

THE CONTRIBUTORY EFFECTS OF SOCIO-CULTURAL FACTORS ON E-GOVERNMENT ADOPTION AMONG NIGERIANS

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ABSTRACT: *The aim of this study was to examine the extent to which socio-cultural factors, specifically, age, gender, and ethnic background influence the adoption of e-government services by Nigerians. Three aspects of the program (e-government) were identified viz. openness, perceived ease of use and perceived usefulness. The methodology of this research is quantitative research based on a survey method using questionnaire as a data collection technique. The findings showed that age, gender and ethnic background all affect the satisfaction and adoption of e-government in Nigeria. It is believed that policy makers will find it helpful if they knew citizens' perceptions toward e-government services.*

KEYWORDS: E-government, openness, ease of use, usefulness and adoption.

Introduction

E-government is the use of internet technology to exchange information, transact businesses and provide services for the citizens and other arms of government. Specifically, it involves the use of information and communication technologies (ICTs) by the government to serve its populace in a manner that accountability, openness, and mutual interaction are ensured and sustained. Impliedly, the policy is intended to involve the populace and the government in a relationship that guarantees the recognition and importance of citizens as well as their inputs in policy formulation and implementation.

According to Heeks (2001), e-government is integrated governance that enables the integration of both the processing of information by people and the use of communication technologies in achieving the objectives of governance. Wimmer and Traunmuller (2001) pointed out that the main objectives of e-government encompass: (i) restructuring administrative functions and processes, (ii) reducing and overcoming barriers to coordination and cooperation within the public administration, and (iii) the monitoring of government performance. It also has the potential of transforming public services, as well as, re-engineering the fundamental relationship between government and citizens (Watson & Mundy, 2001).

Adeyemo (2010) notes that e-government may be applied in order to improve internal efficiency and the delivery of public services or processes of democratic governance. It brings about cheap and fast-delivered services for the population (Ifinedo, 2004; Navarra & Cornford, 2003), brings

about socio-economic and political reformations for developing countries (Breen, 2000; InfoDev, 2004). Evidently, with e-government, citizens are well-informed and are able to participate in governance as it provides greater access to government's information and activities. Kamar and Ongo'ndo (2007) claim that e-government provides the following benefits:

1. Government's information and programs are circulated fast and easily to a larger audience as the general public can always access such through electronic media and ICTs.
2. Transparency and accountability are increased thereby leading to a reduction in corruption rate.
3. Every individual irrespective of physical location and disability has access to information and the bottleneck of the bureaucracy experienced in government is removed.
4. The exchange of information as well as the unification of related services is enhanced between ministries and agencies. Notably, these are done at a reduced cost of transaction, time, space and manpower.

Much as the policy is hailed and being implemented globally to encourage ICTs awareness and usage amongst citizens, some scholars have observed that not all e-government projects and programs across the globe are successful. For instance, Heeks (2002) notes that especially, in developing and transitional countries, an estimated 15 percent of e-government projects are successful, 50 percent are partial failures while the remaining 35 percent are total failures. This may be due to the fact that the theories and policies that are designed in developed countries are being employed in developing countries whose cultural values and social backgrounds are completely different. Indeed, Bardasi and Wodon (2006) noted that accessibility is not the only issue for consideration in determining e-government's success but as well, factors such as culture and gender responsiveness must be equally considered.

Observably, across the globe, e-government is being implemented as if in a single universal setting but the fact is that the culture and social framework of every country differs from one another, and this may be one of the reasons for the huge failures of the program, especially, in a developing country like Nigeria. The aim of this study therefore, is to examine the extent to which socio-cultural factors such as age, gender and culture influence the adoption (consumption) of the services by Nigerians

Context of e-government in Nigeria

The Federal Republic of Nigeria comprises of 36 states and the Federal Capital Territory, Abuja. The country is located in West Africa and shares borders with Niger in the north, Chad and Cameroon in the east, the Republic of Benin in the west, and its coastline on the Gulf of Guinea.

