

E-Government And Service Quality In Public Sectors

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ABSTRACT

This paper was extracted from a bigger study which established the relationship between E-Government and service quality in Public Sectors. The objectives of the study were; to ascertain whether IT infrastructure influences service quality in Uganda Electoral Commission, to examine the effect of web accessibility on service quality in Uganda Electoral Commission and to establish the contribution of human resource management and service quality in Uganda Electoral commission. This paper, specifically presented objective one: IT Infrastructure and Services Quality in Electoral Commission. It has been apprehended that Uganda Electoral Commission, has not successfully met the sophisticated expectation of the citizens of Uganda and output in terms of service quality as perceived in terms of Reliability, Responsiveness, Effectiveness and Efficiency as evidenced in the long queues in registration of voters. In fact, if a name was erroneously skipped, the concerned person will have to wait for some good time to get feedback and later re-registers, therefore, the service quality expected by the citizens is not received, hence, resulting into a disappointments and dissatisfaction to the citizens, this being one of the major reasons why the number of registered voters is low in some districts as per the finding of this study. The study was majorly guided by reviewed literature of great scholarly and earlier works of the external and internal volunteers report, (2011) Berry & Zeithmal (2005); OECD (2003) and Moon, (2004). The Research Design used was correlational survey design which was cross sectional in nature where both qualitative and quantitative research approaches were employed. Particularly interview guide was used as the qualitative tool and questionnaire was adopted as the quantitative instruments. The population involved in the study was 62,058 respondents from different groups of people, that is, employees in public sectors and Citizens and the sample size was 381 where by 250 were employees (management, technical staff, other staff) in public sectors and 131 were citizens. The Purposive, Convenience, Stratified and Simple Random Sampling Techniques were used for the selection of the respondents. The study found out that: IT infrastructure was positively related to service quality ($r=0.621$ at significance of 0.000), Therefore based on the findings, some recommendations were made; the need for improved usage of IT infrastructure, all users should be trained such that they are knowledgeable and experienced in using web developers and strong laws and rules of web accessibility be put in place, Human Resource department should be responsible for employee Recruitment, Maintainace, Training and Development.

Keywords: E-Government, Service Quality, Information Technology Infrastructure

1. INTRODUCTION

The E-government domain (also called Electronic Government, Digital Government, Electronic Governance, and other similar names) emerged in the late 1990's. Since then it spurred several scientific conferences and

journals (United Nations, 2006). The history of computing in government organizations can be traced back to the beginnings of computer history. Literature on "IT in government" goes back at least to the 1970s. E-government started as a practitioner field, basically convening practitioners struggling to meet the new challenges of the Internet medium by implementing new systems creatively. Ghana was one of the African countries where ICT usage was first experienced (Koh, 2003).

In Government at a Glance 2011, and in the same vein; a similar perspective was presented by OECD (2003), asserting that Citizens and businesses increasingly prefer and use digital means to interact with governments. E-government, specifically the one dealing with voters' details has brought about a website where every citizen can login to find out all the relevant information needed to successfully register with this Commission as a Valid Registered Voter in the Country (Chiger, Stephen 2002). Despite the advantages offered by E-government, some challenges exist, like; extra movements are made since one has to go to a registering center for registration, make long queues, fill in a form all the details, wait for some days/months/years to check on the list of registered citizens, when the list is out and a name was erroneously skipped, the concerned person will have to wait for some good time to get feedback some other time to be communicated and he and later re-registers, therefore, the service quality expected by the citizens is not received hence, resulting into a disappointments and dissatisfaction of the citizens, this being one of the major reasons why the number of registered voters is low in some districts.

