

## **E- Administration and Public Sector Reforms in Nigeria: From the Socio-Technical Doctrine**

**Otu O. DUKE** (Ph.D)

Department of Public Administration,  
Faculty of Social Sciences,  
University of Calabar – Nigeria

**Gbolabo O. OKUDERO** (Ph.D in view)

Department Of Industrial Relations and Personnel Management  
Faculty of Management Sciences  
Lagos State University – Nigeria

**Emma ETIM** (Ph.D in view)

***Corresponding author***

Department of Public Administration,  
Faculty of management Sciences,  
Lagos State University – Nigeria.  
Email: [emmaetim1@gmail.com](mailto:emmaetim1@gmail.com)

**Edidiong M. JOHN**

Department of Public Administration,  
Faculty of Social Sciences,  
University of Calabar – Nigeria

### **Abstract**

*Information and Communication Technology (ICT) has become an integral part of our lives and society. Its value is limited only to individual's imagination, and cuts across every sphere of human existence. This paper examines the role of ICT in the transformation of public administration and public sector reforms in Nigeria. It relied heavily on literature review. It has been discovered that irrespective of several policies and strategies by the government to install e-governance structures, the activities of e-governance remains low in the country and falls below the US benchmark measure of development which stood at 1.62 as at 2002. On the other hand, the Nigerian public service continues to struggling with management problems, inertia, inefficiency, incompetence, ineffectiveness and low productivity. Going forward, the paper recommends that ICT should be fully adopted to reform the Nigerian public sector and to foster efficiency, effectiveness and high performance in the public sector. This can be achieved if the government carefully address all the challenges of ICT application in the Nigerian public sector, as listed in this paper.*

**KEYWORDS:** e-administration, Information and communications technology, public sector reforms, socio-technical approach.

## **INTRODUCTION**

Information and Communication Technology (ICT) has become an integral part of our lives and society. Its value is limited only to individual's imagination, and cuts across every sphere of human existence. This paper examines the role of ICT in the transformation of public administration and public sector reforms in Nigeria. Put differently, the prospects and challenges of e-administration in Nigeria. E-administration is aimed at improving the internal working of the public sector through the application of ICT. E-administration revolves around those techniques, technologies and mechanisms that help to convert governance and administration from analog to digital. On the other hand, public service is an intellectual capital of the nation. The public sector requires adequate reforms in order to meet up with contemporary demands of today's technology-driven society. These reforms are expected to be built around ICT. Further, the chapter will critically examine the socio-technical theory of ICT and public administration, as well as the way forward.

## **CONCEPTUAL AND THEORETICAL ISSUES**

### **Information and Communication Technology (ICT)**

Several definitions abound in the explanation of the acronym ICT. ICT connotes all the items that allows for the creation, processing, storage and transmission of information (Tiamiyu, 2003; OECD, 2011). ICT constitute one of the major inventions in the history of human existence and has informed the continuous drive to improve information processing and communication with no distance barrier (Ndukwe, 2002). Today, the survival and development of countries depend largely on ICT (Federal Government of Nigeria, 2001). ICT contributes largely to information dissemination and provides a wide range of communication capabilities, together with a growing access to technology and knowledge, etc. The 21<sup>st</sup> century witnessed the transformation of the World into a knowledge-based economy and ICT constitute the principal driving force (San-Jose, Iturald and Maseda, 2009). ICT has facilitated rapid economic growth and productivity in various MDAs.

ICT includes computers, the internet, data storage and security devices, network security, business productivity and management system software, etc, which enables businesses to be digitally networked (Ashrafi and Murtaza, 2008). Today, the application of ICT spans across many industries and it is responsible for large productivity, revenue generation, and reduces production and transaction costs (Rangam and Sengal, 2001). Bature (2007) sees ICT as technologies that provide access to information through telecommunications. Decision making and development are now facilitated through less expansive and fast flow information channels, made available by ICT (Ahmed, et al, 2006). Most prominent among these technologies include video-conference, e-messaging, social networking websites, etc which allows for constant communication, and exchange of ideas irrespective of time and place.

