academicresearchJournals

Vol. 6(7), pp. 213-221, October 2018 DOI: 10.14662/IJALIS2018.062

Copy © right 2018

Author(s) retain the copyright of this article

ISSN: 2360-7858

http://www.academicresearchjournals.org/IJALIS/Index.htm

International Journal of Academic Library and Information Science

Full Length Research

Awareness and perception of e-governance information portal by undergraduates of University of Lagos, Nigeria

Olawale Oyewole^{1*}, Oluwatoyin Omotayo² and Benjamin Nwobu³

¹ Department of Library, Archival and Information Studies, University of Ibadan, Nigeria Email of corresponding author: oyewolebaba01@yahoo.com

Accepted 16 October 2018

E-governance information portal is the platform that makes it possible for government to render services electronically. E-governance promotes efficiency, transparency and accountability of government functions, convenient and faster access to government services, improved democracy and lower costs of administrative services. However, there seems to be a dearth of literature on egovernance within the Nigerian context as most of the studies that have been carried out on citizens' awareness and perception of e-governance were done outside the African continent and majority did not study undergraduates. This makes this study imperative. Descriptive survey research design was adopted for the study and the study population consisted of 25095 undergraduates of the University of Lagos, Nigeria. The multistage random sampling technique was used to select a sample size of 232 and the questionnaire was the instrument used for data collection. Findings showed that the level of awareness of e-governance information portal of Lagos State (Citizens Gate App) by majority of the respondents was low as indicated by close to half of the undergraduates 109 (48.4%). Majority of the respondents had a positive perception of the e-governance information portal of the Lagos State Government. A significant number of the respondents (mean=3.06) noted that the electronic application (app) could bring governance close to the people. The e-governance information portal will not be able to assist the government in providing dividends of democracy if awareness about the existence of this portal is low and if the citizens do not perceive the portal as useful. It was recommended that the individuals in charge of the Citizens Gate App need to intensify their awareness creation.

Keywords: Awareness, perception, e-governance, undergraduates, Nigeria

Cite This Article As: Oyewole, O., Omotayo, O., Nwobu, B. (2018). Awareness and perception of egovernance information portal by undergraduates of University of Lagos, Nigeria. Inter. J. Acad. Lib. Info. Sci. 6(7): 213-221

INTRODUCTION

Societies are organised and coordinated by the government. Without governments, anarchy and pandemonium will reign supreme in the society. The actions and inactions of governments have implications

on different segments of the society. In order to improve the lot of the people, government need to continue to look for ways to provide services. Governments in both developed and developing countries strive to make

Department of Library, Archival and Information Studies, University of Ibadan, Nigeria Federal College of Education (Technical) Lagos, Nigeria

massive financial and political commitments towards change initiatives that are enabled by advanced Internet and communication technologies (ICTs) (Fountain, 2001). Broadly, these initiatives have led to the adoption and use of advanced ICTs in public administration by government organisations at all jurisdictional levels are grouped under the umbrella term "e-government" (OECD, 2003). The significant increase in the availability and use of government information and services online is a testament to the importance of e-government (Muir & Oppenheim, 2002).

E-governance is the commitment to utilise appropriate technologies to enhance governmental relationships, both internal and external, in order to advance democratic expression, human dignity and autonomy, support economic development and encourage the fair and efficient delivery of services (Gupta & Jain, 2010). The authors also noted that e-governance offers a large opportunity for serving the citizens in better way as ICT promises lots of advantages in governance process but at the same time require efforts for changing process, building infrastructures, capacity enhancement etc. According to Sanjay and Sarangdevot (2011), egovernance can also be viewed as the application of electronic means in the interaction between government and citizens and government and businesses, as well as in internal government operations to simplify and improve democratic, government and business aspects of governance.