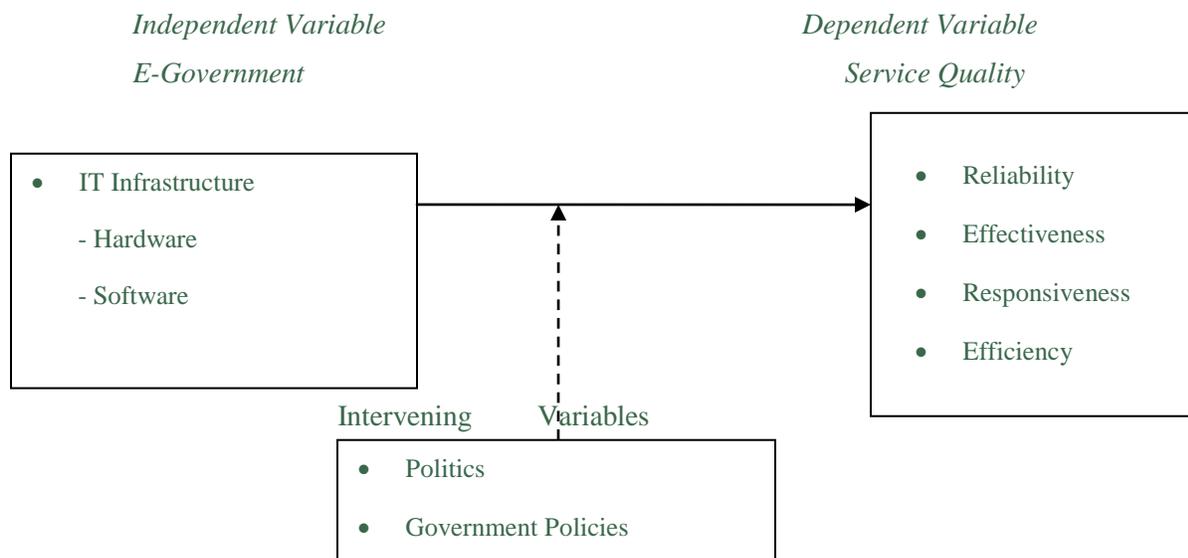
In the same stratum, Uganda Electoral Commission, not successfully met the sophisticated expectation of its citizens and output in terms of service quality as perceived in terms of Reliability, Responsiveness, Effectiveness and Efficiency as evidenced in the long queues in registration of voters. According to Schwart, (1975), nobody likes to be kept waiting because it is boring, time wasting and physically uncomfortable, no doubt waiting for a long time dissatisfies the client. Misplacement/omission of voters' names on the registry and rigging of votes that have brought about numerous complaints lodged by citizens; hence, questionable service quality as reported in the External and Internal Volunteers Report (2011). The Second 2013/14, Africa Consortium; highlighted that Electoral Commission displayed the national voters' register online facilitating citizens to browse the entire register at their convenience, however, this has not worked since there is inadequate IT Infrastructure to use for both employees and citizens as well as insufficient web accessibility since employees in the Electoral Commission cannot access some information when needed and lack of enough trained IT human resource (employees) to help train citizens, on how to use IT infrastructure and how to access the Electoral Commission Website; in order to get the services when needed, consequently, poor service quality and this seems to explain why the number of registered voters is low in some districts as evidenced on the Electoral Commission website as analyzed, for example, in Adjumani where the eligible number of voters in 2006 was 98,576, yet the actual results showed that 102,346 electorates voted giving an excess (gap) of 3770 voters In the year 2011 same district, the Eligible voters was 109,617 and those who

actually voted were 49,447, giving a gap of 60,170 missing voters, seemingly the above situation translates into a gap in Service Quality which this study investigated.

1.1 OBJECTIVES OF THE STUDY

The purpose of the Study was to establish the relationship between E-Government and Service Quality in Uganda Electoral Commission so that Clear and Precise Practical solution/s is/are sought. The Specific objectives included; To ascertain whether Internet Technology infrastructure influences service quality in Uganda Electoral Commission, To examine the effect of Web accessibility on Service Quality in Uganda Electoral Commission, To establish the contribution of Human Resource Management on Service Quality in Uganda Electoral Commission. This paper, specifically presented objective one, IT Infrastructure and Services Quality in Electoral Commission.

1.2 CONCEPTUAL FRAMEWORK



Source: Parasuraman, Zeithmal & Berry (2005);

2. LITERATURE REVIEW

The government uses information technology and particularly the Internet to support government operations, interact with citizens, and provide government services which is termed E-Government. The interaction may be in the form of obtaining information, filings, or making payments and a host of other activities via the World Wide Web (Sharma & Gupta, 2006), (Sharma, 2007).

Service Quality has been recognized as one of the major factors for maintaining sustainability and one of the driving forces for an organization's achievement. Quality Service represents the comparison between customers' expectations of how a company or organization should perform and the service performance that

customers perceive. The most dominant and extensively used scale for assessing quality service is SERVQUAL Scale, which was developed by Parasuraman, Zeithami and Berry (1985).

