

E-Governance and Effective Service Delivery in the Nigeria Public Service

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Abstract

The study seeks to establish the relationship between e-governance and effective public service delivery. The objective of the study is to establish the relationship between e-governance and effective public service delivery. The study used ex-post facto research design. Data were collected through both primary and secondary sources. The population of the study was 13479 while Taro Yamane's formula was used to sample 388 respondents for the study. Two sets of questionnaire were constructed for the study as follows: E-governance Questionnaire (EGQ) and Effective Public Service Delivery Questionnaire (EPSDQ). 200 copies of questionnaire on e-governance were administered to selected members of the public through simple random sampling technique. Standard deviation, Pearson product moment correlation coefficient were used as the analytical tools for the study. One research question and one hypothesis were formulated and which were tested and statistically analysed. The null hypothesis was rejected. This means that there is a significant relationship between e-governance and effective public service delivery in Akwa Ibom State Civil Service. It was recommended among others that government should make the study of Information and Communication Technologies (ICTS) compulsory from primary to tertiary levels of education; knowledge of ICT should be made a prerequisite for employment in the civil service; provision of constant electricity to facilitate e-governance and domestication of technology by Nigerian government by developing her own software and setting up ICT parks and incubation centers.

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Introduction

It is incontrovertible that new technologies such as e-governance (Electronic-governance) are driving, shaping and reshaping public service delivery in government Ministries, Departments and Agencies (MDAS) the world over. Most developed countries of the world are conversant with the use of e-governance in rendering public services to the citizens, however, most developing countries are late comers in the use of these technologies in delivering public services to the people.

E-governance involves the use of information and Communication Technologies (ICTs) in rendering public services to the generality of the people. Services rendered through ICT include e-procurement, payment of bills and taxes, licensing, downloading of government forms, online services, payment and registration of courses by Universities and Polytechnics, teleconferencing, zoom, online lectures, public information and business opportunities. Information and communication Technology (ICT) systems available for tertiary institution's administration have been listed to include e-mail, internet, intranet, teleconference, facsimile (Fax), mini-computer, micro-computer, main-frame computer, word processing computer, and basic website (Nwafor, 2005). ICT is an electric application of computing, communication, telecommunication and satellite technology. The prevalence and rapid development of ICTs has transformed human society from the information technology age to the knowledge age (Johnson, 2007).

All over the world, e-governance is seen as promoting and enhancing efficiency in public service delivery and strengthening people's participation and engagement. E-governance refers to the use of information technologies, such as the internet, the World Wide Web, and mobile computing by government agencies that can transform their relationship with citizens, businesses, different areas of government and other governments. E-governance is intended to facilitate and expedite the process of rendering and delivering public services to the people.

Statement of the Problem

The civil service is established to render services to the generality of the citizens in a dispassionate manner. Such services do not take into cognizance the citizen's political, religious, social, financial, ethnic or material status before rendering such services. This is because such services are intended to be enjoyed by all citizens irrespective of background.

However, over the years, the civil service has been blamed for poor delivery of public services to the people. Several reasons have been adduced for this assumed poor service delivery by the civil service. These include strict adherence to Max Weber ideal bureaucratic postulations such as hierarchical arrangement of personnel, division of labor based on functional specialization, observance of rules and regulations, impersonality of interpersonal relationship and employment of officials based on merit principle among others.

It is assumed that these challenges do not enhance effective public service delivery. Several efforts have been made to ensure effective public service delivery. These range from staff training and retraining, enhanced wages and working condition, monetization policy, the use of public-private-partnership or privatization and commercialization policies, the introduction of service compact with all Nigerians (SERICOM) to transform the civil/public service and redirect customers' experience of the service in a transparent, timely and cost effective manner. None of these reforms or policies is able to enhance effective public service delivery. This researcher believes that the adoption of e-governance, which emphasizes the use of information and communication technologies (ICTs) in rendering public service, will enhance effective

public service delivery. The problem of the study therefore is: Will the adoption of e-governance enhance effective public service delivery?

Objective of the Study

The objective of this study is to establish the relationship between e-governance and effective public service delivery.

Research Question

What is the relationship between e-governance and effective public service delivery?

Research Hypothesis

There is significant relationship between e-governance and effective public service delivery.

