RESEARCH ARTICLE

Impact of E-Government on Governance Service Delivery in Nigeria

Adegoroye AA , Oladejo MO, Yinus SO*

Department of Management and Accounting, Faculty of Management Sciences, Ladoke Akintola University of Technology Ogbomoso, Oyo State, Nigeria.

*Corresponding Author: E-mail: **Abayomicrown@gmail.com**

Abstract

E-government has become an important practice among public sector in Nigeria. The introduction of E-government services such as IT usage and other web-based telecommunication technologies enhance improvement in the efficiency and effectiveness of service delivery in the public sector, It was in line with this that the study aim at examine the influence of e-government on governance service delivery in Nigeria. The study were carried out in Ogun state with One hundred and fifty (150) Questionnaires administered and distributed to both senior & junior staff of the Three selected Ministry, fifty (50) staff each was picked from the three (3) selected government parastatal (Ministries). One hundred and Twenty five (125) Questionnaires were found useful for the purpose of the study. Data collected was analyzed using frequency table and percentage analysis while the non-parametric statistical test Chi- square was used to test the formulated hypothesis using STATA 10 data analysis package/software. Findings show that Electronic system of Operation help government workers to display technological skills and connect them with other world and also reduce the stress of queue in government ministries and department by citizens dealing with government .the result of tested hypothesis buttress that E-government improve service delivery by the public sector in a form of transactional convenience, savings of time and save of service cost which has recuperate customer's relationship and satisfaction. To this end, it is recommended that Government should create awareness to the public about the benefit on the e-government services, skilled manpower and computer wizard should be employed by every government parastatals in order to meet up with the digital world or economy. Finally Government should establish a commission on ICT to regulate the sector and to see to the full implementation of e-government.

Keywords: *E-government Service, Governance Service Delivery, Service Delivery, Service Satisfaction, Public service, E-Payment.*

Introduction

According to Ekeh, [1] E-government is the use of technologies to facilitate the operation of government and the dispersement of government information and services. E-government, short for electronic government, deals heavily with Internet and non-internet applications to aid in governments. E-government includes the use of electronics in government as large-scale as the use of telephones and fax machines, as well as surveillance systems, tracking systems such as RFID tags, and even the use of television and radios to provide government-related information and services to the citizens.

Narayan [2] stated that e-Governance differs in scope from e-Government, which focuses primarily on technology related initiatives in the government domain. E-Governance encompasses a broader vision of use of ICT to support good governance and encourage citizens to proactive opportunity to provide information unencumbered. It can also be stated that electronic government is a way of doing business that moves society into an era where citizens increasingly interact with government, demanding a greater variety of services and information, where the demand for service and the ensuing pace of change grows ever greater, and where the need for innovation and entrepreneurialism in government is at a premium.

In technological platform in the polity, E-Nigeria initiatives is geared towards connecting communities, vital agencies, institutions of Government and educational institutions at all levels with ICT are currently being pursued by the government. From the National Rural Telephony projects to other laudable initiatives like the Nigerian telemedicine initiative, Public service network initiative, internet exchange point initiatives, State and local Government ICT

facilities loan scheme initiative and wire Nigeria initiative. According to Ekeh [1], these initiatives are aimed at enabling the rapid development of the Nigerian nation. In addition, and as a matter of necessity, the only skill and tool a nation needs to actualize them (the initiatives) is by making computers affordable and flexible for Nigerians to acquire. Currently, one can access the local/ states allocations over the Ministry of Finance website and compare with the estimated values locally (through the in-house package) within the local Government and reasons on how and where the expenditure has gone into can be deduced almost instantaneously. Cordella [3], listed the primary delivery models as Government-to-Citizen or Government-to-Customer (G2C), Government-to-Business (G2B) and Government-to-Government (G2G) & Government-to-Employees (G2E). The extent to which e-government can influence good governance by way of improved public service delivery is worthy of exploration in the Nigeria context.