Presently, it has 29 political parties but only 2 of them are popular nationally. Its legal system is based on legal tradition and the English Common Law as a result of colonization by the British.

According to the World Bank (2014), Nigeria is an oil-run economy with a GDP per capita of USD 3,006 as at 2013. By classification, it is a developing country. It has a population of 173.6 million with more than 250 ethnic groups and its literacy rate is 61.3%. The official language is English but Hausa, Igbo and Yoruba, being the major ethnic groups are also widely used as means of communication. With such above-average literacy level, one would expect the use of ICTs such as telephones, computers, internet, e-mail and so on to be high but the contrary is the case. Scholars have observed that the use of ICT is low in the country (Ifinedo, 2005; ITU, 2004).

In the case of e-government, Nigeria has a development index of 0.2929 and ranked 141 out of 193 countries, which is below the United Nations (UN) standard measure of development at an index of 1.62 (Ifinedo, 2005; UN-ASPA, 2002). Although, the use of ICTs dates back to colonial era (Ifinedo, 2004), however, the appearance of e-government in the country can be traced to the arrival of democratic government in 1999 when government's website was developed (Choudrie, Umeoji & Forson, 2012). In order to effectively implement the program, the Federal Government established the National Information Technology Development Agency (NITDA) in 2001 to create an outline for the planning, research, development, regulation, application, direction, monitoring and appraisal of information technology systems and activities in Nigeria.

Basically, the role of NITDA is to build information technology in the country via regulatory standards and policies and to serve as a clearing house for all information technology projects and infrastructure development in Nigeria. The National eGovernment Strategies (NeGst) was thereafter created by the Federal Government through NITDA in 2004 with the instruction to facilitate, drive and implement the e-government program under a Public Private Partnership (PPP) pattern. The PPP pattern is an arrangement between the Federal Government (represented by NITDA), Strategic and Technology partners, and Private and Financial Investors.

As posted on the website of NeGst, e-government goes beyond technology. It also requires strong human, technological, infrastructural, organizational, institutional and legal structure (NeGst, 2015). Certainly, citizen requirements are strategic aspect of e-government and the main concern is to change the way people, businesses, organizations, tourists and so on relate with government. Cook (2000) argues that it is very reasonable to determine what citizens want and expect from their government and also what they do not want and what they are concerned about. This is a very logical opinion. If the intention of governments all over the world was to develop and to implement strategies for the delivery of resourceful and quality services to citizens, then it is imperative that they (governments) examine how the public feel about the idea and digital content of e-government beyond other things that exist such as its financing, content and responsiveness (West, 2004; Borrás, 2004). Similarly, Carter and Belanger (2003) reveal, in a survey that was administered by

the International City Management Association (ICMA) to Chief Administrative Officers in government agencies that 74.2% of the agencies developed websites without conducting a survey to determine what the citizens wanted on the websites.

Theoretically, e-government should be built on a dual relationship between the public and governments but the socio-cultural conditions in the developing countries like Nigeria is different from the developed countries where e-government originate. It has been argued that ICT will thrive better in cultures that have a systematic view of the world unlike in the developing countries where informality thrives (Ifinedo, *ibid.*). According to Heeks (*ibid.*), e-government implementation in Nigeria has failed totally or partially due to “people” factors since the government did not have a thorough understanding of the society. The culture of self-motivation among public officers in Nigeria, the tendency to over-politicize decision making, secrecy and bureaucratic complexity as well as internal resistance and culture of corruption are all detrimental to the implementation of e-government initiatives in Nigeria (Thisday, 2002; Thomas, LeBlank, Mbarika & Meso, 2004).