## **E-Public Administration**

Before conceptualizing E-administration, it is pertinent that we consider the concept of E-governance first. The word governance has been used in varying contexts (Edward and Charles, 2014). The concept spans through both civil society and private sector and involves the exercise of administrative economic as well as political authority. This authority is often aimed at harnessing resources for development. Governance itself involves the process of decision making as well as the implementation of these decisions with values such as accountability, participation and respect for the rule of law (Boeninger, 1992).

The concept of e-governance became prominent in the early 21<sup>st</sup> century when scholars attention were driven towards exploring to gains of the internet in public administration (Fatile, 2012). The United Nations (UN) sees it as “the utilization of information technologies (including the internet, World Wide Web, computers and mobile phones for the delivering of information from government to citizens” (Drucker, 2001). Governments all over the world move towards, and own ICTs in order to transform its relationship with citizens, the private sectors and other arms of government.

The fact that public administration is the enforcement of public policy as declared by competent authorities has been well established. Public administration involves all organizational powers, and management techniques adopted in carrying out the policies made by the decision making arm of the government (Marume, 2016). E-administration is aimed at improving the internal working of the public sector through the application of ICT. E-Administration refers to those techniques, technologies and mechanisms that help to convert the traditional office paper processes into digital or electronic processes and supports the free, adequate and less expansive information flow outside the public authority (Somchez, 2006).

E-administration according to Hecks (2010), represents government to government relations targeted at improved administrative processes through the application of ICT. E-administration covers both intra and inter-office communications in the work organizations (Onuigbo, 2015). Several factors drive e-administration towards change. These factors include, but not limited to; economic factors, organizational factors (Fang, 2002), political factors, and technological factors (Fang, 2002). E-administration is built around two principles. First: the principle of E-service; which is focused on the improvement of citizens - government relationship. Second: e-society; which is operated through government websites for the provision of services like licensing, registration, etc.

## **The Socio-Technical Approach to Understanding ICT and Public Administration**

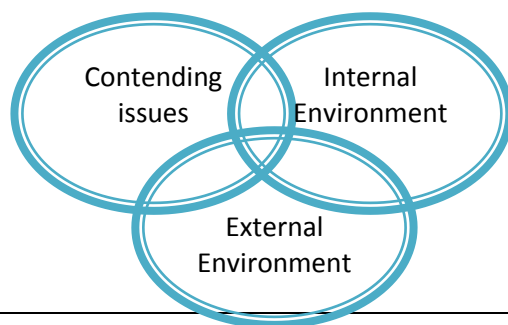
ICT influences every aspect of our lives, including the public and private sectors. However, much has been written about ICT in private sectors, possibly because of its relationship with efficiency, effectiveness and productivity which, many writers erroneously belief, are not needed in the public sector organizations. ICT has great impacts on public organizations, given the diverse interest it must serve, which may not necessarily be profit generation, as it is in the private sector organizations. For instance, in our society today, a public manager has several

unique and constrained operating environments to contend with. These unique environments include, but not limited to the following:

- Ability to contend with staff attitudes
- Ability to manage multiple goals with numerous stakeholders
- Increasing bureaucracy with low management autonomy
- Working to satisfy a vast population

The socio-technical theory posits that people in the social system make up the organization and they use their knowledge, techniques and available tools to effect organizational changes. These changes influence all the environments of public administration and introduce contending issues into administration. The socio-technical theory helps in the demonstration of the impact of technology in the public sector (Norris and Moon, 2005). From the socio-technical view point, there are three over-riding aspects of ICT and public administration that must be understood. These include the external environment, internal environment and contending issues.

The external environment explains that changes within government are driven by external factors like democracy, citizen's participation in policy and decision making and e-governance. It is believed that good policy making process, transparency and proper information dissemination are respectively easy, attainable and cheap, especially when it is harnessed with modern technologies. Citizens' participation has also been identified as an external environment that influences administration. Also, the internal environment explains changes within the organization. Here, emphasis is placed on the management as well as the leadership of the public organization. Most often than not, the masses complain of lack of good leadership and management in the public sector organizations because, as expected, leaders (especially in the public sector), are supposed to be agents of positive changes and should pilot the affairs of goals actualization. In the internal environment, the management must provide avenues through which ICT can fit in the mission of their organizations because in order to successfully adopt ICT, which still remains a problem in Nigeria, public service leaders must support it (ICT). Still talking about the internal environment, there is a vast need to map public organization's business processes using enterprise architecture, which is capable of integrating information system into the organization's mission. Finally, contending issues in ICT and public administration. As explained in socio-technical framework, contending issues like making financial reports, procurements, transactions and human resource information, using the internet and other ICT methods remains topical in public administration. Further, there are questions to be answered about the privacy and security of information, as people are excessively interested in obtaining other people's personal information.