Statement of the Problem

The importance of citizen participation in government cannot be overemphasized. Government in many developing countries has made effort, in spite of their infrastructural and financial limitations, to uphold the virtues of participatory e-governance platforms, which doesn't encourage usage by the stakeholder of e-government. Government and public-sector managers worldwide have within the last decade come to the realization that Information and Communication Technologies (ICT) is a viable tool that can help to deliver efficient and cost effective services to its citizenry, clients and partners.

Studies in the developed world have shown that e-government is capable of improving governance process. This is dearth of literature in Nigeria as regards application of e-government to governance. Few studies that exist have only focused on e-banking and e-payment aspects of e-commerce. Furthermore a recent study by European Intelligence Union [4] ranked Nigeria the lowest of sixty two selected countries of the world. This calls for more investigation as to the trend in e-payment adoption by the Nigerian government. The paper aim to examine the influence of e-government on governance service delivery in Nigeria. Specifically, the study will answer the following research questions:

- What is the impact of e-government on governance service delivery?
- What is the trend of e-government adoption in Nigerian public sector?

- Are there challenges of e-government adoption in Nigeria?

Research Hypothesis

The hypotheses for this study are stated in the null form as follows:

H_0: There is no significant relationship between E-government and governance service delivery in the Nigeria ministries.

Literature Review and Conceptual Explanation

E-government indicates a better government structure which is more advance than the traditional government model base on a stronger IT background and implication [5]. E-government is defined as a government model which is utilizes information technology in exchange of information of services and goods between citizens and commercial institution in other to increase performance and efficiency. The digitalization of data and communication makes fundamental changes in the nature of government and its organization main component of e-government are e-firm, e-institution and e-citizen. Each of them will work to realize the "E-within them and they will develop eventually. The direction of e-government services can be grouped into three categories; from government to government {G2G}, from government to citizen {G2C} and from government to business {G2B}, E-government programme seek to achieve greater efficiency in government performance through raising the performance of service for beneficiaries and investor from all segment society easily, accurately and efficiently to become a new type of performance of official governmental and governmental transaction.

Good Governance

Good governance is an indeterminate term used in international development literature to describe how public institutions conduct public affairs and manage public resources. Governance is "the process of decision-making and the process by which decisions are implemented (or not implemented)". The term *governance* can apply to corporate, international, national, local governance or to the interactions between other sectors of society. The concept of "good governance" often emerges as a model to compare ineffective economies or political bodies with viable economies and political bodies. The concept centers on the responsibility of governments and governing bodies to meet the needs of the masses as opposed to select groups in society. The meaning of the term 'governance" evolved significantly since its being a synonym for the

world 'governance' [6] to being ultimately concerned with creating condition for order rule and collective action (ibid). Governance clearly embraces government institution but it also subsumes informal non-governmental institution operating within the public relation [7]. A better matching of the scales of governance to the scale of ecological and social process leads to increased capacity to adapt to change [8].

Government Service Delivery

Government service delivery deals with the effective management effective management of customer service and customer satisfaction. The selection details news and articles on improving the delivery of product and services to intended beneficiaries. It includes methods of improving responsiveness dealing with customer complaint, customer right, worker productivity, success stories, project management, and product poisoning corporate relation, public sectors, accountability and better management of citizen's services.

Service delivery deals with the effective management of customer service and customer satisfaction. The section details news and articles on improving the delivery of product and services to intended beneficiaries. It includes method of improving responsiveness, dealing with customer complaint, consumer rights, workers' productivity, service stories, project management, product positioning, corporate relation, public sector accountability and better management of citizen service.

Concept of E-Government

E-government refers to the use of internet technology as a platform for exchanging information providing service and transacting with citizens, Business and other arms of government. E-government may applied by the legislature, judiciary, or administration in order to improve internal and external efficiency in the delivery of public services or processes of democratic governance. However, the primary delivery models are government-to-citizen (G2C) or government-to-customer (G2C) and government-to-employee (G2E). E-government should enable anyone visiting a city website to communicate and interact with city employee via the interest with graphical user interface (GUI) instant messaging (IM), audio/video presentation, and in any way more sophisticated than a simple email letter to address provided at the site and the use of technology to enhance the access to and delivery of government service to benefit citizens,

business, partners and employee. The focus should be on.

