

**Effect of Public Sensitization and Awareness Campaigns on Adoption of e-government
Services at Local Government level in Uganda**

NAMIRO IMMACULATE

1200ID10200489

RESEARCH REPORT SUBMITTED TO UNICAF UNIVERSITY

UU-MPA 7080 Research Project

JANUARY, 2022

ACKNOWLEDGEMENTS

*I offer my heartfelt gratitude to the almighty **GOD**, the merciful and the compassionate with whose grace and blessings, I am able to complete this degree programme. I use this opportunity to express my sincere gratitude to my highly respected supervisor (Cristina Isabel Ibarra Armenta), for his/her academic and parental guidance, genuine counselling and encouragement for the successful completion of this research project. I doubt that I will ever be able to convey my appreciation fully, but I owe my eternal gratitude.*

*A special word of thanks to all **tutors** for their constant encouragement and support throughout this duration. You have been the best parents who always made me feel at home.*

I feel lacunae of words to express my most heartfelt and cordial thanks to my fellow students who have always been a source of inspiration for me, stood by my side at the toughest times and discussions.

I am forever indebted to my parents and family for their moral support, love, affection and boundless encouragement without which this degree would not have seen the light of the day. I like to thank all my family members for their kind words during some tough situations in life that God grant you the best in life.

*I acknowledge **UNICAF University** for providing me all the academic and financial support to pursue this degree and **support** towards my research project.*

At the end of my research project I would like to thank all those people who made this project possible and it is a pleasant task to express my thanks to all those who contributed in many ways to the success of this study and made it an unforgettable experience for me.

Any omission in this acknowledgement does not indicate lack of gratitude.

UNICAF UNIVERSITY

JANUARY, 2022

NAMIRO IMMACULATE

ABSTRACT

The successful adoption of e-government systems leads to efficient delivery of government services. Despite several e-government initiatives by the Uganda government, there has been limited success, with the levels of adoption and use remaining generally low. Countries like Uganda are facing challenges like lack of up-to-date technology, but the biggest challenges arise from non-technical issues to include lack of public awareness and sensitization in regards to the benefits of e-government, availability of different e-government services and systems together with a low e-readiness index. Therefore, for a developing country like Uganda much energy and efforts by government should mainly focus on more sensitization and mobilization of the citizens to embrace e-government and its challenges. Different customized e-government models have been developed for Uganda but there is more need to sell them out to citizens through mobilization and sensitization as this increases awareness amongst the community. This study therefore justified the need for sensitization and awareness creation in order to increase participation and implementation of e-government at local level, because different models and designs are in place, different eservices available but still low usage by citizens which is a bigger challenge that needs government to focus resources at sensitization and awareness campaigns. Sensitization campaigns can be conducted through radio and television programmes and adverts, face to face group trainings, schools and institutions trainings, social media, conferences and workshops.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	2
ABSTRACT.....	3
1. INTRODUCTION.....	5
1.2. Statement of the problem.....	6
1.3 Objectives.....	7
1.4 Research questions.....	7
2. LITERATURE REVIEW.....	8
2.1 Different factors affecting adoption and use of e-government services at local government level.....	8
2.2 Different e-government services offered at local government level.....	9
2.3 Different methods and approaches through which local government creates public awareness and sensitization on different e-government services.....	10
3. METHODS/METHODOLOGY.....	11
3.1 Introduction.....	11
3.2 Validity and Reliability.....	11
3.3 Secondary data collation and analysis.....	11
3.4 Data analysis.....	11
4. RESULTS/ EVALUATION.....	13
4.1 Media coverage in Uganda.....	13
4.2 Online service Index in Uganda.....	14
4.2.1 Uganda’s e-government Development Index.....	14
4.2.2 Uganda’s e-government participation Index.....	15
4.3 E-services to Ugandan citizens.....	16
5. DISCUSSION AND CONCLUSION.....	20
5.1 Discussion.....	20
5.2 Conclusion.....	21
6. FUTURE WORK.....	23
References.....	24

1. INTRODUCTION

This chapter discusses the reasons behind this report and the choice of research topic. The earlier studies performed within the area. It contains the problem statement, objectives of the study and the research questions.

The benefits of e-government are observed in both developed and developing countries across the globe as it enables citizen to effectively and efficiently take part in decision and policy making thus bridging interaction gap between citizens and government. Effective e-government system helps government and her citizens save costs, facilitates increased transparency but above all helps reduce corruption vices that destroy delivery of public services to citizens (Bwalya, 2009). Most governments use different e-government practices through public administration and mainly local governments in Uganda to increase and improve performance through efficient public management processes as this reduces costs in the provision of public services. In Uganda, local and central government offer a number of services namely; physical planning of municipalities, town and cities, management of social services, proper management of information infrastructure, public records and archives, community or economic development, health care, education and property assessment.