Some scholars have observed that gender and culture have been studied extensively in many developed countries (Harrison & Huntington, 2001; Stedham & Yamamura, 2004; Choudrie & Lee, 2004; Evans & Yen, 2005) but only few researches have been conducted in the developing countries (Kasekende, Oshikoya, Ondiege & Dasah, 2006). APC-WNSP (2002) describes gender as “a concept that suggests the cultural and social constructs that each society assigns to behaviors, characteristics and values attributed to men and women, reinforced by symbols, laws and regulations, institutions, and perceptions.” In other words, gender does not simply refer to the biological traits that men and women are born with, rather, it explains how the notion of femininity and masculinity are hypothesized (Gillard, Howcroft, Mitev & Richardson, 2008).

According to Trauth (2002), gender-based disparities occur in Information Technology (IT) career choices. Unfortunately, this is rarely considered as an independent factor in socio-cultural studies of IT perspective (Ali, 2011). Really, examining the gender and cultural perspectives is important for understanding e-government development in Nigeria (Choudrie, Umeoji & Forson, *ibid.*) since such could be some of the contributing factors of e-government’s measured diffusion in Africa (Bagchi, Udo & Peeter, 2007)

It is in line with this argument that this study has set out to investigate the socio-cultural factors that may be affecting the adoption of e-government in Nigeria.

Objectives of the study

Alaa-Aldin Abdul Rahim (2013) notes that research on users’ satisfaction of e-government have been largely carried out in developed countries but to a lesser extent in developing countries. In view of such observation, this research work sets out measure users’ awareness and adoption of e-government in developing countries. Specifically, it assessed empirically, Nigerians’ opinions and

perceptions as a yardstick for determining whether there is (or not) a good practice of e-government in Nigeria. The study attempts to determine the extent to which Nigerians adopt e-government based on three aspects of the program namely: openness, ease of use and usefulness.

Openness was interpreted to mean the probability of obtaining government's information and the simplicity with which citizens can find, process and use such information. Really, ability to access information empowers the citizens as it ensures service delivery. It also gives citizens the right to hold governmental agencies and institutions accountable for service delivery. Using the Technology Acceptance Model (TAM) that was developed by Fred Davis in 1989 to explain how users come to accept and use a technology, perceived **ease of use** suggests "the extent to which a person believes that using a particular system would be free from effort" while perceived **usefulness** means "the degree to which a person believes that using a particular system would enhance his or her job performance." Lee, Kozar and Larson (2003) considered TAM as one of the most influential and commonly employed theories for explaining an individual's acceptance of information systems because it suggests a small number of factors – perceived ease of use and perceived usefulness – which jointly account for usage. Absolutely, perceived ease of use and perceived usefulness remain significant determinants of behavioral intention over time, as well as the significant influence of perceived ease of use on perceived usefulness (Venkatesh & Morris, 2000; Kim & Malhotra, 2005; Wangpipatwong, Chutimaskul & Papisatorn, 2008).

Unarguably, these three aspects of e-government are very important as effective e-government will imply better information systems, more informed citizens and empowerment to realize the benefits of governance. The objective of this study is to examine the extent to which Nigerians understand and actively embrace e-government services based on the identified aspects.

Adoption suggests the acceptance and utilization of ICT to increase citizens' involvement with government. In other words, it denotes the extent to which citizens feel belonged in the act of governance and whether they are being consulted and if their opinions count in the decision-making process.

RESEARCH METHOD

Instrument

Based on available literatures on e-government and IT adoption (Saxena, 2005; Garson, 2005; Reddick, 2005; Murad, 2010; Kolsaker, Ailsa, Lee-Keller & Liz, 2008; Shafi, & Vishanth, 2009; Singh, Gurmeet, Pathak, Naz & Rafia, 2010), a questionnaire was developed to examine how the perceptions of citizens toward e-government services might be influenced by their socio-cultural factors such as gender, age and ethnic background. The questionnaire, which comprises 27 questions, was divided into three sections. The first section asked respondents about their demographic features such as age, gender, current academic status, occupation and ethnic origin.