**Fig 1:** The Socio-Technical Perspective of Public Administration and ICT.

### **E-ADMINISTRATION IN NIGERIA TODAY**

It is a much reiterated fact that ICT holds promise to the innovation of public service in Africa (UN, 2005), as it aims at reducing the use of paper in public service. Although, many countries are aware of the benefits derived through the adoption and application of ICT, many challenges abound as would be discussed in the later part of this chapter. Accordingly to Pathak, et al (2008) observed that many developing countries have resorted to e-governance and e-administration in order to provide an easy to use, customer focused and less expensive services that would be enjoyed by citizens. In Nigeria, e-governance emerged during the advent of democracy in 1999, through the development of websites. Although this effort was not properly coordinated and only a few agencies had the resources to be present online, government continued to seek policies and strategies of deploying these infrastructure by establishing agencies like National Information Technology Development Agency (NITDA) which was saddled with the responsibility of taking the e-governance initiatives to the next level, through adequate implementation of ICT innovation projects (NITDA, 2001).

Irrespective of these policies and strategies, e-governance activity in Nigeria remains low and falls below the US benchmark measure of development which stood at 1.62 as at 2002 (UN, 2002). However, as at 2008, there was an increasing awareness of e-governance and e-public administration by employees (both private and public) through the activities of the mass media, though only 30% of Nigerian states had websites that were rated among the second stage of e-governance. The level of access to e-governance by the Nigerian masses remains poor, not because of inadequate awareness, but unavailability of enabling infrastructure of e-government. Nigeria remains with an unfavorable statistics on its ICT infrastructure (Itu, 2005). There were about 10,000 internet users in Nigeria as at 2002 (Fatile, 2012). However, the figure increased to about 3 million as at 2004 and keeps increasing, but not at the rate which is capable of meeting the present day demand (Ifinedo, 2004). Fatile, (2012) noted that the establishment of National e-Governance Strategies Ltd (NeGST), saddled with the responsibility to enhance e-government and e-administration in Nigeria will add back bone to the actualization of e-government and administration in Nigeria. It becomes imperative for us to consider the need for ICT in public administration as highlighted in the later part of this chapter.

### **PUBLIC SERVICE REFORMS IN NIGERIA**

The public service is an executive arm of government that is saddled with policy making and implementation responsibilities. It is a well-known fact that the development of a country is largely dependent on the level of its public service. Hence, the public sector performance is a key determinant of economic performance (Shand, 1997). The public service is expected to be the intellectual capital of the nation (Olowu, 2010), in order to achieve this, reforms become necessary. According to Bureau of Public Service Reforms (2005), reform is an organized and well planned intervention that is targeted at introducing vital changes which involves, but not limited to attitudinal re-orientation, innovation and modernization in values and service delivery in the public sector. Reforms include changes in operation and making things work better

(Magbadelo, 2016). In today's technology driven society, reforms are better done using knowledge-driven approaches like ICT application, as it is the aim of every reform to ensure the advancement and restructuring of service delivery in pursuit of good governance. Today, ICT stands as the best option in the attainment of an up-to-standard public service in Nigeria.