The most important anticipated benefits of egovernance in developing countries include improved efficiency, increase in transparency and accountability of government functions, convenient and faster access to government services, improved democracy and lower costs of administrative services. The aim is to also use the internal running and linkages among various government departments, ministries and agencies. In order to ensure that the citizens have access to the various components of e-governance, information portals are created. In this regard, e-government information portals can fundamentally be considered as a governmental innovation and evolutionary phenomenon for transforming government organisations into more citizen-centric and efficient organizations. E-government information portals ensure that the citizens have access to the activities of the government around the clock as an integrated and single entity (Stauffacher, 2002).

Abasilim, Gberevbie and Ifaloye (2017) echoed the views of scholars that e-governance could be carried out on a basis of; Government-to-Citizens (G2C), Government-to-Business (G2B), Government-to-Government (G2G) AND Intra-government. G2C provided the platform whereby the citizens can easily access needed information about governance services. G2B enables the government to communication with those in the private sector of the economy. G2G focuses

on exchange of information among those at the governance level in the local and state and federal. As for intra-government, it relates to the exchange of information among the different departments in each level of governance.

In Nigeria, the government of Lagos State which is the economic nerve centre of the country has launched an egovernment information portal with a view to render egovernance services in the state. The portal is called the Citizens Gate App, aligning more with the G2C mode. During the launch and flag-off ceremony of the Citizen's Gate platform, the present Governor of the State, Akinwunmi Ambode noted that the platform was created to serve the people of Lagos better and interact with them more, in order to deliver more dividends of democracy. This initiative is very laudable, because as a state that prides itself as the centre of excellence, new innovations and concepts need to be constantly developed to match the status. Due to the massive amount of internally generated revenue in the state, the government of Lagos State seems to have the financial support that is needed to keep this laudable idea running.

It is expected that all residents of Lagos state become aware of this electronic platform that should bring governance close to them. Undergraduate students studying in Lagos State are supposedly an enlightened class of people who should be aware of the egovernance information portal. A study of this nature that focuses on them could present findings that could be used to improve the use of the e-governance information portal by other target groups in the state. Most undergraduate students are technologically savvy and as such do not have challenges in using technology in any way. Awareness about this e-governance information portal by the undergraduates will create an avenue whereby the platform can be well utilised by them. High level of awareness of the e-governance portal by the undergraduates can be beneficial as they can access information scholarships. on government entrepreneurship training opportunities, financial aids and the likes. They can also use this platform to express their concerns to the government.

However, the success of e-governance initiatives is dependent not only awareness of citizens, but also on their perception. Thus, if the undergraduates perceive the e-governance platform as beneficial, they might be willing to use the platform for various purposes and even share their experiences with their followers on the social media. Based on this, awareness and perception are critical to the use of the e-governance information portal by the undergraduates. It is not empirically known whether the citizens, undergraduates in the context, are aware of e-governance platform created in Lagos State, Nigeria and whether they have a favourable perception. Therefore, the aim of this study is to examine the awareness and perception of e-governance information portal by

undergraduate students in University of Lagos, Nigeria.

STATEMENT OF THE PROBLEM

The benefits arising from the use of e-governance information portal by citizens, undergraduates inclusive, cannot be overemphasised. Literature search revealed that most of the studies that have been carried out on citizens' awareness and perception of e-governance were done outside the African continent and majority did not study undergraduates. Thus, there seems to be a dearth of literature on e-governance within the Nigerian context. This could possibly be as a result of the infrastructural challenges. However, Lagos State seems to have risen above the hindering factors militating against the creation of e-governance information portal with the creation of an e-governance application. Based on this, it is imperative to study the awareness and perception of e-governance information portal by undergraduate students University of Lagos, Nigeria.

RESEARCH QUESTIONS

The study will provide answers to the following research questions:

- 1. What is the level of awareness of e-governance information portal by undergraduates in University of Lagos, Nigeria?
- 2. What is the perception of e-governance information portal by undergraduates in University of Lagos, Nigeria?
- 3. What are the perceived challenges of egovernance information portal by undergraduate students in University of Lagos, Nigeria?

