

## **Challenges of E-Government Implementation in the Nigerian Public Service**

**Abdulrazaq Kayode Abdulkareem<sup>1</sup>**

**Abstract:** The concept of e-government began in the early 1990s which is the use of information technology to improve governance, promote efficiency and effectiveness in the delivery of public service. In the year 2000, the Federal Government of Nigeria recognized the need to transform the public service into the modern day system through the use of information technology. This was necessitated by the urgent need to improve public service delivery, ensure transparency, make government accessible, and ensure that information dissemination to the public is in real time. This study explored the hurdles faced by public agencies in materializing the government's e-government vision. This study found that despite the government investing hugely in the ICT to realise the objectives stated in the policy document, minimal progress have been achieved. The lack of massive success can be attributed to infrastructural gap, power failure, digital divide, low ICT literacy level, theft and vandalization of ICT equipment, privacy and security.

**Keywords:** E-Government; ICT; public service; service delivery; transparency

### **Introduction**

The concept of e-government began in the early 1990s which is the use of information technology to improve governance, promote efficiency and effectiveness in the delivery of public service. The urgent need to use ICT in the public service was not only necessitated by the needs mentioned above, but also to change the whole society structure, values, culture and ways of conducting official business. In

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<sup>1</sup> Assistant Lecturer, Department of Public Administration, University of Ilorin, Nigeria, Email: [abdulkayode@gmail.com](mailto:abdulkayode@gmail.com)

essence, to have a rethinking in the whole process of governance. Furthermore, e-government was perceived as a platform to change the relationship structure between the government and the citizens.

In the year 2000, the Federal Government of Nigeria recognized the need to transform the public service into the modern day system through the use of information technology (Asogwa, 2012). This was necessitated by the urgent need to improve public service delivery, ensure transparency, make government accessible, and ensure that information dissemination to the public is in real time (Obasanjo, 2003). In furtherance to this idea, the National Information Technology policy was introduced in 2000 with the main objective to improve governance in Nigeria. The policy document clearly stated the intention to make Nigeria an *“IT capable country in Africa and a key player in the information society by the year 2005, using IT [ICT] as the engine of sustainable development and global competitiveness”*. Also, one of the policy’s 31 objectives, is *“to improve accessibility to public administration for all citizens, bringing transparency to government processes”* (NITDA, 2007).

Almost six years after the implementation of e-government in Nigeria a study by Yusuf (2006) found most federal ministries websites are in the publish stage and a few are at the transact stage. However, in the private sector, Uwage (2012) noted that they (private sector) kicked-off the e-government initiative at the same time as the public sector and have excelled to the advanced stage (like re- engineering, and upgrading its operations to use the advantages of things like cloud computing and nanotechnology). In the past recent years, the Global ranking of the United Nations among the 192 member states have placed Nigeria above 100 taking 141<sup>st</sup> position in 2004, 136<sup>th</sup> in 2008, dropping to 162<sup>nd</sup> in 2012 and 141<sup>st</sup> in 2014. Based on 2012 United Nations E-government survey, Nigeria is the least developed in e-government among countries with large population such as Brazil, China, India and Indonesia. More so, Nigeria is the fourth developed among the 16 West African States rising above Liberia, Niger and Senegal (United Nations, 2013; 2014)

The lag in the performance of e-government which are due to technical, social and cultural reasons have critically denied accessibility of information to the citizens, provision of essential public services and lower transparency index. However, to this date, there is minimal progress made by government institutions and organizations to deliver service via electronic means. Therefore, the

broad objective of this study is to explore the hurdles faced by public agencies in materializing the government's e-government vision. Specifically, the challenges faced by government agencies would be examined from the technical, organizational and social perspectives, subsequently recommendations would be offered.

## **Literature Review**

### **Background of E-government**

E-government actually began in the early 1990s following the success trail of e-commerce (Al-Habshi, 2011) which is the interaction between business to business (B2B) and business to customers (B2C). The advent of the internet around this period prompted the private sector to adopt the innovate 'E' (electronic) in the daily running of businesses which resulted in bigger margins, faster turnovers, better effective and efficient service delivery to customers. This reasons spurred the need to go digital by the public sector by adopting electronic means of carrying out public administration routines, better interaction between government and citizens (G2C) and intergovernmental relations (G2G).