- The use of information and communication technologies and particularly the internet, as a total to achieve better government.
- The use of information and communication technologies in all facets of the operations of a government organization.
- The continuous optimizing of service delivery constituency participating and governance by transforming internal and external relationship through technology, the internet and new media.

The primary delivery model of e-government can be divided into two:

- Pushing information over the internet e.g regulatory service, general holidays, public hearing schedule s issues brief, notification e.tc.
- Two-way communication between the agency and the citizen, a business, or another government agency. In this model, user can engage in dialogue with agencies and post problems, comment or request to the agency.

E-government is often thought as "electronic government" technologies used in this context include telephone, fax PDA, SMS, MMS, wireless network and services Bluetooth, CCTV tracking system RFID, Biometric identification road traffic management and regulatory enforcement identity cards smart card and other near field communication e-voting is being considered. TV and radio-based delivery of government service (e.g. SMW) Email online community facilities newsgroups' and electronic mailing list online chat and instant messaging technologies.

E-Government in Nigeria

E-Government in Nigeria has been progressing steadily over last several years the e-government implementation framework has ruled out several citizen centric project [9], while the rage of e-government service is limited the one that available are very well developed. From online registration and record management of citizen and business to online passport application are providing serious to the citizen at their door step. However, the ICT infrastructure is not available to most of the population outside the few large urban areas. After a careful received of e-government maturity in Nigeria we have placed it in the enhanced category.

Nigeria's E-Government Ranking

A comparative study of the E-Readiness Index of

the first five West African countries performance in the 2004, 2005 and 2008 UN global E-government survey report was carried out. Table 1 presents the Global ranking (and Index) of the first five West African countries out of a total of 192 UN member countries surveyed. Tables 1, 2 and 3 presents the breakdown of the E-Readiness, E-Participation and Service Delivery (percent utilization by stages) reports for Nigeria. While it is to the country's credit that its Global ranking among the 192 member nations of the United

Nations had improved from the 141st position in 2004 to 136th position in 2008, this is still a far cry from Cape Verde which still ranks first in the West African sub-region with a ranking of 104 in 2008. The West African region had the lowest regional index in the 2008 Survey. The region scored a 0.2110 in 2008 as compared with the world average of 0.4514. Cape Verde (0.4158) continues to lead the region, with Nigeria (0.3063) and Ghana (0.2997) taking the top three spots.

Table 1: West African countries e-government readiness index 2004/2005/2008.

Global Ranking in Index		Year		
		2004	**2005**	**2008**
1	Cape Verde	0.3442	0.3346	0.4158
		107	116	104
2	Nigeria	0.2485	0.2758	0.3063
		141	139	136
3	Ghana	0.2369	0.2758	0.2997
		143	133	138
4	Senegal	0.2328	0.2238	0.2531
		145	152	153
5	Gambia	0.171	0.1736	0.2253
		162	163	159

Source: Analysis Adopted by Adeyemo 2011, E-government implementation and assessment of Nigeria global E-govt ranking [10]

Table 2: Nigeria e-readiness/e-participation index 2004/2005/2008.

Year	Web measure index	Infrastructure index	Human capital index	E-govt. readiness	rank	E-participation index	E-participation rank
2008	0.2241	0.0492	0.648	0.3063	136	0.0682	116
2005	0.2231	0.0143	0.59	0.2758	139	0.0794	39
2004	0.143	0.013	0.59	0.248	141	0.0656	33

Source: Analysis Adopted by Adeyemo 2011, E-government implementation and assessmentof Nigeria global E-govt ranking [10]

Table 3: Nigeria (Service delivery by stages (percent utilization)

Year	Stage 1 emerging	Stage 2 enhanced	Stage 3 interactive	Stage 4 transitional	Stage 5 connected	Total (%)
2008	8	32	27	0	0	67
2005	100	24	26	5	9	21.17
2004	87.5	12.6	20.2	0	3.7	13.5

Source: Analysis Adopted by Adeyemo 2011, E-government implementation and assessment of Nigeria global E-govt ranking [10]