The second and third sections of the questionnaire were formed based on four dimensions of Hofstede's framework for cultural analysis and six aspects of gender studies framework (Hofstede, 2005). The items in these sections were designed in Likert's 5-point response format that ranged from strongly disagree (1), disagree (2), undecided (3), agree (4) to strongly agree (5). Each respondent marked (√) either of the response format (as appropriate) for each statement. This allowed the responses to be grouped and analyzed statistically using SPSS V15.

After the questionnaire was formed, a pilot study was carried out to ascertain its clarity. This was necessary to improve the instrument and as a result, two items were removed while another three were reworded to ensure understanding and clearness. A Cronbach's coefficient alpha that was computed to determine the reliability of the items yielded 0.74.

Participants

This research work was conducted in Lagos state, Nigeria in April 2014 and it took five weeks to complete. Since Boko Haram, an Islamic terrorist group is currently carrying out nefarious attacks on the northern part of the country, it was considered dangerous for this researcher to travel to that part of the country presently and since, due to its socio-economic level of development, all ethnic groups in Nigeria traditionally reside in different parts of Lagos, it was considered appropriate to conduct the survey in the state. For instance, Hausas mainly reside in Agege area; Igbos in Ajegunle area and Yorubas in Mushin. Besides, this researcher resides in Ogun State, which is a neighboring state to Lagos and therefore easily accessible.

Table 1: Demographic analysis of the respondents

Demography	N = 270	%
Gender: Male	155	57.4
Female	115	42.6
Age: 20 – 30	62	22.9
31 – 40	70	25.9
41 – 50	79	29.3
50 & above	59	21.9
Ethnicity: Hausa	90	33.3
Igbo	90	33.3
Yoruba	90	33.3

In all, two hundred and seventy respondents were randomly chosen for this study. Specifically, ninety respondents were randomly chosen from each ethnic locality and they comprise of male and female. Precisely, out of the 90 people that were studied among the Hausas, 58 (64.4%) of

them were males while 32 (35.6%) of them were females. 49 (54.4%) of this population claimed awareness about ICTs but only 31 (34.4 %) of them claimed to have used e-government services. 90 people were also studied among the Igbos. 49 (54.4%) of them were males while 41 (45.6%) were females. 74 (82.2%) of these people are aware of and had used e-government services. Out of the 74, 46 (62.2%) of them were males while 28 (37.8%) of them were females. Among the Yoruba respondents, 48 (53.3%) of them were males while 42 (46.7%) were females. 79 (87.8) claimed to have knowledge about ICT and 64 (81%) of them had used e-government services.

Out of the 270 respondents, 263 completed the questionnaire, which makes a response rate of 97.4%. Their mean age in years was 34.3. The participants were eventually grouped into three: (1) those who are aware of and have used e-government services; (2) those who are aware of the program but have not used it and; (3) those that do not have any knowledge about e-government.

Data Analysis

The respondents' perceptions based on the three identified aspects of e-government represent the dependent variables while the socio-cultural factors, specifically, age, gender and ethnic background were chosen as independent variables.

The means, reliability assessment, and t-test were determined using SPSS statistical package. The level of significance was set at the usual 0.05 and the Scheffe method of multiple comparisons was used to determine the significantly differing categories for each independent variable, that is, gender, age and ethnic background for post hoc analysis.

Research Questions

As stated earlier, this research work intends to examine how socio-cultural factors might be responsible for how Nigerians perceive e-government services and this perception covers the three identified dimensions of e-government, that is, openness, ease of use and usefulness. Users' adoption of e-government is examined in terms of three categorical independent variables, which are gender, age and ethnic background. The following questions will be answered in order to achieve the objective of this study:

1. Does age affect the level of adoption of e-government with the identified three dimensions?
2. Does gender affect the level of adoption of e-government as represented by the three dimensions?
3. Does ethnic background affect the citizens' adoption of e-government as signified by the three aspects?