Literature Review

E-governance involves the application of Information and Communication Technologies (ICTs) in the rendering of government services to the people. These technologies help deliver government services to citizens, improve interactions with businesses and industries, and provide access to information (Moon, 2012). E-governance is seen as the use of emerging Information and Communication Technologies (ICTs) to facilitate the process of governance and public administration. This explanation focuses on the use of ICT to assist in the administration or management of government.

According to Fatile (2012), e-governance is the adoption of web-based technologies to deliver and conduct government services, and has become a global trend in public administration. E-governance often comes with a promise to improve public administration in terms of efficiency, one of the primary values in public administration (Lee and Perry, 2022). E-governance has the potential of altering the traditional relationship between government and citizens by creating a new virtual government and citizen interface.

The potential for electronic government to transform public administration has been heralded at various points throughout the past half century. Even by the 1960s and the 1970s, as computers started to appear in government organizations, some public officials and commentators predicted that information technology would bring a revolution to public administration (Heeks, 2002).

E-governance initially began as a process where government entities developed websites and began populating these sites with information. After mastering these information dissemination aspects, government units moved towards processing online transaction. Subsequent to mastering transaction processing, government moved across a continuum and engaged citizens online in a participatory framework; that is, offering interest applications that connect citizens with public administrators, decision makers and perhaps elected officials (Basu, 2004).

Assessment made by the World Bank (2001) indicates that e-governance is in a nascent stage of implementation in both developed and developing countries. Government Ministries, Departments and Agencies (MDAs) in many developing countries publish information on websites as a first step towards e-governance. According to the World Bank report (2001), many of these sites are poorly designed and the MDAs do not update or monitor the quality of information on the sites. Initially, the publishing of information online was targeted at attracting foreign investments, but as internet penetration grew in urban areas, many sites began to focus on delivering information and services to citizens and businesses.

Ifinedo and Uwadia (2005) assert that a large number of developing countries from Asia to Latin America have implemented transaction-oriented e-governance applications on pilot basis. With the popularity of e-governance and the increasing interaction between government and citizens through the internet in many countries of the world, a major question then is: To what extent does e-governance promote public accountability and service delivery in Nigeria?

No matter how we want to look at e-governance, we cannot possibly rule out the pivotal role played by the internet. The internet has ushered enormous possibilities that have had a fundamental impact on human society. The advent of different technologies have always impacted human kind but no technological invention has arguably transformed businesses, transactions, governance, education, health, etc as the internet. Most organizations have already adopted the internet not only to enhance productivity and efficiency but also to develop innovation models for conducting business and governance (Chatfield, 2009).

E-governance represents the introduction of a great deal of technological innovations as well as government reinvention. E-government's importance in public administration stems from the fact that it is a way for governments to use the most innovative ICTs, 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 (Bakus, 2001). This includes transactions between government employee, and different units and levels of government. E-government presents a tremendous impetus to move forward in the 21st century with higher quality, cost-effective government services and a better relationship between citizens and government.

The Organisation for European Cooperation and Development (OECD) perceives e-government as the use of information and computer technologies to ensure transparency of government actions, the accessibility of government services and information, and the responsiveness of government to new ideas, demands and rules. Ibidapo-Obe (2013) sees e-government as the use of web 2.0 technologies, both internally (intranet) and externally (internet), to increase collaboration and transparency and efficiency. Intranet means a computer network-based TCP/IP protocols belonging to an organisation, usually a corporation, accessible only by the organisation's members, employees or others with authorisation while internet is a global system of interconnected computer networks that use standard protocol suite (TCP/IP) to link several billion devices worldwide.

Internet is a network that consists of millions of private, public, academic, business and government networks of local to global scope, linked by a broad array of electronic and optical networking technologies. In order to ensure proper implementation of e-government platform in an organization, both internet and intranet technologies are expected to be installed and properly managed in the environment. According to Arfeen and Khan (2009), the implication of e-government stems from the ability of individuals and groups to obtain government services through non-traditional electronic means, enabling access to government information and the completion of government transaction anywhere, in any time basis and in conformance with equal access requirements. Thus, this offers prospect of reshaping the public sector and building relationships between citizens and the government.

Therefore, the inherent philosophy behind e-governance is that government and the leadership of the Akwa Ibom State civil service needs to accept e-government as a child of necessity in their

drive to deliver efficient and cost-effective service, and also deploy ICTs to enhance the implementation of e-government, and thus improve service delivery through creativity, innovation, inclusiveness and openness in administration to the public which constitute the direct beneficiaries of such services, which they pay for through taxes.