Local e-government being one of the major parts of e-government has enabled public offices and government extend services to citizens in different rural and local communities through provision of physical and online ways for the people easily communicate and keep in touch with government to better service delivery as government delivers based on citizen needs assessment as this helps government sectors and bodies offer new, improved and enhanced services to the public and citizens, increase community involvement in policy making (Carbo et al., 2005). Heeks, 2006 noted although e-government impacted all government sectors but the biggest impact was observed at the local setting where 50-80% of the citizen interacted with public/government bodies making local e-government most vital through empowerment of public officers with different softwares that integrate changes in the internal workflow that makes local administrations run smoothly (Cortés et al., 2006). With the advantages of local e-government well documented, its implementation at local levels and communities has remained a big challenge in developing countries.

Local e-government enables citizens to freely interact with government easily and access government services through electronic means, citizens are enabled to take part in electronic and online discussions regarding political and economic affairs freely, easier electronic transactions between government sectors and private sector to take place but implementation has remained a big challenge in economically and technologically transitioning countries. Shackleton and Dawson, 2007 noted that most local governments do not have the independence and powers needed to make decisions in line of e-government systems and services as they rely entirely on funding from central governments to implement new initiatives designed by central government. Most local government set-ups lack the required data and information on how to implement e-government strategies at the local level since the available designed models mostly focus on national and central e-government practices with few designed for local government (Capgemini, 2007).

It has been studied that successful implementation of local e-government in developing countries is mainly challenged by current e-government implementation models and designs, poor sensitization and citizen unawareness of availability of different e-government systems and services which citizens can use to easily interact with public officers. Failure of e-government implementation at local government level is due to the gap between the existing e-government implementation model design and the real conditions at local government level. There is a need to strengthen the role of Information and Communication Technologies at local government level but as well sensitize citizens on availability of different e-government services and systems, build capacity of public officers to effectively and efficiently manage e-government systems to deliver public services in developing countries (Benamou, 2005).

1.2 Statement of the problem

E-government is an electronic system that involves deliverance of government information and services to the citizens, businesses or other government agencies through different electronic technologies and digital platforms. E-government allows pervasive access to government information resources, replacing the traditional operations of physical government offices with their characteristic red tape; improves citizen participation in public policy-making processes; improves productivity and production and saves costs (Palvia and Sharma, 2007).

The different activities, services and information citizens get from government through the E-governance systems include e-procurement of government tenders, electronic voting (e-voting), tax filing (e-filing), and payment of bills. But e-governance includes different

applications which manipulate information for example; calculation of retirement benefits for public servants, public service delivery applications and accessibility, collaboration among government employees (Bwalya, 2010). Here in Uganda, citizens can easily access information and services from different mainstream government sectors but as well number of downloadable government forms are available and can be accessed online for example application forms for identity cards, passports, marriage certificates, and government jobs. Availability of all the required documents and applications online makes it easy for citizens to submit applications without the need to visit different offices physically hence saving money and time.

Bwalya and Healy (2010) argued that adoption of ICTs, and other e-participation was so low amongst Africa countries since most countries shun e-government despite suffering costs of not introducing it. Although the e-government system has shown greater advantages in Uganda as it saves costs and time, still the adoption of the system is very low in Uganda and local governments and this is attributed to poor sensitization and unawareness of the availability of the e-government system and services to be accessed by the citizen hence not fully utilized. There is also a problem of limited education as most citizens can't fully utilize the new technological developments, making it hard for people to access e-government information and exchange views with government officials for decision making. Therefore, this study aims at deeply studying how Public Sensitization and Awareness Campaigns influence Adoption of e-government Services at Local Government level in Uganda.

1.3 Objectives:

- 1) Identify the different factors affecting adoption and use of e-government services by public within Masaka City local government.
- 2) Determine the different e-government services offered to the public by Masaka local government.
- 3) Find out different methods and approaches through which Masaka City local government creates public awareness and sensitization on different e-government services.

1.4 Research questions:

- 1) What are the factors affecting adoption and use of e-government services within Masaka City local government?

- 2) What are the available e-government services to public within Masaka City local government?
- 3) What are the different methods and approaches used to create public awareness and sensitization of available e-government services?

2. LITERATURE REVIEW

2.1 Different factors affecting adoption and use of e-government services at local government level.

E-government strategy in Uganda delivers high-quality customer centric and performance-driven services to her citizens. The major expectation of Uganda's e-Government is to boost the country's socio-economic development, transform the economy into a competitive, innovative knowledge society (Rwangoga and Baryayetunga, 2007). Major challenges of e-government implementation in Uganda include; inadequate Information and Communication Technology resources, half-baked staff lacking knowledge and skills about e-government systems and their implementation at local level, poor government coordination and training, unskilled staff, lack of network connectivity and low citizen appreciation of integrated e-government systems and services [ibid]. Bwalya, 2009 noted that most developing countries are challenged by the following: a) ICT infrastructure is limited to most parts of the remote rural areas, b) high illiteracy levels among the population since most e-government designs aren't user friendly design c) citizen education levels are low and most of the e-government and ICT content is available in English other than local languages which they understand, d) unskilled human resource that can handle e-government projects to produce efficient public service delivery, e) most of e-government projects are donor funded hence aftermath of project sponsorship the projects can't be sustained due to shortage of funds. f) Most governments don't have formal e-government strategies, g) citizens don't understand the importance of e-government to due to lack of sensitization, promotions and awareness campaigns. But governments understand the benefits of e-government to her citizen thus have the political will and intentions to implement it.