The public service reforms that have been carried out in the past few years in Africa has shown the interest that the continent has on improved performance, productivity and professionalism in service delivery (Balogun, 2003). Irrespective of the variance in the administration of reforms in Africa, there are some elements that are still in common. Popular among this elements include the introduction of customer care initiatives, review of personnel policy and practices, resuscitation of the basic ethos of public service, labour redeployment and redundancy management (Kauzya and Balogun, 2005). The Nigerian public service is a British creation and has remained as a succinct instrument of governance that serves as a demarcating line between partisan and national interest (Economic Commission for Africa, 2010; Oyediran, 2007). The Nigerian Public Service was rated the best in the best in the Common Wealth between 1950 and 1980, but the 1980 experienced the drastic deterioration of the public service. From mid-1980, till date, the Nigerian Public Service is still struggling with management problems, inertia, inefficiency, incompetence, ineffectiveness and low productivity. This problem can be traced to the non-application of technologies and techniques of management, lack of accountability and responsibility (2006). Lawanson and Adeoye (2013) summarized the major reforms as follows;

- a. Payroll computerization
- b. Benefits monetization
- c. The strengthening of Management Information System (MIS)
- d. National Health Care Insurance System
- e. Legally recognized Contributory Pension Scheme
- f. The adoption of competency-driven procedures for hiring, promotion and training.

### Key Principles of Public Sector Reforms

The Commonwealth Secretariat (2016) highlights some key principles of public sector reforms. These principles include;

- i. **A code of conduct for public sector ethics:** the enforcement of these codes should involve both judicial and non-judicial approaches, including self-regulation
- ii. **Professionalization and improved morale:** this involves an adequate recognition of the contributions of civil servants, as well as granting them some financial remuneration and non-financial incentives. This will re-ignite their morale.
- iii. **Experimentation and innovation:** the application of new and innovative ways of solving problems has proven to be effective in civil service development.
- iv. **Skills development:** this is a continuous capacity building which is expected to address specific goals to be achieved.
- v. **Administrative structure:** Bureaucracy in Third World Countries still has significant skill gaps as a result of poor and ill-planned administrative structures.

- vi. **Result-oriented framework:** this is an increased demand for a better and high quality public service.
- vii. **Political strategies and engagement:** this involves the link between politics, policies and administrative capacities.

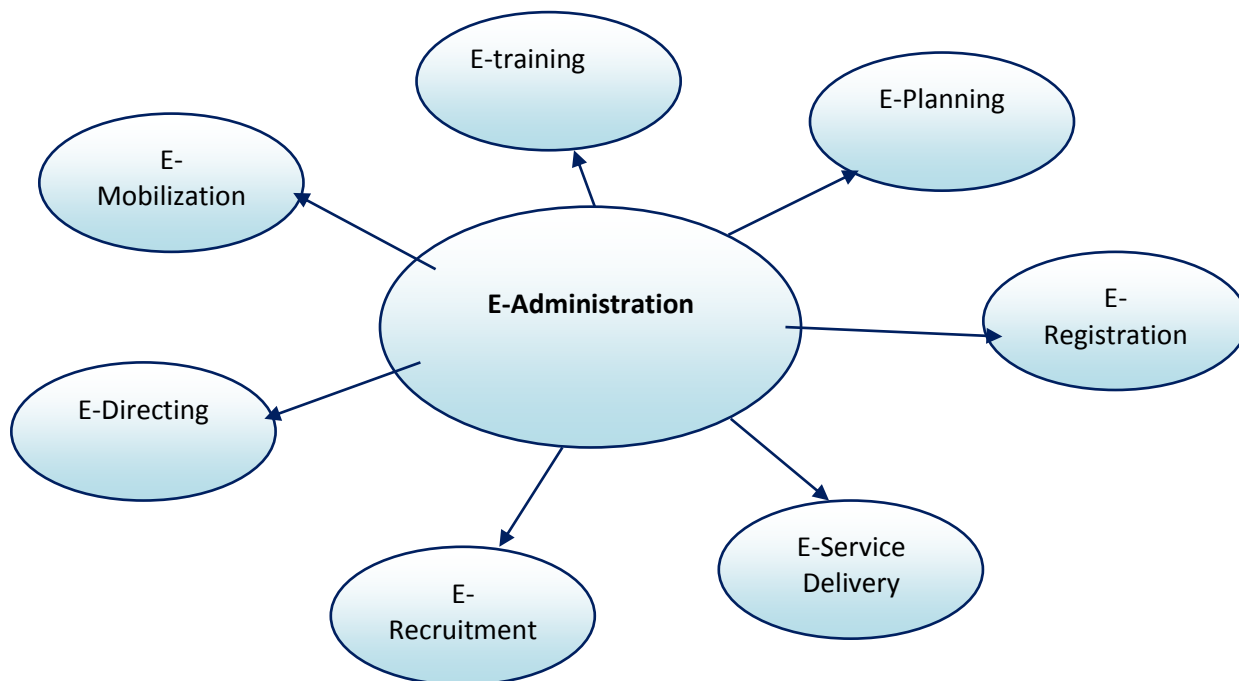
## ICT IN ADMINISTRATION AND PUBLIC SECTOR REFORMS