Quisar and Ahmad (2010) summarized the role of e-government as not just about website and e-mail but about service delivery over the internet. It is not just about digital access to government information or electronic payments but the way it will change how citizens relate to governments as much as it changes how citizens relate to each other. It will bring forth new concepts of citizenship, both in terms of needs and responsibilities. In the view of Drucker (2001), e-government will allow citizens to communicate with government, participate in the government's policy making and allows citizens to communicate with each other and to participate in the democratic political process. This is in tandem with the work of Ifinedo (2006), who opined that e-government is the use of web 2.0 technologies, both internally (intranet) and externally (internet), to increase collaboration and transparency, and efficiency in service delivery. Thus, in a broader sense, e-governance has greater implications on public service delivery (Ifinedo and Uwadia, 2005).

E-governance concerns itself with the automation of the current way of delivering services to the public as well as citizens' feedback. It is all about carrying out responsibilities using digital technology as a collaborative transaction and process required to function effectively and economically, promoting innovation and competition in a bid to enhance the quality of services to the citizens (Nweke, 2011). In the view of the World Bank (2001), e-governance is information and communication technologies that transform relations with citizens, the private sector and or other government agencies so as to promote citizens' empowerment, improve service delivery, strengthen accountability, increase transparency, or improve government efficiency. Abramson and Meaus (2001) view e-governance as the electronic interaction, transaction and information exchange between the government, the public (citizens and businesses) and employees. E-governance is the public sector's use of the most innovative information and communication technologies, like the internet, to deliver to all citizens improved services, reliable information and greater knowledge in order to facilitate access to the governance and to inspire greater citizen participation.

Digital governance holds promising potentials in enhancing citizen's participation by allowing them make inputs into mechanisms that address public challenges and fulfil public interest. The use of electronic input and output analysis that explains civic engagement as provided by digital technology is referred to as internet engagement. According to Nweke (2011), the internet engagement models are grouped into three interface mechanisms, namely: Government-to-citizen, Government-to-business and Government-to-Government.

- i. Government-to-citizen: This allows government agencies to talk, listen, relate and continuously communicate with its citizens. This type of interaction permits citizens to access government information and services more comfortably through the use of multiple channels such as PC, Web TV, mobile phones or wireless devices. Thus Riley (2001) avers that this broad interaction enhances delivery of services and provision of welfare and health. The associated benefits include increasing citizen's participation in the policy process of government as well as its employees. Government interaction with its employees promotes team work and avail the employees the opportunity of having access to information such as compensation package, rights and other privileges.

- ii. Government-to-Business is another electronic transaction between government agencies and private businesses. This happens when government engages in e-procurement and the development of an electronic market place for the purpose of transaction. Furthermore, the government to business online transaction reduces the burden of red tapism in public service delivery (Nweke, 2011).
- iii. Government-to-Government involves the electronic transactions and relationships that take place between government and its agencies and other foreign countries. In this network of interactions, government depends on other levels of government within the state to effectively deliver services and allocate responsibilities. This enables Ministries, Departments and Agencies (MDAS) to share databases, resources and skills that promote efficiency and effectiveness in public service delivery.

Hirst and Norton (1998) posit that electronic delivery strategy covers three major transactions: Internal, external and relational.

Internal transaction has to do with the use of information and communication technologies (ICTs) to enhance efficiency and effectiveness of internal functions and processes of government by interrelating different departments and agencies. This can facilitate the flow of information among government departments, reduce red tapism, excessive paperwork, and eliminate bottlenecks and other bureaucratic pathologies. It also facilitates storing and collecting data, reduces labor costs and information handling cost and the speed and accuracy of time processing.

External transformation opens up a new vista opportunity for government to be more responsive and transparent in its dealings with citizens and the business world.

Relational transformation promotes relationship between the citizens and the state, and between nation states to facilitate good governance as well as deepen democratic practice.

According to Dode (2014), electronic governance seeks to harness information and communication technologies to facilitate the provision of public services, improve managerial effectiveness and promote transparent democratic processes. It also encompasses the setting up of regulatory frameworks to herald informative-intensive initiatives towards a knowledge based society. Under e-governance, there is a paradigm shift from mere efficiency in service delivery to a new philosophical thought aimed at improving the quality and value of services rendered by the public sector.

Terms such as e-government, e-governance, online government, digital government and e-democracy are loosely used to mean the replacement of paper intensive government processes with online information creation and dissemination, and delivery of services (Posters 1999).