FINDINGS

The statistics gathered from this study showed a high usage of e-government services among Yoruba (81%) and Igbo (82.2%) ethnic groups but comparably low among the Hausas (34.4%). Further, it was revealed that 64.4%, 54.4% and 53.3% of the Hausa, Igbo and Yoruba respondents were males while females constitute 35.6%, 45.6% and 46.7% of the Hausa, Igbo and Yoruba respectively.

With regard to the first question, the respondents were classified into four groups (as shown in table 2) and one-way analysis of variance was performed.

Table 2: One way analysis of the mean difference in users' satisfaction by age

E-government dimensions	20 – 30	31 - 40	41 – 50	50 & above	F
	I	II	III	IV	
Openness	1.99	2.21	2.65	3.09	10.32*
Ease of use	2.01	2.24	3.00	3.42	11.76*
Usefulness	1.74	2.08	2.60	3.05	9.62*
N	32	67	38	22	

* $\mu \geq 0.05$, Scheffe M.C. for significantly differing groups. Openness: (I-II), (I-III), (I-IV). Ease of use: (I-II), (I-III), (I-IV). Usefulness (I-II), (I-III), (I-IV).

Table 2 above shows that there are significant differences in the level of adoption based on the ages of the respondents on all identified aspects of e-government. To determine which groups differed significantly, Scheffe multiple comparison was performed. The results revealed that the respondents aged above 50 years are more satisfied compared with respondents who are less than 50 years. This means that there are positive correlation between the age of the respondents and the level of satisfaction with e-government, that is, the higher the age of the respondents, the positive satisfaction towards these dimensions of e-government.

Table 3: T-test for users' satisfaction with e-government by sex

E-government dimensions	Sex	No	Mean	SD	T Value
Openness	Male	82	2.22	1.02	2.68*
	Female	87	1.82	0.88	
Ease of use	Male	95	2.18	0.96	2.84*
	Female	74	1.70	0.87	
Usefulness	Male	95	2.11	1.12	2.91*
	Female	74	1.75	0.92	

$\mu \geq 0.05$

To answer the second question, a t-test was performed to ascertain whether gender affects the citizens' preference for e-government services. The test reveals that there are significant differences in all three dimensions of preference between the sexes. As reflected in the table, the means for males are significantly higher than that of the females.

Table 4: One way analysis of the mean differences in users' satisfaction according to ethnic group

E-government dimensions	Yoruba I	Igbo II	Hausa III	F
Openness	3.01	2.58	2.24	9.48*
Ease of use	2.73	2.32	1.93	8.37*
Usefulness	2.34	1.92	1.68	6.24*
N	64	74	31	

* $\mu \geq 0.05$, Scheffe M.C. for significantly differing groups. Openness: (I-II), (I-III). Ease of use: (I-II), (I-III). Usefulness (I-II), (I-III).

Pertaining to the last research question of whether ethnicity of the respondents influences their attitude towards the value of the three aspects of e-government, one-way analysis of variance was performed. The respondents were grouped into three: Yoruba, Igbo and Hausa, which are the three major ethnic groups in Nigeria. Table 4 above shows that the perceptions of Yoruba natives toward the three aspects of e-government are greater compared to Igbo and Hausa natives. The table reveals statistically differences in the means' value in favor of the Yoruba natives compared to the other two groups. The Scheffe multiple comparisons indicates that in all the identified dimensions of e-government, there are differences between the three ethnic groups and in favor of group I (Yoruba) compared to II (Igbo), and I and II compared to III (Hausa).

Table 5: The overall mean value of the respondents to the three dimensions of e-government

E-government dimensions	Mean Ranking
Openness	2.27
Ease of use	2.21
Usefulness	2.02

1-2 Unfavorable; 2-3 Less Favorable; 3-4 Favorable; 4-5 More Favorable

DISCUSSION

The objective of this study was to investigate the influence of three independent variables, that is, age, gender and ethnic background on the level of adoption of e-government services by Nigerians. The study identified three aspects of citizens' perception of e-government viz. openness, ease of use and usefulness. Openness was defined as the real probability of obtaining government information and the extent to which government website portals can help the public to find, process

and use information. Ease of use means the extent to which an individual believes that using a particular system (for, example, government portals) would relieve him or her of stress and at reduced costs. Usefulness refers to the level which a person thinks that using a certain service would enhance his or her performance and the realization of his or her goals.