ICT has become the chief corner stone many sectors in the economy. At such, there is no gain saying that the need for an appropriate e-administration in Nigeria cannot be over-emphasized (Kramer, Jenkins and Katz, 2007). It has been suggested by World Bank that organizations using ICT experience a faster growth and higher productivity than organizations without ICT. This section highlights major benefits of ICT in modern organizations and e-administration.

1. **Logistics/Reduced Transaction Cost:** Logistics is a transaction oriented activity, which involves database filling, analysis and monitoring (Person, 1995). Therefore, if properly harnessed, ICT provides a platform for success to be achieved and value can also be added, by using the 'soft' and 'hard' parts of ICT (van dar Vost, Beulens and va Beekd, 2005). The Nigerian Public Sector urgently requires a full adoption of e-business tool for logistics development, most especially the training of logistics experts that are selected by the government. This will positively influence logistics future in the public sector.
2. **Capacity Building:** Here, emphasis is not placed only on enabling the ability to use ICT, but using ICT to enable other abilities. The past 20 years have witness enormous attention paid to capacity building by both public and private sectors in Africa (Ontario Trillion Foundation, 2005). Programmes suffer in every work organizations whenever there is weak capacity building. Capacity building is an increase in the ability of organizations, groups or individuals to perform specific functions solve problems as well as deal with development needs. Workers can attend online courses even as they continue in their day to day activities in the office.
3. **Tele-working:** The concept of tele-working was first coined in the 70s by Jack Nilles. It highlights activities revolving around telecommunication, distance, virtual, distributed, remote and e-work. Tele-working describes working describes working from home (ILO, 2016). Although tele-working does not suit every aspects of public administration, applying it in suitable departments can go a long way to speed up and create convenience in service delivery.
4. **E-Services:** E-services connotes the utilization of ICT infrastructure in different aspects of organization (Rowley, 2006; Wimmer, Codagnone and Janssen, 2008; Lofstedt, 2005). This may include customer support, e-commerce, e-tailing, e-learning, e-banking, e-service delivery, etc. E-services increase accessibility broadens the market. In public administration, it enhances transparency (Lu, 2001). E-services also enhances reliability, response and flexibility.
5. **Messaging:** In our society today, apart from private usage, e-messaging has improved organizational consistency and enhances personalization in various ways. Prominent among e-messaging facilities include, Electronic Mail (e-mail), Instant Messaging, Voice over Internal Protocol (VoIP), Really Simple Syndication (RSS), Web Blog, and Personal on Demand + Broadcast (PoDCAST).

6. **Virtual Communication:** Virtual communication is the ability of people to communicate with one another from a distance when they can't be face to face (Frost, 2018). Through virtual communication, people see and hear from each other like in real time. Some virtual communication technologies include social networks, forums, Massive Multi-player Online (MMO), Chatrooms, etc. Virtual communication is important to the organization, as it creates room for cheaper training, conferences, lectures, seminars, etc, where resource person may not necessarily be physically present to render same.

## E-ADMINISTRATION IN ITS ACTUAL PERSPECTIVE



**Fig. 2: E-Administration in its actual perspective**

### E-Mobilization

E-mobilization can be used to promote increased citizens' participation in decision making and projects. For instance, awareness campaigns will easily be accessed by a larger population, if placed on the government/organization's website.

### E-Service Delivery

The issue of service delivery has been recurrent in organizational and administrative debates. E-administration is capable of promoting effectiveness and efficient social service delivery at all levels, including waste management, security, sanitation, etc. Hence, it becomes necessary to use ICT to reshape public administration in this dimension.