LITERATURE REVIEW

Researchers have carried out studies on the awareness and perception of e-governance services by different categories of citizens. As regards awareness, Al-Jaghoub, Al-Yaseen and Al-Hourani (2010) surveyed the awareness of 1,200 undergraduates of different faculties at the Al-Ahiyya Amman University Jordan on e-governance services. Results showed that most of the respondents (75%) did not know e-governance services and its website. Findings also revealed that 85% noted that they had never logged on to the website to seek information. The authors argued that the fact that the sample consisted of students who were young, most of whom had high income and access to the Internet, implies that they should at least know what e-government is. The implication is that given that many other

Jordanians will not have the same level of income, Internet access, and easiness of usage means that they will most likely have even lower awareness and usage levels of e-government services.

Netheti, Shrivastava and Shukla (2015) analysed egovernance services for effective communication to citizens in a state in India. The respondents were 60 citizens of Odisha State who were government employees. These individuals were selected purposively. They reported that the awareness of e-governance services by the respondents was influenced by their areas of settlement. Results showed that most of the respondents who lived in the urban areas had high level of awareness as against those who lived in the rural areas who recorded a low level of awareness of e-governance services.

Nasrulla and Kumari (2016)examined the implementation of e-governance in Bangalore. The study considered awareness as a critical factor that could predict the use of e-governance services. From the results, age was found to be a determinant of awareness of e-governance by the respondents. Most of the individuals between the age group of 25-34 were aware of e-governance services, while majority (60%) of those between 35-49 were not aware and those between 70 and 100 were not aware at all. This implies that undergraduates who should be younger in years have a higher probability to be aware of the e-governance platform than other citizens. Ramya (2016) also studied awareness of e-governance by 60 secondary school teachers in Mangalore, Karnataka. Findings revealed that most of the respondents 36 (60%) had a moderate level of awareness of e-governance, 14 (23.33%) had a low level of awareness and the rest 10 (16.67%) had high level. As a result of this, Ramya opined that the teachers need to develop a high level of awareness of egovernance in order to contribute to a sustainable society.

As for perceptione-governance platforms, Susanto and Goodwin (2010) conducted a web-based survey, paper-based questionnaires, and phone-call interviews that collected 159 responses from 25 countries on the use of e-governance portal via Short Messaging Service (SMS). The results showed that most of the respondents (20.8%) had a favourable perception of the e-government services as they perceived it to be easy to use, 12.6% also felt that there were perceived value for money and perceived responsiveness when it comes to the use of SMS based e-governance. A notable number (11.9%) and (9.4%) also perceived SMS based e-governance to be useful and convenient.

In the study carried out by Al-Jaghoub, Al-Yaseen and Al-Hourani (2010), majority of the respondents were very interested in using their electronic systems to access egovernance services. This is an indication that these individuals have a positive mental image of e-governance

information portals. The study by Netheti, Shrivastava and Shukla (2015) also discovered that a significant number of the respondents had the feeling that the services provided in the e-governance system were user friendly. As a result of this, the authors reported that the citizens were giving priority to the use of these services as against the manual systems.

Despite the seemingly positive perception of e-governance information portal by citizens, there are some challenges. Okwueze (2010) noted that adequate power supply is an important element to be considered for the successful implementation of e-governance in the country's public sector. Against the current picture of what exist in most of the public service, most government agencies operate on generators and sometimes the generators lack capacity to power adequately the ICT facilities.

Olaopa (2014) also identified inadequate funds allocated to the e-governance projects as a challenge. Without adequate funding, it could be difficult to establish and sustain the infrastructure needed for the continuous operation of the e-governance platform. Attitude or resistance to change is another challenge confronting e-governance. Most of citizens, especially those in the public service, are still used to the old way of carrying out government activities. That is, they are still known to be working with a lot of papers, carrying of files from one desk to the other or from one office to the other. Their resistance to e-governance implementation in their services is what has culminated to the poor rating of the implementation of e-governance in the public service.