The dimensions of service quality for this study are Reliability (the ability to execute the promised service in an accurate and trustworthy way), Responsiveness (willingness to assist the end users and provide punctual service), Assurance (personnel cognizance which persuades user confidence and trust), and Empathy (providing caring and paying individual attention to customers). Although the SERVQUAL scale was developed in a marketing environment, it has been widely used in an Information System context and Information Technology. According to Lee and Lin, many research studies have successfully employed SERVQUAL in E-Commerce context.

However, designing IT infrastructures for large public sectors is a challenging task since it requires knowledge of existing processes, the views of different players and users, and the conjunction of technical expertise in different domains that rarely reside in a single individual (Veen, Annelies van der; Jan van Bon, 2007).

Hardware and software are essential in the IT applications as they ease the work of an organization, some software are used as analytical hierarchy approach and tools that can be used to assess E-Government induced changes in Public Service Quality as Many authors have recognized the transformational potential of ICT in government due to the application of software and hardware Jeong (2007).

It is also believed that web accessibility improves service quality in public sectors because there are more needs addressed by web accessibility and improve service quality including, visual impairments to help citizens with such a problem to get the services required. (Trenton 2013) Human resource is a great aspect in running of an organization, be it public or private. All institutions need people who have the required skills to do the appropriate jobs available; therefore Human Resource is concerned with how people are managed in an organization, focusing on policies and the system. (Johnason, 2009).

3. METHODOLOGY

3.1 RESEARCH DESIGN

The study used a Correlation Survey design which was Cross sectional in nature where different categories of respondents were required to give appropriate decision in order to give reliable information about E-Government and service quality. The study adopted a mixture of qualitative and quantitative research approaches, which is preferred because many of the respondents were covered by use of questionnaires and interview guides so that they could describe their feelings, beliefs and attitudes regarding E-Government and service quality in Electoral Commission.

Specifically, the quantitative research approach was used in order to generate quantifiable data. The use of both qualitative and quantitative methods is also recommended by Amin (2005) as an important form of triangulation in a study that involves a large number of people. Qualitative data was collected so as to capture views, attitudes and opinions of respondents in form of themes.

3.2 SAMPLE DESIGN

This employed both probabilistic and non probabilistic sampling techniques, in probabilistic sampling, simple random sampling was used because respondents from the various departments and electorates from Rubaga Division had a large population size and as such warranted simple random sampling to minimize sampling bias (Mugenda & Mugenda, 2003) and all respondents had an equal chance of being selected, stratified sampling was used because the study has been drawn into two strata of Electoral Commission Kampala head office, and Rubaga electorates. Probability sampling methods like the Simple random sampling was used for collecting statistical data. Singel, (2007). This method helped to allow generalization of the findings Amin (2005). Non probability sampling methods like convenience and purposive was also used for collecting qualitative data that included opinions and perspectives of different people on the subject. Mugenda & Mugenda (2003). Non Probability methods are quick and inexpensive Amin (2005) and therefore can be used to achieve sufficient responses.

3.3 SAMPLE SIZE

The study population included 250 employees of Uganda Electoral Commission of which 30 are management members, 102 technical staff, 118 other staff, and 61808 citizens of Rubaga Division Kampala district. Therefore the total population being 62058. The researcher adopted Morgan and Krejcie, 1970, adopted by Amin (2005) table for determining the sample size, for a given population of about 62,058 which gives the sample size of about three hundred eight one (381) respondents.

4. EMPIRICAL FINDINGS

The study showed that there were 195(51.2%) respondents from the Electoral Commission staff and 186(48.8%) respondents from the electorates(Citizens).This indicates that since the number of respondents are equal with a margin of only 11(2.4%) the results obtained from the study was representative of both the staff and the Citizens and therefore balanced. The researcher observed that of the 381 respondents, 131 (34.4%) were between 18 – 30 years, 75 (19.7%) were between 31 – 40years, 91 (23.9%) were between 41-50 years, 68 (17.8%) were between 51-60 years, and 16 (4.2%) were above 60 years. This showed that respondents of all age groups participated in the study and majority of the participants were of the age group between 18-30 years and followed closely by those between 31-40 years. The study considered the gender of the respondents and it showed that out of the 381 respondents, through set questionnaire, 233(61.2%) were male, 148(38.8%)

were female. This implies that more male than female participated in the study because male were more interested in the study.