### **What is E-Government?**

E-government is a multidimensional field where thoughts are still been exploited from different angles and viewpoints, this makes the concept one devoid of a universally agreed definition (Young-Jin & Sean-Tea, 2007). And due to the difficulty in accruing a definite definition to e-government by virtue of its multidimensionality and broad based understanding, definitions offered by various scholars have been greatly influenced by the context of discussion, environment and the players involved (Heeks, 2005; Ndou, 2004). From the perspective of Yildiz (2007), e-government can either be an end in itself or a mechanism for public sector reform. Signore, et al (2005) perceived e-government as a means of improving governance i.e. *"the use of Information and Communication Technologies (ICT) to improve the process of governance"*. While Molnár (2007:4) credits e-government as a tool to improve public administration and democratic process (participation, transparency and accountability) *"using the combination of information technology, organisational changes and new skills in public administration.... [e-government] could improve the quality of public services, reinforce the democratic process and support community objectives"*.

Other group of scholars like Heichlinger (2004:26) believes e-government could improve service delivery to citizens “*E-government as [a] set of activities supported by information systems with the aim of improving the relationships between government institutions and citizens*”. Similarly from the perspective of Olowu (2004), e-government serves as a tool for service delivery. i.e. the use of “*all the information and communication technology platforms and applications in use in the public sector or the use of the internet for delivering government information and services to citizens*”.

### **Rationale for E-Government**

The era of globalization informs that government changes its mode of interaction and provision of public services to the citizens. Different arguments abounds as to why there should be a switch from old public administration. Some scholars like Pearce (2004) form the opinion that e-government does not emerge to develop another medium different from the earlier and conventional mode of interaction and communication between the governments as their constituents, rather “*is an opportunity to employ new technologies in order to enable transformation of government to a model more appropriate to the 21st century*”.

Alhabshi (2011) argued on her own part that e-government is an essential part of New Public Management. New Public Management is specifically a strategy of reforming the operations and service delivery mechanisms of government into a replica of the private sector style of management which is highly result oriented, innovative and cost effective as against the traditional and old public administration which is highly bureaucratic and ineffectual in operation and public service delivery.

Therefore, e-government in the context of this discussion can be professed as an evolutionary shift in the public management system. Ndou (2004:3) analysed in table 1.0 below the distinction between old bureaucratic administration and the e-government paradigm.

**Table 1.0: Paradigm shifts in Public Service Delivery**

| Operation      | Bureaucratic Paradigm      | E-government Paradigm                     |
|----------------|----------------------------|---|
| 1. Orientation | Production cost-efficiency | User satisfaction and control flexibility |
| 2. Process     | Functional                 | Horizontal                                |

|                                      |  |   |
|--------------------------------------|--|---|
| organization                         | rationality,<br>departmentalization,<br>vertical hierarchy of<br>control | hierarchy,<br>network<br>organization,<br>information<br>sharing                          |
| 3. Management<br>principle           | Management by rule<br>and mandate  | Flexible<br>management,<br>interdepartmental<br>team work with<br>central<br>coordination |
| 4. Leadership style                  | Command and<br>control   | Facilitation and<br>coordination,<br>innovative<br>entrepreneurship.                      |
| 5. Internal<br>communication         | Top down,<br>hierarchical  | Multidirectional<br>network with<br>central<br>coordination,<br>direct<br>communication   |
| 6. External<br>communication         | Centralized, formal,<br>limited channels                                 | Formal and<br>informal direct<br>and fast feedback,<br>multiple channels                  |
| 7. Mode of service<br>delivery       | Documentary mode<br>and interpersonal<br>interaction                     | Electronic<br>exchange, non-<br>face to face<br>interaction                               |
| 8. Principles of<br>service delivery | Standardization,<br>impartiality, equity                                 | User<br>customization,<br>personalization   |

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Source: Ndou, (2004:3)