METHODOLOGY

Descriptive survey research design was used for this study. The population of study comprised of the undergraduates of University of Lagos, According to the data in the Pocket Statistics of University of Lagos as downloaded from their website, there are 25,095 full time undergraduates; this number forms the population of the study. The multistage random sampling technique was used for this study. At the first stage, 60% of the faculties were selected randomly. The selected faculties are Basic Medical Sciences, Dental Sciences, Pharmacy, Environmental Sciences, Arts, Engineering and Law. The second stage of sampling involved the random selection of three faculties through the balloting method. The selected faculties are Basic Sciences. Pharmacy and Environmental Sciences. The last stage of sampling involved the determination of the sample size. In order to get the sample size, a sampling fraction of 7% was used. Thus, the total sample size is 232 (Table 1).

The self-developed questionnaire, which has four sections, was the data collection instrument. Section A

focuses on demographic information of the respondents. Section B elicits response on the awareness of egovernance information portal by the undergraduates. Section C collects information on the perception of egovernance information portal by undergraduates. Section D focuses on the perceived challenges of egovernance information portal by the undergraduates. In order to ascertain face validity of the instrument, copies were given to two experts in the Department of Library, Archival and Information Studies, University of Ibadan who read through and made necessary corrections which were effected before final administration. The data collected was analysed with the use of descriptive statistics of frequency counts and percentages for research questions one to three, with mean and standard deviation added for research questions two and three. The Statistical Package for the Social Sciences (SPSS) was the software used for data analysis.

RESULTS

Questionnaire administration and return rate

A total of 232 copies of the questionnaire were administered to the undergraduates of the University of Lagos who were three faculties. However, 225 copies were returned and found useful for analysis giving a response rate of (97%) (Table 2).

Demographic characteristics of respondents

Table 3 showed that majority of the undergraduates 73 (32.4%) that responded to the questionnaire were in 100 level, while just 10 (4.4%) indicated that they were in 500 level. Results also revealed that a significant number 101 (44.9%) noted that they were between 16-20 years of age and only 3 (1.3%) were 30 years old and above. As regards gender, most of the undergraduate students 156 (69.3%) were males and 69 (30.7%) were of the female gender. From the findings, close to two-fifths of the undergraduates 82 (36.4%) indicated that they had spent between 16-20 years of their lives in Lagos, while just 6 (2.7%) noted that they had spent between 25-29 years in the state.

ANSWER TO RESEARCH QUESTIONS

Research question one: What is the level of awareness of e-governance information portal by undergraduates in University of Lagos, Nigeria?

Table 4 revealed that well over half of the respondents 125 (55.6%) attested to the fact that they were not aware

Table 1. Selected faculties and sample size

Faculties	No. of Undergraduates	Sample Size
Basic Medical Sciences	609	43
Pharmacy	963	67
Environmental Sciences	1740	122
Total	3312	232

Table 2. Questionnaire administration and return rate

- 44-10 = - 44-001.01.11.11.01.14.10.11.14.11.11							
Selected faculties	Distribution	Return					
Basic medical sciences	43	40					
Pharmacy	67	65					
Environmental sciences	122	120					
Total	232	225					

Table 3. Demographic information of respondents

Demographic Characteristics	Frequency	Percentage
Level		
100	73	32.4
200	49	21.8
300	23	10.2
400	70	31.2
500	10	4.4
Age Group (Years)		
16 -20	101	44.9
21 - 24	99	44.0
25 – 30	22	9.8
30 and above	3	1.3
Gender		
Male	156	69.3
Female	69	30.7
Year(s) spent in Lagos state		
1-10	91	40.4
11-20	105	46.6
21-29	29	13.0
30 and above	-	-

N=225

Table 4. Awareness of e-governance information portal by undergraduates in University of Lagos, Nigeria

Question	Yes	No
	Freq %	Freq %
Are you aware that Lagos State Government has an electronic information application where you can get all the information you need about the government and also provide suggestions?	100 44.4	125 55.6

that the Lagos State Government has an e-governance information portal where they can get the information that they need and also provide suggestions. However, 100

(44.4%) indicated that they were aware.