Table 1: IT Infrastructure and Services Quality in Electoral Commission Regression Analysis Coefficients

Model	Correlation	Comment	Comment	Significance (P-Value)	Comment
IT infrastructure has been used in Election management process in Electoral Commission	.551	Positively correlated	Valid	0.000	Significant variable
IT resources are managed according to the needs of citizens	.480	Positively correlated	Valid	0.000	Significant variable
IT infrastructure has benefited Electoral Commission processes in Uganda	.471	Positively correlated	Valid	0.000	Significant variable
IT infrastructure is used to deliver, monitor and control IT services in Electoral Commission	.256	Positively correlated	Valid	0.000	Significant variable
IT influences quality services in Electoral Commission	-.032	Positively correlated but very weak	Invalid	0.537	Insignificant variable

Source: SPSS 21, 2014.

The results of regression analysis shown in the coefficient table above gave significant values for the variables used in objective one and correlations summarized and it showed that;

IT infrastructure has been used in Election management process in Electoral Commission had moderate positive correlation of 0.551 and significant value of 0.000 meaning that it has an effect, it is a valid question and it is significant in determining service quality in the Electoral Commission.

IT resources are managed according to the needs of citizens had moderate positive correlation of 0.480 and significant value of 0.000 meaning that it has an effect, it is a valid question and it is significant in determining service quality in the Electoral Commission.

IT infrastructure has benefited Electoral Commission processes in Uganda had moderate positive correlation of 0.471 and significant value of 0.000 meaning that it has an effect, it is a valid question and it is significant in determining service quality in the Electoral Commission.

IT infrastructure is used to deliver, monitor and control IT services in Electoral Commission had weak positive correlation of 0.256 and significant value of 0.000 meaning that it has some effect though weak, it is a valid question and it is significant in determining service quality in the Electoral Commission.

IT influences quality services in Electoral Commission had negative correlation of -0.032, and significant value of 0.537 meaning that when IT increases, service quality tend to decrease, and it was not a valid question and not significant in determining service quality in the Electoral Commission.

Qualitatively response indicated that IT infrastructure influences service quality in that it increases the speed of the election process, it reduces misplacement of registration names because it has not been used in Uganda and if it has been used, then they are not aware or it is being used for different purposes and this has influenced negatively on the service quality of the electoral commission. Also, some of the respondents said that they were not sure about the use of IT infrastructure by electoral commission in Uganda hence, not sure whether it influences service quality or not.

The theme developed from objective one was that, IT infrastructure influences service quality in Uganda Electoral Commission through the use of electronic devices.

Table 2: IT Infrastructure and Services Quality in Electoral Commission Regression Analysis Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.621 ^a	.385	.377	.900	.385	47.046	5	375	.000

Source: SPSS 21, 2014.

The Regression table shown in table 2 analyzed whether IT Infrastructure has influence on service quality in Electoral Commission.

From the Regression analysis, the model summary showed R-Square value of 0.385 indicating that IT Infrastructure contributes to service quality in Electoral Commission by 38.5%.and that 61.5% of the service quality in Electoral Commission is contributed by other factors implying that 38.5% of the service quality in Electoral Commission can be explained by IT Infrastructure.

The adjusted R² indicates the percentage of variation explained by those independent variables that truly affect the dependent variable. This means that 37.7% (0.377) of the independent variables used in IT Infrastructure affect service quality in Electoral Commission.

The regression analysis also showed that the coefficient of correlation between IT Infrastructure and service quality in Electoral Commission is 0.621 which is positive and quite high indicating that IT Infrastructure has positive effect on service quality in Electoral Commission.

Further the regression analysis showed that IT Infrastructure is significant in determining service quality in Electoral Commission since it has a significant value of 0.000; hence, the strong relationship between IT Infrastructure in determining service quality in Electoral Commission.

Arising from objective one: To ascertain whether IT infrastructure influences service quality in Uganda Electoral Commission it can be deduced that IT infrastructure influences service quality in Uganda Electoral Commission because it has strong positive correlation 0.621, strong significant value of 0.00 though it contributes only 38.5% of the service quality in the Electoral Commission.

5. SUMMARY AND RECOMMENDATIONS

Based on the research findings, the following recommendations were developed;

- There is need for improved usage of IT infrastructure in Election management process in Electoral Commission
- IT resources should be managed according to the needs of citizens not the government of the day
- IT infrastructure should benefit not only Electoral Commission processes in Uganda but all stake holders.
- IT infrastructure should be used intensively to deliver, monitor and control IT services in Electoral Commission

Acknowledgment: This research paper was funded by Ndejje University, Kampala, Uganda

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