### E-Registration

Drivers' license, National Identity Card, Birth Certificates, Motor Vehicle and other registrations can be done on appropriate government websites, without clients being physically present at fixed venues.

### **E-Recruitment**

Some government establishments in Nigeria that have explored the potentials of ICT in this regards include Joint Admission and Matriculation Board (JAMB), the Armed Forces (Army, Navy and Air Force). Others include West African Examination Council (WAEC), National Examination Council (NECO). E-recruitment reduces the loads of panelists, in terms of having to screen applicants one after the other. This is because the eligibility criteria is programmed into the system and unqualified candidates are automatically screened out. This process also shows high level of transparency.

### **E-Training**

Sustainable democracy and proper service delivery is a function of adequate training. The adoption of e-training will be useful in the following ways: first, it will improve public servants' capacities and competencies. Second, it will give the masses adequate information relating to eligibility, as well as sensitize them about their rights and responsibilities.

### **E-Planning**

As a process of thinking about and organizing something, e-planning encourages citizens to make inputs and provide advice towards administrative initiatives, at the comfort of their homes without much stress.

### **E-Directing**

Directing is an administrative/management function in which senior officers or managers guide, instruct and oversee the activities and performance of staff with the aim of achieving a defined goal. With proper application of ICT, physical presence and contact becomes less important. Instructions can be given electronically and feedback can also be obtained electronically. Monitoring may also be done with the help of CCTV cameras.

## **MAJOR CHALLENGES OF E-ADMINISTRATION AND PUBLIC SECTOR TRANSFORMATION**

Although many African countries are fully aware of the potentials of ICT in administration and governance, and these countries are making efforts to integrate ICT projects and application into their various systems, many challenges abound and these challenges must be carefully addressed. Popular among the numerous challenges facing ICT application in Nigeria includes;

1. **Political Will:** Regulations that stand as impediments to e-governance actualization are harmful to the success of ICT in public administration. Examples of such regulations include copy right law and administrative law. The participation information system (PIS) should be adequately applied (Dada, 2006; Charney, 2009).

2. **Inadequate Resources:** When we talk about inadequate resources in this aspect, we refer to both human skills and infrastructures. In ICT, infrastructures and human skills must always be available. A lot is wrong wherever one of these items is missing (InfoDev, 2002)
3. **Sourcing and Internal Collaboration:** There is need for collaboration, especially as government may not have all the required skills to handle its e-governance and e-administration needs. Inadequate sourcing and partnership has posed serious threats to the sustenance of e-administration in Nigeria.
4. **Inadequate institutional arrangements:** the Nigerian public sectors are not designed in a way that it can easily adapt to changes. There is an excessive case of bureaucratic bottle neck in the system and this affects the entire process of transformation.
5. **Issues in Public Private Partnership (PPP):** to fully transform the Nigerian public sector, adequate efforts should be made to partner with the private sector. It is no more news that the government is a bad manager. There, lessons should be learnt from the operations of the private sector organizations.

## CONCLUSION/RECOMMENDATIONS

The thrust of this chapter was a critical examination of the prospects and challenges of E-administration in Nigeria. It is a much reiterated fact in this chapter that ICT has become an integral part of our lives and society, and countries (both developed and developing) have made efforts to gain relative advantage of its application in both private and public sectors. On her part, Nigeria has embarked on several public sector reforms. Many of these reforms have been targeted at a creation of more enabling environments for ICT implementation in the public sectors. However, irrespective of this awareness and actions by the Nigerian Government, there is a lacuna between the 'ought' and the 'is' of E-administration in the country. Finally, factors like willingness to reform, availability of ICT infrastructure, and institutional ability to absorb and manage change are necessary for the successful implementation of E-public administration in Nigeria.

It is therefore recommended in this paper that the government should adopt and apply all the potentials of information and communications technology infrastructures to enable a more reliable service delivery in the system. As governments across Africa few other continents continue to exhibit poor management attributes, there is need to learn management styles from the private sector organizations. Finally, all the challenges of ICT implementation in administration, as listed in this study, should be carefully addressed.