Table 5 showed that the awareness level of e-governance information portal by majority of the

Table 5.Level of awareness of e-governance information portal by undergraduates in University of Lagos, Nigeria

Question	High Average		Low			
Can you rate the level of your awareness?	38	16.9	78	34.7	109	48.4

Table 6. Name of the e-governance information portal of the Lagos State Government

Table 6. Value of the e governance information portail of the Lagos state dovernment							
Question	Yes	No					
	Freq %	Freq %					
Do you know the name of the electronic information	45 20.0	180 80.0					
application launched by the Lagos State Government?							

Table 7. Correct name of e-governance information portal of the Lagos State Government

Question	Y	es	No	
	Freq	%	Freq	%
What is the correct name of the electronic				
information mobile application?				
Lagos State Government Information App	10	4.4	-	-
Lagosians Gate App	1	0.4	-	-
Citizens Gate App	9	4.0	-	-
Lagos E-Governance Gate App	25	11.1	-	-

respondents was low as indicated by close to half of the undergraduate students 109 (48.4%).

Still on the awareness of the e-governance information portal provided by the Lagos State Government, four-fifths 180 (80.0%) of the respondents noted that they did not know the name of the e-governance information portal launched by the Lagos State Government, though 45 (20.0%) claimed they know the name (Table 6).

Table 7 showed that out of the 45 respondents that pointed out that they knew the name of the e-governance information portal, only 9 (4.0%) got the name portal which is Citizens Gate App correctly. The majority, 25 (11.1%) of the total number of respondents chose the wrong answer which was Lagos E-Governance Gate App.

Research question two: What is the perception of egovernance information portal by undergraduates in University of Lagos, Nigeria?

Table 8 showed that majority of the respondents had a positive perception of the e-governance information portal of the Lagos State Government. A significant number of the respondents (mean=3.06) noted that the electronic app brings governance close to the people. While others were of the opinion that the provision of the electronic app is a means to increase the quality of service from the government to the residents (mean=3.00). It was also the view of a significant number that the app will give

opportunity to the residents to urgently report matter needing immediate attention to the appropriate government quarters (mean=2.70). On the other hand, a significant proportion of the respondents (mean=2.94) were of the opinion that the residents cannot access reliable information from the government through the app.

Research question three: What are the perceived challenges of e-governance information portal by undergraduates in University of Lagos, Nigeria?

Table 9 presented results on the challenges of e-governance information portal as perceived by the undergraduate students. Findings showed that lack of awareness about the e-governance portal on the part of the citizens of the state was the greatest challenge (mean=1.82). Other notable challenges were inadequate publicity on the part of the government (mean=1.77), low level of ICT literacy on the part of the citizens (mean=1.75) and erratic power supply (mean=1.73). Thus, in order for the e-governance information portal to perform effectively, these challenges have to be addressed.

DISCUSSION OF FINDINGS

Results showed that most of the respondents were not aware of the e-governance information portal of the

Table 8. Perception of the e-governance information portal by undergraduates in University of Lagos, Nigeria

Table 8. Perception of the e-governan										
Perception of the electronic	_	SA	A D		_	_		SD Mean		
information application	Fred		Freq	%	Fred		Fred			
Residents can access reliable information from the government	14	6.2	41	18.2	114	50.7	56	24.9	2.94	0.82
through the app										
The electronic app brings governance closer to the people	73	32.4	99	44.0	46	20.4	7	3.1	3.06	0.81
The provision of the electronic app is a means to increase the quality of service from the government to the residents	50	22.2	133	59.1	35	15.6	7	3.1	3.00	0.71
The use of this app will improve communication and interactions between the residents and the government	51	22.7	89	39.6	68	30.2	17	7.6	2.77	0.89
The use of this electronic app could bring about the delivery of more dividends of democracy	52	23.1	71	31.6	82	36.4	20	8.9	2.69	0.93
This electronic app will give residents the opportunity to commend, complain and suggest areas of improvement to the government	33	14.7	107	47.6	75	33.3	10	4.4	2.72	0.76
The provision of the electronic app could boost the citizens confidence in the government	42	18.7	87	38.7	83	36.9	13	5.8	2.70	0.84
This app will give opportunity to the residents to urgently report matter needing immediate attention to the appropriate government quarters	41	18.2	91	40.4	77	34.2	16	7.1	2.70	0.85
This app could be used to get updates about job opportunities in the state civil service	43	19.1	83	36.9	89	39.6	10	4.4	2.71	0.83