Benefit of E-Government

The ultimate goal of e-government is to be able to offer an increased portfolio of public services to citizens in an efficient and cost effective manner. E-government allows for government transparency. Government transparency is 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. Simple tasks may be easier to perform through electronic government access. Many changes, such as marital status or address changes can be a long process and take a lot of paper work for citizens. E-government allows these tasks to be performed efficiently with more convenience to individuals. E-government is an easy way for the public to be more involved in

Political campaigns [11]. It could increase voter awareness, which could lead to an increase in citizen participation in elections. It is convenient and cost-effective for businesses, and the public benefits by getting easy access to the most current information available without having to spend time, energy and money to get it. E-government helps simplify processes and makes access to government information more easily accessible for public sector agencies and citizens. For example, the Indiana Bureau of Motor Vehicles simplified the process of certifying driver records to be admitted in county court proceedings. Indiana became the first state to allow government records to be digitally signed, legally certified and delivered electronically by using Electronic

Postmark technology. In addition to its simplicity, e-democracy services can reduce Costs [12].

There are shortcoming while implementing on E-governance at the same time, the advantages out weights the shortcoming of e-governance because e-government will improve the efficiency of the current system, which would in return save money and time. And more so the introduction of e-government would facilitate e-procurement and better communication between government and business. The society is moving toward the mobile connection. The ability of government service to accessible to citizens irrespective of location throughout the country brings the next and potentially biggest benefit of e-government services.

Factors Affecting the Implementation of E-Government in Nigeria

Evidence shows that e-government activity in Nigeria is low [13]. Most government website are in the publish stage. And a few government organization are at the transact stage. Some organization have even by-passed the interact stage, as capture there by giving no opportunity for citizen request or feedback like any other Africa nations. There are some clear problems which influence the Implementation of e-governance in Nigeria. The Problem includes lack of inadequate infrastructure such as Electricity supply, Internet diffusion, Adult literacy rate, Political challenges and others. There are significant other problems such as maturity of governmental process and lack of other physical communications.

Methodology

The sampling frame of this study comprises of senior and junior staff in the relevant departments of three (3) selected Government parastatal (ministries) in Abeokuta, (Ministry of Education, Science and Technology, Ministry of Finance, Ministry of Information and Strategy). Ogun state. Ogun state was chosen due to their recent high adoption of E-governance such as E-procurement, E-recruitment, E-appraisal and others. The selection ministries were done using purposive sampling while the ministry staffs were selected at random. One hundred and fifty (150) Questionnaires were administered and distributed to the staff of the selected Ministries, Thirty (30) staff each was picked from the three (3) selected Ministries. One hundred and Twenty five (125) were found useful for the purpose of the study. The major instrument used in the collection of data for this research work is questionnaire. Data collected was analyzed using frequency table, percentage and mean score analysis while the non-parametric statistical test (Chi- square) was used to test the formulated hypothesis using STATA 10 data analysis package/software.

Results and Discussions

Perception of Respondent on Computer Proficiency of Government Workers

Table 4 below show that government worker use computer in office. More so the table shows that government workers can operate computer. Furthermore the table show that government worker is trained to use of computer. Finally it signifies that computer help government worker to display technological skill.

Table4: Response on Computer Proficiency of Government Workers

Response	Frequency	Percentage
Use of computer in Office	125 (Yes) Valid	100.00
	0 (No)	00.00
Workers Can operate computer effectively	125(Yes) Valid	100.00
	0 (No)	00.00
Government workers are trained to use computer	115 (Yes) Valid	92.00
	10 (No)	8.00
With the help of computer literate Government workers can display technological skill	125 (Yes) Valid	100.00
	0 (No)	00.00

Source: Research Survey 2015.