Both developed and developing countries have different e-government experiences observed in technical, social and political factors (Flak et al., 2005). Each country needs to identify major activities needed to develop of their own local e-government as these can be incorporated into existing e-government implementation models and designs to suit their own conditions (ibid). Therefore, Uganda needs to determine requirements, analyze and assess favorable e-government conditions as this helps to identify weaknesses, strengths, threats, and opportunities before rolling out different local e-government models and designs for her citizens to adapt.

2.2 Different e-government services offered at local government level.

E-government operates in a way that it employs Information and Communications Technologies in order to develop national and local information systems aimed at improving efficiency and effectiveness in government service delivery. This ensures that government accounts to her citizens using different applications to include; internet, websites, mobile phones, telegrams, telex and fax messages (Eilu, 2009). Through e-government systems, citizens and employees have an effective way of sharing information and exchanging knowledge with government as it enables government sectors, departments and agencies to share, talk, listen, relate and have continuous flow of communication. With this great improvement in public services, accountability and democracy have been enhanced, corruption and tribalism in public sector have reduced as each action taken involves machine uses which is difficult to corrupt and bribe (Al-Shehry et al., 2006). National and local e-government implementation requires interoperability, security, and user friendliness while using different e-governments models, designs and systems as they have different requirements and characteristics namely; cost-effectiveness, easy accessibility and greater scalability due to large number of citizens and people reached. There is a need for empirical studies to study requirements needed for proper local e-government implementation in Uganda, these studies will mainly collect, compare, and assess data about actual local e-government implementation that is cost-effective, resources, and easy accessibility (Lofstedt, 2005).

The Ministry of Local government has integrated ICT in its programmes but the use is still uneven and not properly utilized by citizens and this is attributed to shortage of resources towards ICT programs and lack of enough sensitization and awareness campaigns to citizens at local level (Rwangoga & Baryayetunga, 2007). Most local governments haven't put in enough efforts review business processes, train and skill staff in order to promote efficient use and application of e-government processes and applications. One of the impediments in Uganda is the investment in ICT development is still an "ad hoc" affair, since individual Ministries need independent ICT funding to offset the minimal funding available through the governmental budgetary channels and also most installed systems are not fully being utilized. Part of the reason advanced is lack of staff training, poor connectivity of networks and low appreciation of integrated information systems (Ibid).

2.3 Different methods and approaches through which local government creates public awareness and sensitization on different e-government services.

Different user and stakeholder participation approaches were used and documented in IS development namely; Participatory Design (PD) (Ehn, 1993), user-centred design (UCD) (Gulliksen et al., 2003), and user innovation (UI) (Von Hippel, 1986). Recent studies have shown how user participation contributed to institutional transformation and development through designing and implementation of different policies, organisational frameworks as well as changing stakeholders' mind-sets which is best known as "infrastructuring" (Halskov and Hansen, 2015). Over a period of time, user participation has changed regarding who to involve in different activities and the outcome expected from the design work and groups. This is attributed to the current societal trends, sociotechnical ensemble view of technology and emerging cross-sector public sector initiatives in which there are heterogeneous stakeholders embracing different social and technological elements. User participation, public sensitization and awareness was applied in the ERS context (Kristensen et al., 2006),

Community sensitization and awareness increases user participation but also has challenges as user participation in different projects has adverse effects on project performance since they are time and resource intensive and system developers are required to make huge efforts to involve stakeholders who may not have the motivation or time to participate in design groups (Simonsen and Hertzum, 2008). Some of the approaches and methods to increase user and community participation in different government projects include; stakeholder motivation, organize sensitization and awareness meetings, conflict resolution in community groups, upholding democratic principles and evaluating results (prototypes) have been discussed as challenging tasks (Obata et al., 2012). Challenges of community sensitization and awareness creation increase in large-scale projects due to heterogeneous user and stakeholder groups (Karlsson et al., 2012). These heterogeneous groups with several independent stakeholder groups from different sectors of the community are supposed to work together but they have different cultures, goals, possibilities and interests hence need for different approaches (Pilemalm et al., 2016b; Dalgaard, 2010).

The literature review has mainly covered the therefore points to the following unresolved questions for successful local e-government implementation in Uganda as a developing country: How best local e-government can be implementation in Uganda? Therefore, this study reviewed secondary data aimed at improving e-government implementation at local level.