According to Nweke (2011), the practice of e-governance allows for active engagement of citizens in sharing information faster and conveniently at any time in the course of service delivery. The input-output-feedback mechanism has reduced the regular collection of data, travel costs and allowances associated with manual handling of service fees and charges. Ndou (2004), argues that if developing countries properly make use of e-governance initiative, it will reduce the level of inefficiencies in processes by allowing file and data sharing across MIDAs, thereby contributing to the elimination of mistakes from manual procedures, and reducing the required time for transactions. It is to be noted that the cost of running administration had been on the

rise. The adoption of e-government has the capacity of providing cheaper administrative cost than any other reform policies of government.

E-governance accounts for the de-bureaucratization of service delivery found in traditional public administration system. As argued by Nweke (2011), the e-initiative engagement introduced by public institutions such as the NYSC online, JAMB, online registration, e-payment, e-procurement, and so on, make government/citizen relationship in service delivery devoid of 'red tape' and administrative encumbrances and political interference. The time usually taken, loss of documents, delay in responding to requests and cases of kickbacks often experienced in public transactions in traditional public administration system are drastically reduced. Besides, the idea of repeated visits to offices from far distances which usually take a toll on resources and human efforts is cut down. Also, e-governance allows for service delivery outside normal office hours.

Ndou (204) is in support of this view, when he avers that e-governance puts government services online thus rolling back the bureaucracy, offering round the clock accessibility, fast and convenient transactions and clearly facilitating the quality of services rendered in terms of time and constant accessibility.

In a study by Ifinedo and Uwadia (2015) on "E-administration implementation in Nigerian Universities", they assert that efficient and effective administration rests on the pillars of knowledge and recognition of this set of knowledge by the decision makers. Digitalization of this set of knowledge within a network which links every individual including the decision makers gives freedom to everyone to access and make use of this knowledge paving the way for digital governance. They concluded by stating that E-administration is changing the power equation based on access to and control of information and knowledge. A more informed administration will lead to reduction in knowledge gap. Digital administration will ensure that staff are no longer passive in the discharge of their duties but instead would have a potential to play a meaningful role in deciding the kinds of services they want and structure which would best provide the same.

The research finding suggests that the advent of ICT has provided a platform for effective and efficient service delivery in many Nigerian universities and other tertiary institutions in terms of processing students' results, registration, admission, fee payment etc.

Fatile (2012) opined that some components of e-government have already commenced in Nigeria. For example, the computerization of resident permit by the Nigerian Immigration Service, computerization of Land and Certificate of Occupancy in the Federal Capital Territory Administration (FCTA) and the computerization of most of the activities of the Nigerian Customs Service. It is interesting to note that payroll of some public organizations are being computerized, that is e-payment, online checking of West African Examination Council (WAEC), National Examination Council (NECO), Joint Admission and Matriculation Board (JAMB), National Youth Service Corps (NYSC) registration and posting are part of real time and cost effective services which are part of e-government. Besides, most Nigerian Universities, Polytechnics, and other tertiary institutions have adopted electronic transaction in processing of admission, student's registration, payment of fees, checking of semester results, processing of academic transcripts and even online learning. All these have eased the procedures and processes of doing government's businesses.

The challenges of e-governance include absence of appropriate legislations to guide the practice and use of digital technology in service delivery. Besides, the use of ICT for the purpose of addressing abuses and emerging cyber-crime in the world has brought in its wake dimensions of fraud and corruption. Another challenge of e-governance is the inability of the Nigerian government to launch information and communication satellites and stop being dependent on developed countries. In addition, the slow rate of software development, which is a major component of infrastructure, remains a threat to internet engagement. There is also the challenge of resistance to change, especially the use of ICT and digital technology in service delivery in Nigeria by civil servants. Most civil servants remain conservative and status-quo oriented and abhors any policy reform that is capable of transcending the cosmetic refurbishing of routinized policies and programmes.

The most evident cause of resistance to e-governance and digital application is obtainable among employees who are afraid of replacement and consequently cause job losses and other benefits that result from altering traditional hierarchy which is the fundamental value of traditional government bureaucracy (Danfulani, 2013).

Finally, the prevalent abuse of online documents and forgery frightens both individuals and public institutions and thus impede the use of digital technology for public service delivery. For example, the presence of JAMB online, NECO, WAEC, online recruitments in Nigeria has led to forging of documents online. As a result, personal data, authentication and identity management are called into question. All these have encouraged resistance in adopting digital technology in service delivery. But government must first make citizens electronic complaint, that is e-citizens if ever e-governance is to succeed in Nigeria. E-governance needs e-citizens to succeed.