E-Government Impact on Government Service Delivery in Nigeri

From the above Table 5 (76 %) of the total respondents agreed that Usage of computer will improve job performance in government office. similarly, the table indicate that large number of respondents, i.e. (89.60%) of the respondents are strongly agreed that Computer will increase productivity of workers/staffs. Also, the table indicates that a large number of respondents, i.e. (76%) of the respondents agreed e-government reduces stress of queine in government ministries and department by citizen dealing with government. Also 80% of respondent agreed that Internet connectivity improves government service delivery. Furthermore, 76% of the respondents agreed that Internet facility will connect government with other world. Similarly, from table, 80% of the respondents agreed that E-government is catalyst for national delivery.

Likewise, 76% of the respondents agreed that E-government make use of ICT and internet facility. Also, 76% of the respondents agreed that e-government will improve communication between government and citizen. Also, 96% respondent agreed that E-government improves citizens' relationship with government. Finally 80% of the respondents agreed that E-government enables citizen to have access to government information.

Table 5: Distribution of responses on perception of e-government impact on government service delivery in Nigeria.

SN	Response	SA	A	D	SD	U	TOTAL
Q1	Usage of computer will improve job performance in government office.	40(32.00)	55(44.00)	0(0)	0(0)	30(24.00)	125(100)
Q2	Computer will increase productivity of workers.	88(70.40)	24(19.20)	12(9.60)	0(0)	1(0.80)	125(100)
Q3	E-government reduces stress of queine in government ministries and department by citizen dealing with government.	70(56.00)	25(20.00)	0(0)	30(24.00)	0(0)	125(100)
Q4	Online government service will improve government service delivery	70(56.00)	40(32.00)	0(0)	0(0)	15(12.00)	125(100)
Q5	Workers should know how to use internet facilities.	70(56.00)	25(20.00)	10(8.00)	15(12.00)	5(4.00)	125(100)
Q6	Internet connectivity improves government service delivery	50(40.00)	30(24.00)	0(0)	25(20.00)	20(16.00)	125(100)
Q7	Internet facility will connect government with other world.	55(44.00)	26(20.80)	0(0)	14(11.20)	30(24.00)	125(100)
Q8	E-government enable people participate in governance.	59(47.20)	21(16.80)	0(0)	0(0)	45(36.00)	125(100)
Q9	E-government is catalyst for national delivery.	53(42.40)	27(21.60)	12(9.60)	20(16.00)	13(10.40)	125(100)
Q10	E-government make use of ICT and internet facility	55(44.00)	40(32.00)	10(8.00)	20(16.00)	0(0)	125(100)
Q11	E-government will improve communication between government and citizen.	55(44.00)	26(20.80)	0(0)	14(11.20)	30(24.00)	125(100)
Q12	E-government improves citizens' relationship with government.	59(47.20)	21(16.80)	0(0)	0(0)	45(36.00)	125(100)
Q13	E-government enables citizen to have access to government information.	53(42.40)	27(21.60)	12(9.60)	20(16.00)	13(10.40)	125(100)

Note: the bracket Figures indicate the percentage& figure not bracket in **Note:** *the bracket Figures indicate the percentage& figure not bracket indicate the frequency*
Source: Computations and Output of STATA10 based on Authors' Field Survey (2015).

Test of Hypothesis

H_0: There is no significant relationship between E-government and governance service delivery in the Nigeria ministries.

Decision: Since the chi-squares calculated (X2-cal) are greater than chi-square tabulated (X2-tab) which makes all the figures to be highly statistically significant with the probability of F = 0.000. Collectively; we reject null hypothesis stated earlier: There is no significant relationship between E-government and governance service delivery in the Nigeria ministries due to the result. Thus, we accept alternative hypothesis that: There is significant relationship between E-government and governance service delivery of sampled ministries in Nigeria [14,15].