3. METHODS/METHODOLOGY

3.1 Introduction

This chapter describes the methodology and different research methods used in this study have been explained. I have discussed in detail the research methods used, data collection and a criteria for judging the quality of the research designs used (validity and reliability).

3.2 Validity and Reliability

Validity means the ability of measuring instruments in the study to measure what is required to measure. I have also presented my results into a report which can be shared with respondents to check if I have analyzed and interpreted their data correctly.

Reliability means the measure of how the study has managed to measure what it was supposed to measure, by avoiding any form of random errors (National encyclopedia, 1994). Because of the lack of time, I have not been in position to conduct a primary data collection and therefore used reports, statistics and secondary data already in the public domain but I will have my tutor read through my research report and give suggestions about interpretation of research conceptions and ideas.

3.3 Secondary data collation and analysis

I have reviewed existing data, as well as statistical data manipulation in the quantitative context. Collection of secondary data helped me to have all the information needed from reliable sources which provided a starting point for evaluation and analysis to gain some background knowledge and understanding. Secondary data collection contributed to the analysis and commentary throughout my research report. The common types included: Official statistics; include the official national data sets and this information was acquired from the recognized e-government platforms, annual departmental and ministry reports, and ministerial policy statements. Secondary data concerning my study has been collected from different reports, statistics available in the public domain. I have searched different databases and obtained different materials to include journals, reports, and articles. The databases have provided secondary data to me regarding e-government systems and services, surveys, and policies in Uganda.

3.4 Data analysis

I had in my mind the key issues and topics to be addressed as it made secondary data collection a lot easier; searched for the relevant information and data sources; after data collection then read and analyzed it properly; transformed information from secondary data into key headings. After collection of data and analysis, various outputs depending on the type of information

collated and reviewed include statistics, data tables and charts were developed and I made comparisons between different areas. Secondary was analyzed using the same techniques as for primary data.

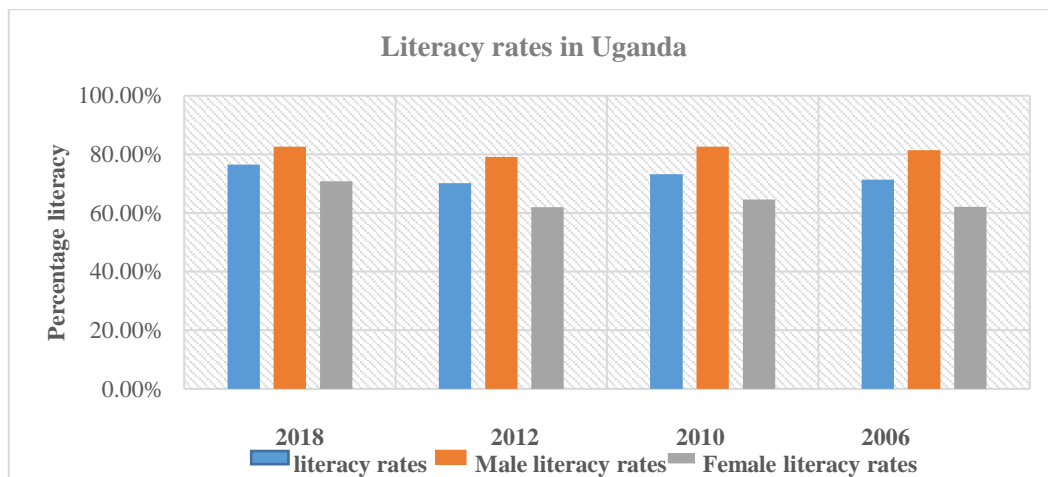
4. RESULTS/ EVALUATION

This chapter presents the results, analysis and discussions basing on the sequential flow of the objectives and research questions of the study.

4.1 Media coverage in Uganda

There is no way e-government implementation can be successful at both national and local level in Uganda if we don't consider the channels through which information can reach the final user. E-government packages are delivered in English in Uganda therefore it is wise to understand the literacy levels of Ugandans as this determined the rate at which the citizens understood and adopted the use different e-government services. Therefore, I studied the literacy levels of Ugandans, mass media coverage in Uganda which I presented below.