Methodology

Research Design

The study used ex-post facto research design. The design was seen as most appropriate because the phenomenon under investigation has already taken place and the research could not have control over the variables. The independent variable was studied in retrospect in order to establish its influence on dependent variable. In this study, e-governance was used to examine its influence on effective public service delivery in Akwa Ibom State civil service.

Population of Study

The population of this study consisted of 13,479 civil servants and selected members of the public.

Sample and Sample technique

388 civil servants were sampled for the study using Taro Yamane's formula with 5% error margin.

Method of Data Collection

The data for the study were obtained from both civil servants and members of the public. The researcher did not deem it necessary to use all the civil servants to rate their own performance in service delivery. The researcher used simple random sampling technique to pick 200 civil servants and 188 members of the public for the study. In simple random sampling every respondent stands equal and independent chance of being selected for the study.

Instrumentation

Instruments for data collection were E-governance Questionnaire (EGQ) and Effective Public Service Delivery Questionnaire (EPSDQ). The instruments were validated by Measurement and Evaluation experts. The reliability of the instruments was determined using the test of internal consistency on 20 staff and 18 randomly selected members of the public which were not included in the study. The data obtained were analysed using Cronbach's Alpha Coefficient.

Method of Data Analysis

The data collected were analysed using mean, standard deviation and Pearson Product Moment Correlation Coefficient. Mean and standard deviation were used to answer research questions while hypothesis was tested using Pearson Product Moment Correlation Coefficient. The significance level of .05 was the criterion for accepting or rejecting the null hypothesis. The two instruments were analysed collectively but the responses were correlated to find the influence of predictor variable on the criterion variable.

Results

research Question

What is the relationship between e-governance and effective public service delivery?

1.1 Relationship between e-governance and effective public service delivery

	EX	EX ²	EXY	r-cal	Remarks
Variables	EY	EY²			
E-governance	4430	156890			
			21505	.216	Low positive relationship
Effective service delivery	13261	476361			

Source: Field study (2019)

The entries in Table 1.1 show the type and strength of relationship between e-governance and effective public service delivery in Akwa Ibom State civil service, Nigeria. The results reveal that the calculated R-value of .216 is low. This therefore means that there is a low positive relationship between e-governance and effective public service delivery in Akwa Ibom State civil service.

Testing of Hypothesis

Decision Rule for Pearson Product Moment Correlation Co-efficient (PPMS).

When the computed r is greater than the critical R-value at 0.05 level of significance, we reject the null hypothesis and accept the alternative hypothesis. The hypothesis is tested using PPMC to establish the extent of relationship between the predictor variable (E-governance) and criterion variable effective public service delivery in Akwa Ibom State civil service, Nigeria.

Null Hypothesis

There is no significant relationship between e-governance and effective public service delivery.

1.2 Result showing Pearson Product Moment Correlated analysis of the relationship between e-governance (X) and effective public service delivery in Akwa Ibom State civil service (Y).

	EX	EX²	EXY	r-cal	r-crit	Decision @.05 alpha level
Variables	EY	EY²				
E-governance	430	156890				
			21505	.216	.133	*Significant
Effective public service delivery (Y)	13261	476361				

*Significant @ .05 alpha level; $f = 377$; $r\text{-crit} = .133$

Source: Field study (2019)

The result in Table 1.2 reveals that calculated R-value of .216 is higher than the critical R-value of .113 at .05 level of significance with 377 degrees of freedom. The result is significant. Therefore, the null hypothesis which claims a no significant relationship between e-governance and effective public service delivery is rejected. This result means that there is a significant relationship between e-governance and effective public service delivery in Akwa Ibom State civil service.

Discussion of Findings

The testing of the hypothesis revealed that there is a significant relationship between e-governance and effective public service delivery. This is because the calculated r-value of .216 is higher than the critical r-value of .113 at .05 level of significance with 377 degrees of freedom. The result is accredited to the fact that electronic governance has facilitated the rendering of government services to the people and hence enhanced effective public service delivery. E-governance actually refers to the use of information and communication technologies (ICTs), particularly internet, to deliver government information and services to the people. This study confirms that e-governance promotes efficient and cost effective government, facilitates more convenient government services, allows people greater access to government information and makes government more transparent and accountable to the citizens. E-governance uses ICT to facilitate the processes of government and public administration. It focuses on the use of ICT to assist in the rendering of government services.