Table 6: **Analysis of relationship between e-government and governance service delivery in the selected ministries in Ogun State, Nigeria using Pearson Chi-Square**

S/N	Relationship	Pearson Chi-Square (Value)	Pr (Value)	Remark
1	Q1 VS Q2	100.3027	0.000	Significant
2	Q3 VS Q4	157.4675	0.000	Significant
3	Q2 VS Q13	97.0982	0.000	Significant
4	Q1 VS Q6	168.1818	0.000	Significant
5	Q1 VS Q7	191.1157	0.000	Significant
6	Q3VS Q12	116.0760	0.000	Significant
7	Q1 VS Q9	180.6207	0.000	Significant
8	Q2 VS Q3	107.3895	0.000	Significant
9	Q4 VS Q7	158.6806	0.000	Significant
10	Q2 VS Q11	174.9242	0.000	Significant
11	Q2 VS Q6	146.4915	0.000	Significant
12	Q2 VS Q7	117.5979	0.000	Significant
13	Q2 VS Q12	93.4343	0.000	Significant
14	Q11 VS Q13	122.7891	0.000	Significant
15	Q4 VS Q12	109.6939	0.000	Significant
16	Q13 VS Q9	212.3352	0.000	Significant
17	Q9VS Q10	211.8056	0.000	Significant
18	Q10 VS Q13	216.1198	0.000	Significant

Source: Computations and Out-Put of STATA 10 based on Author's Field Survey ` (2015)

Conclusion

This research examined the perception of the sample government ministries about e-government and its effect on the service delivered by the sample ministries in Nigeria. However from the result of the analysis, the findings implied that the increase in e-system by the government will lead to increase in service delivery by the government agencies. Finding also validate that Electronic system of Operation help government workers to display technological skills and connect them with other world and will also reduce the stress of queue in government ministries and department by citizens dealing with government. Analysis of findings also indicates that e-government has the potential of providing high quality government services to citizens and business. Similarly the finding also buttress that e-government is *promoter* for national delivery and making use of Technology Devices, such as computer, telephone, fax, PDA SMS, Text messaging mms, wireless networks services. Finally the results of the tested hypothesis indicate that there is strong positive relationship between E-government and Governance service delivery of sampled ministries in Nigeria. In view of the above finding the following recommendation were made:

- Government should create awareness to inform the public about the benefit derived on the e-government services.
- Skilled manpower and computer wizard should be employed by every government parastatals in order to meet up with the digital world or economy.
- Government should establish a commission on ICT to regulate the sector and to see to the full implementation of e-government.

References

1. EkehL S (2007) E-business. THISDAY.

2. Narayan J (2006) ensuring right to information through the use of ICTs.

3. Cardella (2008) The New Management E-government Notion of people Value; lesson from, Mexico, Proceeding of SIG global Development, 1st Workshop, Parris, France.

4. UN E-Government survey (2008) From E-government to connected government, united nations department of economics and social affairs/division for public administration and development management, ST/ESA/PDA.SER.E/112, new york.

5. Oladejo Moruf O, Yinus Oluwaseun (2014) An influential analysis of the impact of information technology (IT) on cooperative services in Nigeria. European Journal of Business and Innovation Research, 2(3)11-24.

6. Moore and Mark (1995) Creativity public value: Strategies Management in government. Cambridge, Harvard University Press.

7. Layne K, Lee JW (2001) developing fully functional e-government: A stage model, government information quarterly 18(2):122-136.

8. Hood (1991) A public Management for All Reasons? Public Administration 69(1):3-19.

9. OECD (2003) The E-government for better government. Parris, France OECD.

10. Adeyemo (2011) E- government implementation in nigeria: An assessment of Nigeria global E-gov ranking. Journal of Internet and Information system, 2:11-19.

11. Ayo CK, Ekong U (2008) E-voting implementation in Nigeria prospects and challenges, proceeding of the 8th European conference on e-government, Ecolepoly technique lausome Switzerland, 10-11.

12. UNCTAD (2004) "ICT as an Enabler for Growth, Development and Competitiveness", Plenary session, June 17, [online], http://www.unctadxi.org/templates/Event-69.aspx.

13. Benchmarking e-government (2002) A global perspective, united nation America society for public administration, (ASPA) and division for public economics and public administration, (DPEPA), united nations, New York.

14. Lau E (2003) Challenges for E-Government Development 5th Global Forum on Reinventing Government, Mexico City.

15. UN Global E-Government Readiness Report (2005) From E-Government to E-Inclusion, United Nations Department of Economic and Social Affairs/Division for Public Administration and Development Management, UNPAN.