Literacy levels and mass media coverage in Uganda



CIA world factbook, 2020

Radio, Television and social media coverage in Uganda

Currently different platforms have documented diverse mass media sector and usage by the growing youthful population in Uganda. The Uganda Communication Commission report, 2018 showed that Uganda had 292 licensed radio stations, 33 operational Television stations and eight Pay TV service providers indicating potential growth from 200 radio stations reported by BBC Monitoring report, 2016. The BBC World Service's nationally representative survey, 2015, reported majority of the adult Ugandans had a working radio (87%) and mobile phone (74%) in their household. Only a third had a working TV (34%) and only 13% of the adult population had access to the internet within their household. According to Internet World Stats database almost three-quarters of the world population own a mobile phone with only 16% smart phones, Uganda had 19 million estimated internet users by December 2017. The digital

report for Uganda, 2020 showed that 26.83million Ugandans (60%) had mobile connections, 10.67million (24%) using internet and 2.5million (5.6%) social media presence. Therefore, if the population of Uganda is approximately 44million people and only about 10million Ugandans are using internet but above all data charges are so high with internet tax inclusive. This means that most Ugandans can't afford sustaining internet and thus this makes it difficult for them to afford using local e-government services. As a means to encourage more people to use e-government with the benefits properly defined but internet expenses are an impediment to implementation of local e-government in Uganda.

General understanding of e-government by respondents

Characteristics	Classification	Percent (%)
e-government meaning	Know a lot	13.2
	Know something	86.1
Challenges to e-government	Language barrier	24.5
	Sophisticated implementation models	18.5
	Lack of sensitization campaigns	25.8
	Poor infrastructure	30.5
	Social media	9.9
e-government information sources	Public officers	19.9
	Public offices	13.9
	Research institutions	24.5
	Religious institutions	17.9
	radio and television	13.2
	Technology dissemination	18.5
	Market information	17.9
Local e-government services	Extension advisory services	28.5
	Link citizens to government	19.9
	Trainings and sensitization	14.6
	Electronic voting and passports	18.5

4.2 Online service Index in Uganda

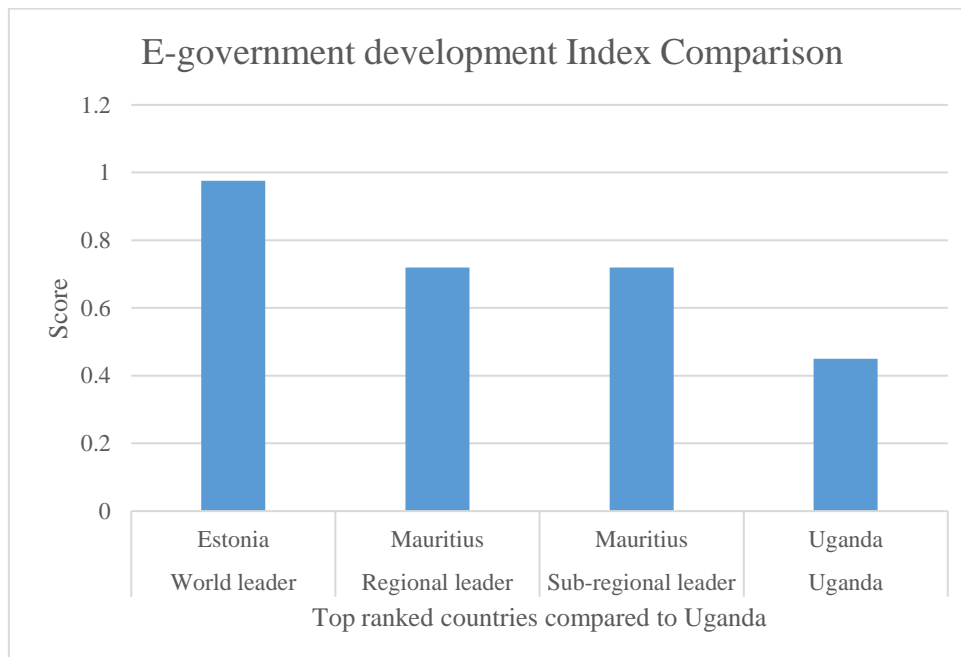
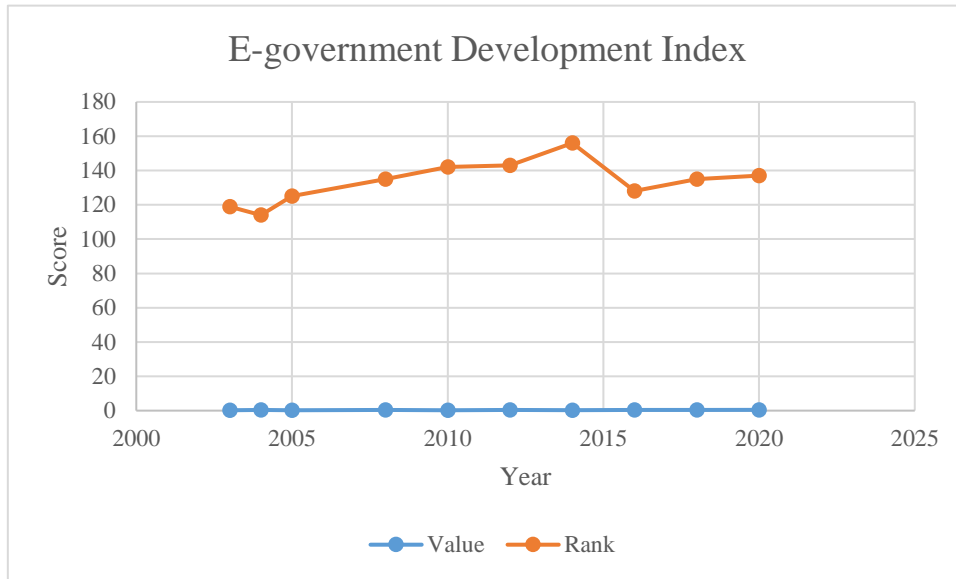
Online Services Index is defined as a parameter under E-Government Development Index (EGDI) used as a measure of the use of Information and Communication Technologies by different governments while delivering public services to her citizens at the national level and mainly measures the impact of digital technologies and innovations to the public sector and improvement of livelihoods. The United Nations E-Government survey, 2018 has showed that Uganda’s online service index majorly improved in 2016 to 2018 from 50% to 57% thus a being ranked among high online service index bracket.