## REFERENCES/ FURTHER READINGS

- Adegroye, G. (2006). Public service reform for sustainable development: The Nigerian experience. *Keynote Address as Director General, Bureau of Public Service Reforms, Commonwealth Advanced Seminar, Wellington, New Zealand*, 20 February, 3 March 2006.
- Ahmed, H et al, (2006). Measuring the impact of ICT on women in Bangladesh, Available at: <http://iec.cugh.Edu.cn/worldcomp>.

- Ashrafi, R., & Murtaza, M. (2008). Use and Impact of ICT on SMEs in Oman. *Electronic Journal Information Systems Evaluation*. 11(3), 125-138. Available at: <http://www.ejise.com/volume-11/volume11-issue3/ashrafiAndMurtaza.pdf> (October 10, 2009).
- Balogun M. J. (2003). "Making Performance Real – Customer-based Initiatives in the Public Sector in Africa". *African Journal of Public Administration and Management*, XIV(1&2). January and July 2003.
- Basu, S. (2004). E-governance and Developing Countries: An Overview. *International Review of Law Computers*, 18(1).
- Bature N. (2007). "Business communication: an introductory text". *Joyce Publishers, Kaduna*.
- Bovens, M., & Zouridis, S. (2002). "From Street Level to System Level Bureaucracies: How ICT is Transforming Administrative Discretion and Constitutional Control", *Public Administration Review*, 62(2).
- Brown, J. S., & Duguid, P. (2000). *The Social Life of Information*, Boston (MA): *Harvard Business School Press*.
- Bureau of Public Service Reforms. (2005). *Public service reform*. Abuja, Nigeria: *Bureau of Public Service Reforms*.
- Charney, C. (2009). Political will: what is it? How is it measured? Available online at: [www.charneyresearch.com](http://www.charneyresearch.com)
- Commonwealth Secretariat. (2016). *Key Principles of Public Sector Reforms: Case Studies and Frameworks*. 2016
- Dada, D. (2006). The failure of E-government in developing countries: A literature review. *The Electronic Journal on Information Systems in Developing Countries*, 26(7), 1-10.
- Drucker, P. (2001). *Eficiența factorului decizional*, București: *Editura Destin*.
- Economic Commission for Africa. (2007). *Public Sector Management Reforms in Africa*, Addis Ababa: *Economic Commission for Africa*.
- Fang, Z. (2002). E-government in Digital Era: concept, practice and development, international. *Journal of the Computer, the Internet and Management*, 10 (2).
- Fatile J. O. (2012). Electronic Governance: Myth or Opportunity for Nigerian Public administration? *International Journal of Academic Research in Business and Social Sciences*, 2(9), 122-140. Available online at: [www.hrmars.com/journals](http://www.hrmars.com/journals)
- Frost, C. A. (2018). What is virtual communication technology? Techwalla. Available online at: <http://www.techwalla.com>
- Heeks, R. (2001). *Understand E-Governance for Development*, I-Government Working Paper Series, Paper No. 11, Manchester, UK: IDPM, *University of Manchester*.

