Agba, Ochimana and Abubakar (2013, p. 113) see public service as "*the activities of government employees and institutions aimed at formulating and implementing governmental policies and programmes for the interests of the masses (public).*" However, the concept of public service is often used interchangeably with the term civil service but the fact remains that they are two unique concept, though with some similarities. According to Adamolekun (2002, pp. 17–18) cited in Ibietan (2013:56), public service "*usually indicates a wider scope than the civil service (and)... means the totality of services that are organized under public (i.e. government) authority.*" It covers ministries, departments and agencies of the central government, its field administration, local government, the military, other security forces and the judiciary. This is a broader conceptualization and it is in line with the constitutional definition of the terms and the distinction between them. Civil Service refers to "*the body of permanent officials appointed to assist the political executive in formulating and implementing government policies*" (Ibietan, 2013, p. 56). The similarities they both share is that they are machinery of government saddled with the responsibility of implementing governmental policies, that is carrying out the day-to-day duties that public administration demand (Adebayo, 2000). It is imperative to state that public service encompasses the civil service or put differently is broader than civil service. Public service has to do with the totality of services that are organized under government (Ezeani, 2006).

3. Challenges to E-Governance Implementation in the Nigerian Public Service

A lot have been said as regards the benefits of the implementation of e-governance in Nigeria or what it has to offer. Scholars have mentioned that when e-governance is implemented, there will be accountability, awareness and transparency in the management of governmental business will be ensured (Ojo, 2014, p. 79). While Budhiraja (2003) opines that the implementation will bring about Simple, Moral, Accountable, Responsive and Transparent (SMART) governance. In addition, it is believed that it will also achieve an efficient, speedy and transparent process of disseminating information to the public and other agencies, enhance the performance of administrative activities both internally and externally and also enhance good governance (UNESCO, 2007). Unfortunately, this is not the case in Nigeria. However, we are not ruling out the tendencies of any challenge that will be peculiar to any policy of government but we are of the view that there are things

that must be taken care of before we expect so much from the policy of e-governance in Nigeria public service. This is also in line with the assertion of Dode (2007, p. 382) thus:

The e-governance practice is bound to meet with strong opposition from the bureaucratic quarters of the policy. By this, we mean the over-bloated public service whose members will analyze this practice as a deliberate attempt by the government to throw majority of their members out of their jobs. Majority of the public servants are thus, likely to use their positions to frustrate the effective application of e-governance in Nigeria. They will definitely dislike a system that will reduce to the minimum, face to face contact between citizens and government service providers.

By implication however, the e-governance implementation in the Nigerian public service is accompanied with many challenges. According to Abdel-Fattah and Galal-Edeen (2008), the major challenge of e-governance in the Nigerian public service is lack of trained and qualified personnel to handle and operate its infrastructures. They further state that due to the high cost associated with the procurement and training of public servants with ICT skills, government sometimes feel reluctant in the actual implementation of e-governance in the public service. Similarly, Ayo & Ekong (2008) also stress the absence of skilled workers to handle various ICT services and their applications in bringing about the successful implementation of e-governance in the public sector. They also noted that the lack of government regulatory policy is a major issue that needs to be addressed if e-governance is to be a reality in government organisations. To them, the effective and successful implementation of e-governance requires experts to coordinate and operate the ICT-related infrastructures, because where there are no competent personnel to handle it infrastructure, it will be useless to procure the infrastructures (Ayo & Ekong, 2008).

Another challenge has to do with the state of power supply in the country, which is said to be epileptic and irregular in terms of supply. These have posed a considerable challenge to the realization of e-governance objectives in Nigeria. Okwueze (2010) also noted that adequate power supply is an important element to be considered for the successful implementation of e-governance in the country's public sector. Against the current picture of what exist in most of the public service, most government agencies operate on generators and sometimes the generators lack capacity to power adequately the ICT facilities. Corroborating this

view, Gberevbie; Ayo; Iyoha; Duruji & Abasilim (2015) stress that there is need for the government to establish the needed infrastructure in electricity power supply, internet connectivity, telecommunications and computer hardware, optical fiber cables, among others for the implementation of e-governance to be successful. This implies that the success of e-governance implementation in the Nigerian public service is tied to dealing with this current challenges, among others.

For Bansode & Patil (2011, p. 58) the digital divide also poses a challenge to e-governance implementation in Nigeria's public service. What this simply means is "*the gap between those with regular, effective access to digital and information technology and those without this access*" In a clear manner, Keniston (2003) sees digital divide as the level of ICT knowledge between the rich and powerful who he terms as those part of the information age and the poor and powerless who are not. He further note that digital divide is not only limited to the level of ICT knowledge between the rich and the poor but also that which has to do with linguistic. To him, this divide separate those who can speak English from those who cannot. Another feature of this digital divide can be seen from the growing digital gap between the rich and poor nations and also the digital divide between a new elite group, which he called the "digerati", that is, those who benefit from the enormous successful information technology industry and other knowledge based sectors of the economy such as biotechnology and pharmacology. The implication of this, is that, the challenge of digital divide encompasses the access to technology hardware physically and the required skills and resources needed for the judicious application of its use. But there are factors that are known to have contributed to this digital divide. For instance, factors like physical disability, physical access, access to the contents and lack of ICT skills contribute to the digital divide (Bansode & Patil, 2011).