4.2.1 Uganda’s e-government Development Index

E-government development Index			E-government participation Index		
Year	Value	Rank	Year	Value	Rank
2020	0.4499	137	2020	0.5714	95
2018	0.4055	135	2018	0.6236	87
2016	0.35992	128	2016	0.49153	91
2014	0.25926	156	2014	0.13725	152
2012	0.31854	143	2012	0.0789	109
2010	0.28123	142	2010	0.07142	117
2008	0.3133	135	2008	0.0909	98
2005	0.30814	125	2005	0.04761	90
2004	0.32903	114	2004	0.03278	97
2003	0.29562	119	2003	0.0345	102

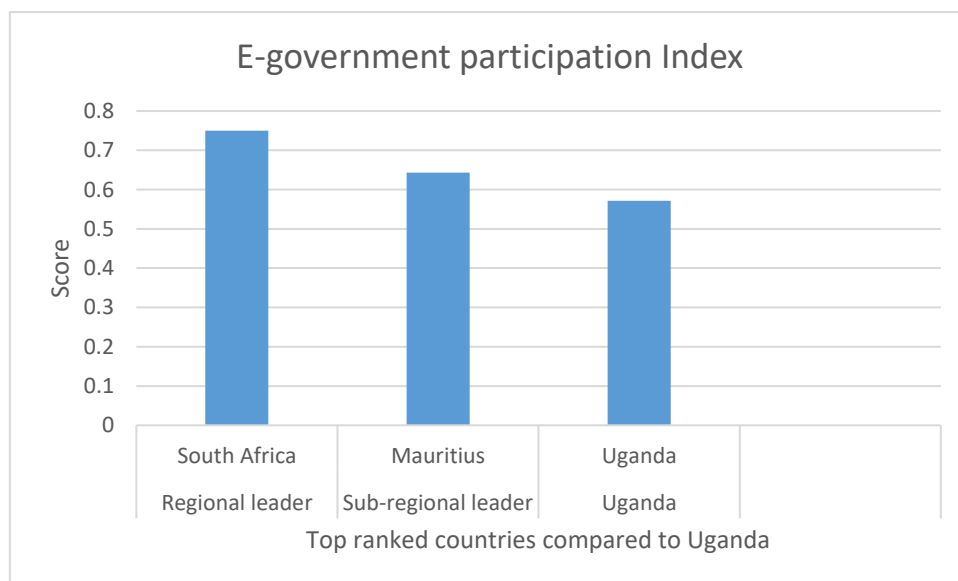
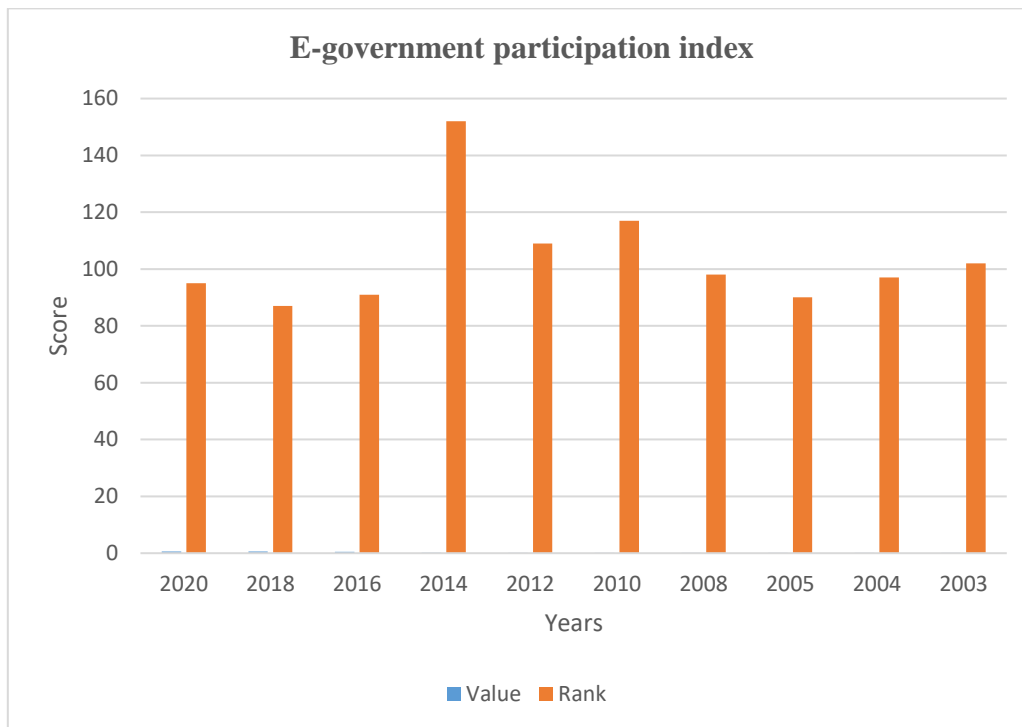
One of the major challenges in Uganda showed by the survey report was Telecommunications Index and Human Capital Index increased but at a very slow pace that is 11.3 percent in 2016 to 15.7 percent in 2018 and 46.7 percent in 2016 to 49.6 percent in 2018 respectively. It was clearly showed that services that e-visa platform allowed foreigners apply for visas from the embassies, renewed their visas and insurance policies, applied for residence and work permits and passes, (student, dependent and special passes) and other certificates of residence. It was on record that by 2017, a total of 212,000 and more applications were received whereas application time for different services by both citizens and foreigners reduced from 1 month to 5 working days. The survey showed that Uganda’s E-Government Development Index (EGDI) had improved from 36% in 2016 to 41% in 2018, which is above the African average of 34%. However, an increase was recorded in e-government development index but that didn’t transform directly into e-government participation where by Uganda is leaning behind