- Ifinedo, P. E. (2005). "E-government: Precursors, Problems, Practices and Prospects: A case of Nigeria". In Soliman, K.S (Ed.), *Proceedings of the 2004 International Business Information Management (IBIM) Conference 2004*. 1-10
- Ifinedo, P., & Uwadia, C. (2005). "Towards e-governance in Nigeria: Shortcomings, successes, swish or sink". In *Proceedings of the International Federation of Information Processing (IFIP) WG 9.4 Conference Abuja, Nigeria*. 75-86.
- ILO (2016). Challenges and opportunities of teleworking for workers and employers in the ICTs and financial services sectors. Sectoral policies department, Geneva. 1-8
- InfoDev. (2002). The E-government Handbook for Developing Nations. World Bank: Washington, November.
- Kauzya, K. (2003). "Reconstructing Public Administration in Post-Conflict Countries: Leadership and Institutional Capacity Implications", in UNDESA. *Leadership and Social Transformation in the Public Sector (New York)*.
- Kramer, W. J, Jenkins, B. & Katz, R. (2007). The role of the information and communication technology sector in expanding economic opportunity. *World opportunity series*. Harvard University. 4-47
- Lawanson O. I., & Adeoye, B. W. (2013). Public sector reforms: implications for human resource management in Nigeria. *British Journal of Arts and Social Sciences*. 13(2), 188. Available online at: <http://www.bjournal.co.uk/BJASS.aspx>
- Lu, J. (2001). Measuring cost/benefits of e-business applications and customer satisfaction", *Proceedings of the 2nd International Web Conference, 29-30 November, Perth, Australia*, 139-47
- Löfstedt, U. (2005). 'Assessment of current research and some proposals for future direction', *International Journal of Public IS*.
- Magbadelo, J. O. (2016). Reforming Nigeria's federal civil service: problems and prospects. *India Quarterly. Indian Council of World Affairs (ICWA)*. SAGE Publications. 72(1): 75-92
- Marume S. B. M. (2016). Meaning of Public Administration. *Journal of Research in Humanities and Social Science*. 2016; 4(6): 15-20. Online at: [www.questjournals.org](http://www.questjournals.org)
- National Information Technology Development Agency "NITDA" (2011). Retrieved January 5, 2011, from <http://www.negst.com/conference>. 2007
- Ndukwe, E (2002). Application of information technology. The Pointer. 16.
- Norris, D. F, Moon, M. J. (2005). Advancing e-government at the grass roots: tortoise or hare? *Public Administration Review*. 65(1), 64-75
- Olowu, D. (2010). Civil service pay reforms in Africa. *International Review of Administrative Sciences*. 76(4): 632-652.

- Omeire, E., & Omeire, C. (2014). New wine in old wine skin: an exploration of major constraints to e-government implementation in Nigeria. *European Scientific Journal*. 10(14)
- Ontario Trillium Foundation. (2005). Building Capacity, Granting for Impact: Research Report. Toronto, ON.
- Onuigbo, R. A., & Eme, O. I. (2015). Electronic governance & administration in Nigeria: prospects & challenges. *Arabian Journal of Business and Management Review (OMAN Chapter)*. 5(3),18-26.
- Oyediran O. (2007). Introduction to Political Science. *Ibadan: Oyediran Consult International*.
- Pathak, R. D., et al. (2008). "E-Governance, corruption and public service delivery: a comparative study of Fiji and Ethiopia", *JOAAG*. 3(1).
- Persson, G. (1995). Logistics process redesign: Some useful insights. *International Journal of Logistics*. 6 (1), 13-25.
- Rowley, J. (2006). An analysis of the e-service literature: towards a research agenda. *Internet Research*. 16(3): 339-359
- San-Jose, L., Ituralde, T., & Maseda, A. (2009). The influence of information communications technology (ICT) on cash management and financial department performance: An explanatory model.
- Shand, D. (1996). New public management: Challenges and issues in international perspectives. In Ladipo Adamolekun et al. (Eds.). *Civil service reform in francophone Africa. Proceedings of IBRD Workshop, Abidjan (IBRD, May 1997) 1996*; 9-17
- Shatne, K. (2001). "Constituent Relationship Management Systems: A Primer for Public Managers", *Government Finance Review*, 17(2).
- Symonds, M. (2000) "Government and the Internet: The Next Revolution", *Economist*. 355
- Tiamiyu, M. (2003). "Information and communication technology for social development: Issues, Options and Strategies". In Soala, EO (Ed). *Communication for Development Purposes*. Ibadan: Kraft Books Ltd.
- Tongia R, Subrahmanian E, and Arunachalam VS. Information and Communication Technology for sustainable development: Defining a global research agenda. Allied Publishing PVT. Ltd, India. 2004; 13-81.
- United Nations (2005). Global e-government readiness report – from e-government to e-inclusion, department of economic and social affairs, UN, New York, 2005
- Van der Vost, J., Beulens, A., VaBeek., P. (2005). Innovation in Agri-Food Systems, Wagenlingen Academic Publishers, Wagenlingen, Chapter 10. 245-292.

---

Wimmer, M., Codagnone, C., & Janssen, M. (2008). "Future of e-government research: 13 research themes identified in the eGovRTD2020 project". *Proceedings of the 41st Hawaii International Conference on System Sciences, USA*.