The overall mean value of the respondents' perceptions toward the three dimensions of e-government is less favorable. The mean values for the three dimensions range between 2.02 and 2.27. This implies that the introduction of a new system (such as e-government or e-governance) may pose a number of challenges to the populace and government. In Nigeria, citizens are practically passive in the act of governance as the governments operates authoritarian role in the economic and political life of their citizens. Most citizens are uninformed about government operations and have minimal understanding of how decisions are made. This lack of understanding may be the reason why most of the respondents in this study have been less favorable to the three dimensions of e-government.

The results of this study also showed that there are significant differences between men and women in all three aspects of e-government identified in this study. Male respondents indicated more favorable value of e-government measured by those three aspects compared to female respondents. The difference might be due to high expectations of men as well as the cultural and political environment, which restricts female perceptions and aspirations compared to men. These findings conform to the conclusions of Choudrie, Umeoji and Forson (2012) and Alaa-Aldin Abdul Rahim (2013).

Regarding the age factor, the results clearly shows that citizens who are older (40 years and above) are more satisfied on the three aspects of e-government. Compliance nature, maturity and life experiences may be responsible for such liking among the elderly respondents. Apparently, these factors will make elderly citizens to be more complacent and compliant with government's decisions. Another reason for such satisfaction among the elderly citizens may be due to the fact that generally, young citizens have more penchants for internet facilities, consequently, they are more exposed to the government website problems, which may be the reason why they are less satisfied, compared to the elderly population.

About ethnic grouping, the results show significant differences among respondents' perceptions of the three identified areas. Yoruba folks showed favorable attitude towards the three dimensions compared to respondents of Igbo and Hausa origin. This might be attributed to general satisfaction of Nigerians in the western part of the country (Yoruba) with the presence and performance of government in terms of socio-economic attainments compared to other parts of the country. Another reason for such difference may be due to the fact that overall, level of literacy and schooling is higher in the western part of the country compared to other parts.

CONCLUSION

The aim of this study is to investigate how Nigerians' perceptions of e-government influence its adoption. The study presented its findings from data analysis of the survey that was conducted in Lagos, Nigeria to examine citizens' preference with three dimensions of e-government. The three dimensions are: openness, ease of use and usefulness.

The study investigated the demographic differences in terms of age, gender and ethnic background as socio-cultural indicators by employing the means, reliability assessment, t-test and Scheffe method of multiple comparisons and the results indicate that there are significant differences in level of adoption based on the identified three dimensions of e-government.

The study has empirically revealed that socio-cultural factors, specifically, age, gender and ethnicity affect consumers' perceptions of the e-government services that are provided. For that reason, governments (and their agencies) websites must be designed in a way that the varied nature of the public would be addressed. Emphatically, government needs to understand the public's attitude to e-government services and their readiness to adopt it.