Key: SA (Strongly Agree) A (Agree) D (Disagree) SD (Strongly Disagree)

Table 9.Perceived challenges of e-governance information portal by undergraduates in University of

Lagos, Nigeria

Challenges	Agree		sagree	Mear	SD	
	Freq %	Fre	eq %			
Lack of awareness about the e-governance portal	185 82.2	40	17.8	1.82	0.38	
on the part of the citizens of the state						
Inadequate publicity on the part of government	174 77.3	51	22.7	1.77	0.42	
Lack of access to the internet	129 57.3	96	42.7	1.57	0.50	
Low level of ICT literacy on the part of the citizens	168 74.7	57	25.3	1.75	0.44	
Slow internet network	159 70.7	' 66	29.3	1.71	0.46	
Unfriendly and unattractive nature of the user	131 58.2	94	41.8	1.58	0.49	
interface						
Erratic power supply	164 72.9	61	27.1	1.73	0.45	
Outdated nature of the information on the portal due	150 66.7	75	33.3	1.67	0.47	
to lack of update						
Lack of trust in the government	151 67.1	74	32.9	1.67	0.47	

Lagos State Government. There was a low level of awareness, as majority noted that they did not know the name of the e-governance app. It was also discovered that out of those that indicated that they know the name of the app, majority ticked the wrong name. This indicates that the awareness creation by the government through the ministry, department or agency responsible for it needs to be revisited. This assertion was made because if majority of the undergraduates despite their inquisitive nature are not aware of the existence of an e-government portal and when those who claimed to be aware and even know the name of the portal fail to know the correct name, it means other categories of individuals in the state may be completely ignorant of this good development. This agrees with the findings of the study conducted Al-Jaghoub et al (2010) in Jordan where they reported in their separate studies that most of their respondents who were undergraduates had low level of awareness about the e-government programmes and online services.

Majority of the respondents had a positive perception of the e-governance information portal of the Lagos State Government as a significant number noted that the electronic app could bring governance close to the people. Others were of the opinion that the provision of the electronic app is a means to increase the quality of service from the government to the residents. This is an indication that the e-governance information portal is viewed as a very important development that could transform access to information from the government and information communication between the government and the citizens and vice versa. This corroborates the submission of Susanto and Goodwin (2010) who noted that e-information portal is easy to access and easy to use. The more citizens perceived that an information portal service is easy to use the more likely they are to use the service. The result of this study is however in contrast with that of Lallana (2008) who reported in a study that the perception of the respondents on the einformation portal was not favourable as some did not trust the government and perceived that the quality of public services is poor.

The perceived challenges of the e-governance information portal by the undergraduates included lack of awareness about the e-governance portal on the part of the citizens of the state and inadequate publicity on the part of government. Other challenges are low level of ICT literacy on the part of the citizens and erratic power supply. It would be difficult for individuals to effectively utilise what they aware of. Additionally, since the e-governance information portal is ICT driven, those in the society, especially the illiterate may find it quite difficult to use it because of their inability to use computers or related mobile devices. Furthermore, if power supply is not regular, the devices used to access information through the electronic app will not be powered. This is in accordance with the submission of Okwueze (2010) who

noted that inadequate power supply could be a clog in the wheel of successful implementation of e-governance in Nigeria.

CONCLUSION

The successful implementation of e-governance information portal by governments at all levels of governance cannot be made possible without effective awareness creation targeted at different categories of people in the society, undergraduates inclusive. If this is done in the right way, the citizens might develop a positive perception that could eventually lead to the adoption and use of the e-governance information portal. The government of Lagos State is clearly on the right path with the investment in the e-governance portal as it will play a huge role in bringing governance closer to the people as the state moves towards a mega city status. Thus, for Lagos and other states in Nigeria with egovernance platforms, it is very important to channel all efforts towards creating awareness and positive perception of the information portal so that the urge finance and the labour invested in establishing these portals will not go down the drain.