It is believed that e-governance will be able to streamline bureaucratic procedures to make operations more efficient. In a study by Fitzsimmons and Fitzsimmons (1997) on service management, operations strategy and information technology, the findings of the study imply that the more the progress is made towards attainment of e-government goals (of coordination, cost-savings and cost effectiveness), the more are the positive impact areas affected by the introduction of e-governance such as provision of services, ability to do the job, government transparency and accountability, convenient services, citizen communication, etc. Their studies also show that there are several competitive advantages associated with the adoption of technology in service organizations, including the creation of entry barriers, enhancement of productivity, and increased revenue generation from new services.

In another study on E-governance for improved public service delivery in Fiji by Naz (2009), the finding was that e-governance improves service delivery and impacts positively on customers' satisfaction. The finding of this study is also in agreement with a study by Asgarkhani (200) that e-governance enhances effective service delivery in local governments in New Zealand but added that e-governance requires electronic or digital citizens (e-citizens) that must be able to

access the required electronic infrastructure. For as the researcher puts it, technology by itself does not necessarily result in better, more efficient and socially inclusive government. In his view, e-technology solutions are only effective if complemented with parameters such as social structure, cultural modes and attitudes; governance process, re-engineering within governments and ethical issues.

The finding of a study by Oguntoyinbo, Obanla and Aremu (2017) on Governance and Public Service delivery in Nigeria was that the adoption of e-governance within the public sector in Nigeria has become imperative in enhancing public participation, to observe and assess government projects, safeguarding government accountability and transparency as well as transmitting information among the citizens, business - community and government. The study concluded that e-governance, if implemented can increase the current level of government services, increase accountability, lessen cost of governance and result in a more accurate as well as organized service delivery system in Nigeria.

The findings of a study by Chukwuemeka, Ubochi and Okechukwu (2017) on effect of e-governance on service delivery in Federal University, Ndufu-Alike, Ebonyi State were that e-governance has strong positive effects on service delivery by fostering the achievement of organizational goals. That through the implementation of e-governance, work related activities are conducted with speed and dispatch, and this engenders organizational success. It was also found out by the study that e-governance has strong positive effect on service delivery by enhancing the performance of workers. This is because, according to their findings; the use of ICT in work- related activities reduces waste of time, as well as delays and mistakes on the part of workers in the discharge of their duties.

However, according to Oguntoyinbo, Obanla and Aremu (2017), despite growing excitement and benefits that accrue from adopting ICT, e-governance initiatives in Nigeria like other developing countries is yet to record significant success, or even affect the system of government in third world countries due largely to wide gap that exists between existing realities and scheme of e-governance initiatives framework (Heeks, 2002). No doubt, improving service delivery is not a remote process. It requires painstaking effort to integrate and strengthen citizen's participation through ICTs to diffuse e-governance processes on technical, non-technical, and state-specific issues, but it also requires a well-functioning public sector that puts forward quality public services consistent with citizen expectations to foster private market-led growth. Though e-governance is a latecomer to government administration in Nigeria, and indeed Africa, it should wake up early from its deep slumber, if it is to make any meaningful impact in public administration system in the country, nay continent.

Conclusion

The conclusion of this study is that e-governance significantly enhanced effective public service delivery in Akwa Ibom State civil service because the use of Information and Communication Technologies (ICTs), internet, the worldwide web, mobile computing by government's MDAs facilitate effective public service delivery.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. The information age is here to stay and there is nothing we can do to circumvent it. Thus, government should make the study of ICTs compulsory from primary to tertiary levels of education.
2. Knowledge of ICTs should be made a prerequisite for employment in the civil service. This is the only way the government can have a pool of competent e-civil servants to drive and implement its visions, goals and objectives which is effective public service delivery to the people. We cannot have e-governance without e-citizens or digital manpower to drive the workforce.
3. The deplorable and epileptic state of electric power supply in the country need to be addressed otherwise we better forget about the adoption of e-governance or e-citizens. Anything to the contrary will be a remedy worse than a malady.
4. Nigeria should domesticate her technology by making it have a Nigerian face by establishing ICTs parks to serve as incubation centers for the development of software applications instead of blind importation of ICTs gadgets from the Western World or China. This will help conserve our foreign exchange and promote Nigeria's fiscal measures including incentives to make ICT more liberalized and affordable to the citizens.

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