REFERENCES

- Adeyemo, A.B. (2010). E-government implementation in Nigeria: An assessment of Nigeria's global e-gov ranking. *Journal of Internet and Information System*, 2(11), 11-19.
- Alaa-Aldin Abdul Rahim, A.A. (2013). Citizens' perceptions towards e-Governance: Field Study. *International Journal of Social Education, Economics and Management Engineering*, 7(9), 1304-1312.
- Ali, R. (2011). E-government adoption in developing countries: The case of Indonesia. *Journal of Emerging Trends in Computing and Information Sciences*, 2(5), 228-236
- Association for Progressive Communications – Womens' Networking Support Program [APC-WNSP] (2002). Gender evaluation methodology for internet and ICTs: Gender Analysis. http://www.apcwomen.org/gem/gend_analysis.htm. Retrieved on April 26 2014.
- Bagchi, K., Udo, G. & Peeter, K. (2007). Global diffusion of the internet XI: The internet growth in Africa: Some empirical results. *Communications of the Association of Information Systems*, 19, 325-351.
- Bardasi, E. & Wodon, Q. (2006). Measuring time poverty and analyzing its determinants: Concepts and application to Guinea. In Mark C. Blackden & Quentin Wodon (eds.) *Gender, time use and poverty in sub-Saharan Africa*. World Bank working paper No. 73, 71-95.
- Borras, J. (2004). International technical standards for eGovernment. *Electronic Journal of eGovernment*, 2(2),75-80.
- Breen, J. (2000). At the dawn of e-government: The citizen as customer. *Government Finance Review*, 16(5), 15-20.
- Carter, L., & Belanger, F. (2003). Diffusion of innovation and citizen adoption of e-government. The 5th International Conference on Electronic Commerce (ICECR-5). Pittsburg, PA.
- Choudrie, J. & Lee, H.J. (2004). Broadband development in South Korea: Institutional and cultural factors. *European Journal of Information Systems*, 13(2), 103-114.

- Choudrie, J., Umeoji, E. & Forson, C. (2012). Diffusion of e-government in Nigeria: A qualitative study of culture and gender. University of Hertfordshire Business School Working Paper. <https://uhra.herts.ac.uk/dspace/handle/2299/5549>
- Cook, M.E. (2000). What citizens want from e-government: Current practice research. Center for Technology in Government, University of Albany/Suny, Albany, New York.
- Davis, F. (1989). Perceived usefulness, perceived ease of use, and user acceptance of Information Technology. *MIS Quarterly*, 13, 318-341.
- Evans, D. & Yen, C.D. (2005). E-government: Analysis for the implementation: Framework for understanding culture and social impact. *Government Information Quarterly*, 22, 354-373.
- Garson, G.D. (2006). Public information technology and e-governance: Managing the virtual state. Jones & Barlett Publishers, Canada.
- Gillard, H., Howcroft, D., Mitev, N. & Richardson, H. (2008). Missing women: Gender, ICTs and the shaping of the global economy. *Information Technology for Development*, 14, 4.
- Harrison & Huntington (2001). Culture matter: how values shape human progress. Basic Books, New York.
- Heeks, R. (2001). Understanding e-governance for development. i-working paper series. Institute for Development Policy and Management, University of Manchester, UK.
- Heeks, R. (2002). E-government in Africa: Promise, and practice. Institute for Development Policy and Management. Paper No. 13, University of Manchester, UK.
- Ifinedo, P.E. (2004). E-government – Precursors, problems, practices and prospects: A case of Nigeria. In proceedings of the 2004 International Business Information Management (IBIM) conference, Amman, Jordan.
- Ifinedo, P.E. (2005). Measuring Africa's e-readiness in the global networked economy: A nine-country data analysis. *International Journal of Education and Development using ICT*. <http://ijedict.dec.uwi.edu/viewarticle.php?id=12>. Retrieved November 3rd 2014.
- InfoDev [Information for Development Program]. (2004). E-government handbook for developing countries. <http://www.infodev.org>. Retrieved March 2, 2004
- International Telecommunications Union [ITU]. (2004). Geneva, Switzerland. <http://www.itu.int>. Retrieved August 17th 2014.
- Kamar, N. & Ongo'ndo, M. (2007). Impact of e-government on management and use of government information in Kenya. World Library and Information Congress: 73rd IFLA general conference and council, Durban, South Africa.
- Kasekende, L.A., Oshikoya, T.W., Ondiege, P.O. & Dasah, Z.B. (2006). Competitiveness and investment climate in SENE economies. African Development Bank.
- Kim, S.S. & Malhotra, N.K. (2005). A longitudinal model of continued IS use: An integrative view of four mechanisms underlying post-adoption phenomena. *Management Science*, 51(5), 741-755.
- Kolsaker, A., Ailsa, D., Lee-Kelley, R. & Liz, M. (2008). Citizens' attitude towards e-governance: A UK study. *International Journal of Public Sector Management*, 21(7), 723-38.
- Lee, Y. Kozar, K.A. & Larsen, K.R.T. (2003). The Technology Acceptance Model: Past, present and future. <http://cais.isworld.org>. Retrieved April 12 2014.
- Murad, M.H. (2010). Improving transparency through right to information and e-governance: A Bangladesh perspective. *Open Government: A journal on freedom of information*, 6(1), 1-18.