However, Olaopa (2014, p. 5) succinctly itemized "inadequate funds allocated to the e-governance projects, difficulty associated with streamlining various silos of e-Government projects already existing or being implemented prior to the creation of the Ministry of Communication Technology, disparity between urban and rural dwellers or those with low literacy levels in accessing the internet, potential to erode the privacy of the citizenry, perceived lack of value for money when the huge cost of deploying e- Governance projects is compared to the actual value to the people, false sense of transparency as the challenges to the adoption and delivery of e-governance in Nigeria.

Additionally, the following are also considered as factors impeding the effective implementation of e-governance in Nigeria's public service:

Lack of ICT Infrastructure: This is another crucial challenge to the implementation of e-governance in Nigeria's public service. As it has been explained in the definition of e-governance above, it is the application of ICTs in the operations of government business. The Nigeria's public service is still lacking in basic ICT infrastructure. For instance, some of the offices still lack common computers let alone the common skills for its operation. What you see in their daily activities is the traditional way of doing things. That is, they are still known for doing a lot of paper work which if e-governance is embraced fully would have reduced. In a better case, you will see the combination of both the traditional way of doing things alongside the digital approach. There are still no access to internet network in most public sector offices, no regular power supply and so on. All these pose challenge to the implementation of e-governance in Nigeria's public service (ITU, 2006; Adeyemo, 2011).

Attitude or Resistance to Change: This is also a challenge in the public sector. Most of them are still used to the old way of carrying out government activities. That is, they are still known to be working with a lot of papers, carrying of files from one desk to the other or from one office to the other. Their resistance to e-governance implementation in their services is what has culminated to the poor rating of the implementation of e-governance in the public service. Some of the reasons for this, is that most of the public servants are not computer literate, not qualified, have little or no training in the installation, maintenance, designing and implementation of ICT infrastructure.

4. Recommendations and Conclusion

It is imperative at this juncture to suggest what can be done to achieve a successful implementation of e-governance in Nigeria's public service. Based on the issues identified as some of the major challenges to e-governance implementation in Nigeria's public service, the following recommendations are advanced:

a.   Government Ministries, Departments and Agencies should set up e-governance implementation committees who will work out modalities for effective implementation of the concept, with performance evaluation units, establish to evaluate the successes and failures in its targets as well as feedback mechanism to

report implementation effectiveness. The Federal Government of Nigeria should establish Ministry of ICT Affairs to set up ICT implementation framework evaluation units in each of the Ministries and Parastatals, with the Permanent Secretaries as the head. The ICT Ministry will liaise with the implementation committees at various ministries including state ministries to evaluate performance as well as feedback to help in its effectiveness. The government should also enact ICT laws that will make computer literacy a compulsory aspect for every public or civil servant both at the local, state and federal levels. The policy should also include creation of ICT awareness with computer literacy programmes among public servants. With the above done, the challenges will be reduced to a mere insignificant level as well as putting the country into the world map of e-governance high ranking list. The implementation of e-governance should be a must to all public service institutions as well".

b.   Nigeria's public service (Ministries, Departments and Agencies) must show a high level of e-readiness in their operations. All that is needed must be put in place by the government, especially that which is within their capacity. For instance, ensure that all office is equipped with functional computers, employ highly skilled personnel in ICT, provision of continuous training of the personnel to keep them informed on how best to utilize e-governance in engendering effective service delivery among others.

c.   The government must provide the necessary infrastructure that will aid the successful implementation of e-governance in Nigeria's public service. For instance, robust broadband services, required internet network and the availability of power supply, which has been identified as one of the major challenges to e-governance implementation in the public service has to be taken care of. This means that the success of e-governance implementation in the public service is tied to the availability of power supply and in this case electricity. Government offices must also be internet connected with trained and qualified staff. Another factor to be considered is the Human element. This is important because no technology can drive itself, it is the human element that will drive the technology so their willingness is critical to whether e-governance implementation in Nigeria's public service will succeed or not, and this is because they have the capacity to truncate whatever innovation and benefits e-governance promises to bring to bear. So on this note, government needs to carefully address the issue of human factor which often manifest in resistance to change, nonchalant attitudes and the likes which is responsible for underutilization of most of the ICT facilities put in place by

government especially in offices or departments that tends to embrace e-governance in their operations, thereby sabotaging the good effort of the government.

d. A reliable and strategic framework for e-governance operation is necessary. Government's Ministries, Departments and Agencies should set up e-governance implementation committees that will work out modalities for effective implementation, alongside the performance evaluation units established to assess the successes and failures in its targets as well as feedback mechanism to report implementation effectiveness. Additionally, there is the need for the government to come up with a regulatory policy, especially on the framework through legislation of e-governance and other ICT-related issues as it pertains to the operations strategies among the tiers of government. By so doing, the public service will be aware on the areas that needs to be worked on, in order to actualize effective implementation of e-governance in Nigeria's public service.

e. The government should also enact Information and Communication Technology (ICT) laws that will make computer literacy a compulsory aspect for every public or civil servant both at the local, state and federal levels. Such policies should also involve the adoption of effective ICT awareness with computer-related literacy training programmes introduced in our primary, secondary and tertiary institutions. With this implemented, the challenges will be reduced as well as putting the country into the world map of ICT/e-governance high ranking list.

However, the challenges have been identified and we hope that government and stakeholders in the ICT sector will quickly find quick and lasting solutions to them. For adequate solution to the challenges, we have suggested a number of recommendations among others have been advanced. We therefore conclude that e-governance remain the best in encouraging effective service delivery that will lead to transparency and accountability in government businesses and operations for Nigeria's public service. But it has to contend with the challenges to the successful implementation of e-governance in the country's public sector.

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