## Discussion

Transforming the Nigerian public service through e-government was made possible through the ICT revolution which kick started as early as year 2001. The main aim was to place government services online to make them accessible, transparent, efficient and effective. The former president of Nigeria Olusegun Obasanjo (1999-2003) buttressed this point when he said “*it [governance] will no longer be business as usual*” (Obasanjo, 2004; Ifinedo 2006). He further

stressed that his administration has been centred on reorientation and reorganization of the civil service and public officials by changing the business as usual (highly bureaucratic) default system to a transparent, efficient, productive, and participatory one. Moreover, he continued that his administration has taken a bold step to reengineer the backroom engine to institutionalize an *“effective system through computer assisted modern processes known as e-government”* (Obasanjo 2004). A similar view was shared by the former Minister of Science and Technology who stressed the need for e-government as a change element in the Nigerian public service.

Policy frameworks were drawn to actualize these plans. The ‘mother’ policy for ICT was drafted back in the year 2000 known as the National Information Technology Policy under the supervision of the National Information Technology Development Agency (NITDA). The policy drafted was to be implemented using a Public Private Partnership (PPP) model which comprises of three broad actors namely, government, consortium of banks and private investors.

Nigeria has made some recognisable progress in e-government over the years despite kicking off late when compared to the likes of Malaysia, Iran and South Africa. Before the wide usage of ICT in governance, the public service was heavily paper based and hugely bureaucratic. Table 2.0 below shows how services were delivered prior to the advent of ICT and with the usage of ICT.

One laudable progress that can be attributed to e-government in Nigeria is the availability of information online and the systematic manner in which the MDAs are linked together. Presently, due to the presence of the government online, the monthly federal allocations for the states and local governments can be viewed on the website of the federal ministry of finance. As well as the national budget.

Another e-service available is the fast processing of the Nigerian International Passport by the Immigration department. Application for a new passport or the renewal of the existing passport that takes up to ninety days can be done in a minimum of one day and maximum of three days, as well as the driver license. Also, registration for national examinations such as Unified Tertiary Matriculation Examinations (UTME), West African Examination Council (WAEC), National Examination Council (NECO) and National Technical Board Examinations (NABTEB) all can now be done online.

Also, from the government agencies side, the administrative costs involved in carrying these services are reduced. The manual system is heavily paper based and requires lots of manpower (staffs) to carry out. However, with the introduction of the online system, it required less manpower to handle. It also, increases the efficiency of the agencies in carrying out these services by reducing the time involved.

Table 2.0: Comparison between Manual and Electronic Mode of Government Service Delivery

| Government Service                               | Manually  | Electronically   |
|--|---|--|
| International Passport Application               | Minimum processing time is 90 days and some could last 9 months | Minimum processing time is 1 day and maximum of 3 days.      |
| Trade Clearance                                  | Requires 7 working days to clear                                | 1 day to clear   |
| National exam registration (WAEC, NECO and JAMB) | Minimum of 7 days   | Minimum of 1 hour  |
| Job Recruitment                                  | 2 months  | 1 hour of online form completion and instant acknowledgement |
| Land Allocation                                  | 3 to 4 months   | 1 day with GIS   |
| Tax remittance                                   | 7 working days  | Minimum of 20 minutes  |
| Voters Registration                              | 5 days to register and get voters card                          | 5 minutes and instant voters card                            |
| National Identity Registration                   | Minimum of 13 to 14 months of processing                        | Minimum of 90 days.  |

Source: Mohammed Et.al (2010)

### Obstacles Facing E-Government Progress

Despite the government investing hugely in the ICT to realise the objectives stated in the policy document, minimal progress have been achieved. The lack of massive success can be attributed to infrastructural challenge, power failure, digital divide, low ICT literacy level, theft and vandalization of ICT equipment, privacy and security

**a) Infrastructural Deficit:** There is serious deficit in the level of infrastructure that are placed in the rural areas compared to the urban areas despite the rural areas accounting for more than 60 per cent of the population. Most of the telecoms base stations are situated in the urban areas leaving the rural areas with little or no access to telecommunication facilities. Although, the teledensity rate of Nigeria is high which is almost reaching as high as 90 per cent. This is an indication that almost every Nigerian own a hand phone. However, e-government goes beyond the use of hand phones, it requires the presence and use of the internet to be able to access government electronic services. The level of internet usage in Nigeria is not encouraging due to low level of penetration most especially in the rural areas where education is low. Based on a 2011 study by the Nigerian Communication Commission, only 17 per cent of rural communities had internet facilities compared to 79 per cent in the urban centres. Out of the 17 per cent only 11 per cent have access to broadband (ITU News 2012).