implying that more sensitization and awareness campaigns need to be conducted so that citizens can participate in use of e-government systems and services.



Uganda is way below the rankings at international and regional level regarding e-government index with Estonia the leading country globally and Mauritius occupying the 1st rank compared to Uganda occupying 137 position which far below average. There is a need to improve and work on factors leading to e-government development to include availability of cheap accessible internet services across the country, tax free internet packages, and developed network services across the country, development and use of e-government services in all departments, ministries and government agencies.

4.2.2 Uganda’s e-government participation Index



The survey report showed that participation of Ugandan citizen in use and utilization of different e-government services was very low compared to other countries around the region and this was attributed to different reasons namely; most of the eservices are in English yet the illiteracy levels are so high among Ugandans hence can’t be able to read and comprehend, secondly most of the citizens aren’t aware of the availability of such e-government services as they were used to physical application to given offices therefore a need to strengthen

sensitization and awareness campaigns to influence citizens to use available services. Most of the citizens are poor and unemployed making it difficult to afford sustaining high internet fares.

4.3 Eservices to Ugandan citizens

The following are the e-services that the citizens of Uganda access as part of the e-government; report Money Laundering & Terrorism Financing, report complaints, counterfeit medicines, national Response Fund for COVID-19, COVID-19 (Corona Virus) National Task Force, information Desk COVID-19, sticker Verification System (Ministry of Works and Transport), ministry of Health COVID-19 Information Portal, Uganda Trade Portal, NTB REPORTING & MONITORING, Uganda Bungeni (Parliament Bill Tracker), Uganda Trade Information Portal, uConnect - Mobile Service Delivery, I.T Certification, Judicial Complaints System, National Oil & Gas Talent Register, UNCCI Membership Management, NDA Services, NMS Services, UTB QA Licensing System, NEMA Services, Anti-Corruption Unit (ACU), IT Certification Office (ITCO)m Animal Directorate License & Permits Portal, Certified Installation Permit Holders, e-Learning, External Employment Management Information System, Health Services Commission e – Recruitment, National Supplier Database, National ICT Initiative Programme Management System, Uganda System for Electronic open data Records, National Housing and Construction Company Ltd, Imports Inspection and Clearance Information Management System, UNBS Product(s) Verification APP, ebiz, Employee/Supplier eRegistration, National CERT, IRA online licensing System, Voter Locator, PPDA Providers online Centre, Procurement Performance Measurement System, Judiciary, Wild Life Card (Reservations and Booking), Student Loan Scheme (Register and Apply for the Loan), Mulago National Referral hospital, Hospital Schedule locator, Emergency Support, Uganda Police Force Services, Emergency support, Counter Terrorism Unit, Professional Standards Unit, Fire out Break! Reach out Fire Brigade, UNEB e-Services, Time tables, Examination registration and results information, Uganda Registration Services Bureau (URSB), Online Name Search, Business Registration, Civil Registration, Intellectual Property, Liquidation & Official Receiver, Umeme eservices (MyUmeme), National Water and Sewerage Corporation (NWSC), Pay online, Track Connection, Brokage & Emergency incidents, Track Complaint, Uganda Revenue Authority (URA) eservices, Register for Taxes, Stamp duty, Motor Vehicle Tax Calculator, Ministry of Gender, Labour & Social Development, Overseas Employment Management Information System, National Gender Based Violence Database, Child Helpline Service, Orphans and Other Vulnerable Children Management Information System (OVCMIS), NSSF Self Service (Get NSSF eStatement, Employer pre-registration), KCCA