RECOMMENDATIONS

In view of the findings, the following recommendations are made;

- In order to address the perceived challenge of lack of awareness about the e-governance information portal, it is very important for the individuals in charge of the Citizens Gate App to intensify their awareness creation. The various media like the television houses, radio stations and newspaper organizations should be used to run jingles and adverts on a continuous basis for a considerable time.
- 2. Due to the cosmopolitan nature of Lagos State, it is very important for the jingles to be run in different languages so that individuals from different ethnic groups who are residents of Lagos State will also benefit from the provision of the e-governance information portal. It is also essential to place newspaper adverts with lots of illustrations on how the app can be used. In the same way, the television jingles could also be in form of brief dramatisation of how the app can be used and the benefits derivable.
- The Lagos State Government should invest extensively in the development of the power infrastructure in the state to improve the use of the e-governance platform. Alternative sources of power like solar, electricity gotten from waste, in

which the state has enough of as a result of the population, and the even wind can be used to power the state.

REFERENCES

- Abasilim, U.D., Gberevbie, D.E. and Ifaloye, O.R. (2017). Attaining a better public service delivery through e-governance adoption in Nigeria. *Covenant University Conference on e-Governance in Nigeria*, 109-118.
- Al-Jaghoub, S, Al-Yaseen, H and Al-Hourani, M. (2010) Evaluation of awareness and acceptability of using egovernment services in developing countries: the case of Jordan. *The Electronic Journal Information Systems Evaluation*, 13:1, 1-8. Retrieved from http://www.ejise.com
- Fountain, J.E. (2001). *Building the virtual state*. Brookings Institution Press Washington, DC.
- Gupta, P. R. and Jain D. K. (2010).Road map for egovernance; *Proceedings of ASCNT 2010, CDAC,* Noida, India,91–100.
- Lallana, E. (2008). *E-government for development: mGovernment definitions and models*. Retrieved from http://www.mgovlab.org
- Muir, A., and Oppenheim, C. (2002). National information policy developments worldwide I: electronic government. *Journal of Information Science*, 28:3, 173.
- Nasrulla, K.K. and Kumari, N.A. (2016). Implementation of e-governance: issues and challenges. *ISBR Management Journal*, 1:2, 12-28.

- Netheti, G.S., Shrivastava, A.K. and Shukla, R. (2015). Analysis of e-governance services for effective communication to citizens in Odisha State. *International Research Journal of Engineering and Technology (IRJET)*,2:2, 1-4. Retrieved from http://www.irjet.net
- OECD. (2003). *The e-government imperative: main findings*. Retrieved from http://www.oecd.org/ dataoecd/ 60/60/2502539.pdf.
- Okwueze, F. O. (2010). E-governance as a tool for public sector development in Nigeria. Nsukka: *Society for Research and Academic Excellence*, 2:3, 23-25.
- Olaopa, T. (2014). Seminar on Sharing Success Stories and Challenges in E- Governance/E-Administration. Retrieved from
 - http://www.cafrad.org/Workshops/Tanger21230414/olaop a.pdf
- Ramya, K.S. (2016). A study on awareness of egovernance and attitude towards sustainable development. *International Journal of Advanced Trends* in Engineering and Technology, 1:1, 15-17. Retrieved from http://www.dvpublication.com
- Sanjay T. and Sarangdenot, S.S. (2011).Integration of ICT and e-governance in Rajasthan. *Indian Journal of Computer Science and Engineering (IJCSE)*, 2:2, 177-183.
- Stauffacher, G. (2002). *E-government as an instrument of public management reform*. In: 2nd (ed.) E-Government Conference.
- Susanto, T.D. and Goodwin R. (2010). Factors influencing citizens adoption of SMS-based e-government services. *International Journal of E-government*, 8:4, 123-127.