**b) Digital Divide:** Digital divide is the difference in ICT access and usage between different regions that shares similar characteristics. In explaining digital divide in Nigeria, it can be perceived as the difference in the accessibility and usage of ICT services between the rural population and the urban population. Digital divide in Nigeria is caused by low level of literacy, poverty, infrastructural gap and high cost of internet connectivity.

**c) Low IT Skill Manpower:** ICT education is another issue of importance here. The Director of NCC in the interview highlighted the fact that majority of the staffs in the ministries do not have the required level of knowledge in ICT to carry out the task of e-services. Thus the very few with ICT knowledge are overburdened with the huge tasks.

**d) Incessant Power Failure:** The major technical challenge disrupting the full success of e-government implementation in Nigeria is epileptic power supply. Power blackout is a regular phenomenon in most Nigerian cities, towns and villages with negative impacts on the robustness of ICT. Most telecommunication base stations are equipped with power generating plants as an alternative source of power for these equipment. The cost of procuring these generating plants, maintenance and fuelling them have added to the operation cost of these companies and as such the final burden will be borne by the final consumers.



### **e) Privacy and Security challenges**

Internet privacy and security is important for a successful implementation of e-government. Internet fraud (popularly known as yahoo-yahoo) has been a problem that has been troubling the country for a long time due to the lack of cyber security laws which has tainted the country's image at home and abroad. Most e-payment providers in Nigeria have been clamouring for the quick passage of the much awaited cyber security law to clamp down on the activities of the fraudsters (Daily Independent, 2013).

**f) Theft and Vandalization of ICT equipment:** Another setback to the progress of IT infrastructural development in Nigeria is the theft and vandalization of the internet and telecommunication equipment most especially in the conflict prone areas of the North East and South- South geo political zones of Nigeria. For example, in 2012 the largest telecommunication company in Nigeria, MTN Nigeria recorded more than seventy (70) cases of facility vandalization (Daily Independent, 2013). And on the National level, the country records more than 1000 cases of vandalization every year (Humanipo, 2013).

The security of assets poses a serious challenge due to the volatile security status of the country. Moreover, the perpetrators of the act are mostly left unpunished due to lack to law that protects these infrastructures. Recently, in September 2013 a motion was raised in the National Assembly for the passage of the Telecoms Infrastructure Protection Act that will seek to prosecute the perpetrators of vandalization (Vanguard, 2013).

### **Recommendations**

No doubt that the challenges highlighted above are serious obstacles to the successful implementation to e-government. They pose a great threat to the realization of the goal of having a vibrant, efficient, effective and transparent public service. Therefore, to overcome these challenges, some recommendations have been profound below.

First and foremost, the most significant solution to achieve implementation success in e-government in Nigeria is for the political institutions to strengthen their level of will and commitment both attitudinally and financially.

Without constant power supply, e-government is bound to fail because everything depends on electricity. The current state of energy

generation and supply does not guarantee a successful implementation of the scheme. Therefore, the primary agenda of the government is to ensure that adequate and constant power supply is guaranteed.

From the citizens' aspect, knowledge is key to the usage of e-government. Therefore, government needs to really invest in education and make ICT a compulsory subject in schools from primary education up to tertiary education and adult educations. Doing this will improve the knowledge and skills required by the citizens to operate and communicate with the government electronically. Moreover, to avoid the bias nature of the present e-government scheme, the government agencies needs to make options for local Nigerian languages on their websites. This will help to include the non- English literates into the scheme.

Infrastructural challenges can never be ignored when tackling problems of e-government. A successful e-government programme is dependent on the sophistication and availability of ICT infrastructure. Government needs to employ a scheme that will make computers and internet affordable for the citizens for them to actively participate in the e-government programme

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