- National eGovernment Strategies [NeGSt]. (2015). Our operational framework. <http://www.negst.com.ng>. Retrieved February 5th 2015.
- National Information Technology Development Agency [NITDA]. (2014). Our mission and vision. <http://www.nitda.gov.ng>. Retrieved January 17th 2015.
- Navarra, D.D. & Cornford, T. (2003). A policy making view of e-government innovations in public governance. In proceedings of the 9th Americas conference on information systems.
- Ndou, V. (2004). E-government for developing countries: Opportunities and challenges. *The Electronic Journal of Information Systems in Developing Countries*, 26(1), 1-24.
- Reddick, C.G. (2005). Citizen interaction with e-government: From the streets to servers? *Government Information Quarterly*, 22, 38-57.
- Saxena, K.B.C. (2005). Towards excellence in e-governance. *International Journal of Public Sector Management*, 18(6), 498-513.
- Shafi, Al-Shafi & Vishanth, W. (2009). Factors affecting e-government adoption in the state of Qatar. *European and Mediterranean Conference on Information Systems*. Abu Dhabi, UAE.
- Singh, Gurmeet, Pathak, R.D. Rafia & Naz (2010). E-governance for improved public sector service delivery in India, Ethiopia and Fiji. *International Journal of Public Sector Management*, 33(3), 254-275.
- Stedham, E.Y. & Yamamura, H. (2004). Measuring national culture: Does gender matter? *Journal of Women in Management Review*, 19(5), 233-243.
- Thisday Newspaper online (2002). There'll be resistance to e-government in Nigeria. <http://www.thisdayonline.com/archive/2002/03/07/20020307bus12.html>. Retrieved July 5 2004.
- Thomas, C.A., LeBlanc, P.D., Mbarika, V.W. & Meso, P. (2004). E-government in Africa: A new era for better governance in sub-Saharan Africa. In proceedings of the Information Resource Management Association (IRMA 2004) conference. New Orleans, LA., USA.
- Trauth, E.M. (2001). The choice of qualitative methods in IS research, Article in qualitative research in IS: Issues and trend. Idea Group Publishing.
- UN-ASPA (2002). Benchmarking e-government: A global perspective: Assessing the progress of the UN member states (United Nations, Division for Public Economics and Public Administration, and the American Society for Public Administration). New York.
- Venkatesh, V. & Morris, M.G. (2000). Why don't men ever stop to ask for directions? Gender, social influence and their role in technology acceptance and usage behavior. *MIS Quarterly*, 24(1), 115-139.
- Wangpipatwong, S., Chutimaskul, W. & Papsatorn, B. (2008). Understanding citizen's continuance intention to use e-government website: A composite view of Technology Acceptance Model and computer self efficacy. *The Electronic Journal of e-Government*, 6(1), 55-64.
- Watson, R.T. & Mundy, B. (2001). A strategic perspective of electronic democracy. *Communications of the ACM*, 44(1), 27-36.
- West, D.M. (2004). E-government and the transformation of service delivery and citizen attitudes. *Public Administration Review*, 64(1).
- Wimmer, M. & Traunmuller, R. (2001). Trends in electronic government: Managing distributed knowledge. In the proceedings of the 11th International workshop on database expert systems applications, Springer, New York.

World Bank Group (2014). Report on Nigeria. <http://www.worldbank.org>. Retrieved November 3, 2014.