eciti, online payment platform, Track Application (Register Payment), ONTR Payments (Track Payment), Report a corruption Case to the IGG (Report Corruption Case), Declaration of income, Assets & Liabilities (Case Listing), Bank of Uganda (BoU) (Exchange Rates, Monetary and Financial Sector Statistics). However, the government of Uganda to develop as different eservices under most of her ministries, departments and agencies but not all have been covered and such crucial departments without such services have remained a bigger challenge as citizens can't access the required services. But even those services listed above are not fully functional as however much citizens try to use them, there's less efficiency and effectiveness in service delivery hence raising so many questions among citizens. For example the recently concluded presidential election in Uganda, 2021 were most of the digital finger scan failed to work hence causing delays in the electoral process, the online voter locator also failed to work efficiently to verify voters and the places of voting which caused financial and time losses as citizens had to travel to different parts of the country to be verified as eligible voters. Some online services and systems have been intentionally failed by staff in those departments and agencies because there is no way they can ask for bribe from citizens hence intentionally fail them to remain in close contact with citizens hence promoting corruption.

5. DISCUSSION AND CONCLUSION

5.1 Discussion

Financial Resource Mobilization

One of the major challenges facing implementation of e-government in Uganda is limited financial resources needed to develop a sound and sustainable ICT infrastructures. The government of Uganda should therefore invest energy in mobilizing and fundraising in order to have all the resources needed to support implementation and sustenance of the local e-government projects. These funds will be used to: build capacity of staff, put up all the necessary essential infrastructure and human resource training. For local governments in Uganda, they should present their work plans and budgets to the national government to enable successful implementation of local e-government projects but as well solicit for any financial aid from development partners (donors), private companies and Non-Government Organizations.

Building Information and Communication Technology Infrastructure

Information and Communication Technology infrastructure is key for proper and sustainable e-government implementation in developing countries like Uganda. Local governments should mobilize for funds needed to build the required Information and Communication Technology infrastructure supported by reliable power supply and network connectivity. Our infrastructure is outdated and can't be used effectively for eservice delivery therefore a need to equip local governments with updated infrastructure like computers is to be successfully implemented. There is need for up-to-date basic ICT infrastructure to enable the government capture the advantages of new technologies and communication tools which are very significant for undertaking any e-government initiatives. Irregular and non-existent electricity supplies are also a barrier to implementation of e-government projects in the ministry of local government especially in rural areas of the country as it affects implementation and usage of e-government services in Uganda.

Staff training and capacity building

Training of local government employees should be carried out at all implementation stages since activities done differ at all stages while different services are offered at different stages hence need by management to build capacity of all stakeholders including; staff members, citizens and well-wishers with different skills at different stages.

Sensitization and awareness campaigns

Sensitization is important for successful implementation of an e-government project in a developing country like Uganda where literacy is very low, people have negative attitude towards use of the website and are ignorant of the relevancy and benefits of using the website. It is therefore important for the government to ensure that citizens are sensitized at each and every stage of implementation to enable them easily adopt and enjoy services offered at each and every stage. Sensitization can be done through use of public places like libraries, schools, and any other points of computer contact by putting up instruction manuals in both English and local languages to enable them learn, develop interest and then use the system.

Social political will to implement e-government

Factors Local government needs to put in place IT standards, legal framework, have political will and build trust in the use of ICTs. This can be achieved through putting in place clear policies and procedures, treating website users equally and lawfully at all stages, being transparent, giving accountability and holding those in charge responsible for their actions, establishing formal privacy policies and proactively monitoring actual practices to help avoid privacy breaches, setting the legal framework for electronic transactions and integrating IT Security in the system. For the e-democracy stage, the government needs to build trust by introducing use of e-signatures, data security, copyrights and many others.

5.2 Conclusion:

Countries like Uganda are facing challenges like lack of up-to-date technology, but the biggest challenges raise from non-technical issues to include lack of public awareness and sensitization in regards to the benefits of e-government, availability of different e-government services and systems together with a low e-readiness index. Therefore, for a developing country like Uganda much energy and efforts by government should mainly focus on more sensitization and mobilization of the citizens to embrace e-government and its challenges. Different customized e-government models have been developed for Uganda but there is more need to sell them out to citizens through mobilization and sensitization as this increases awareness amongst the community. This study therefore justified the need for sensitization and awareness creation in order to increase participation and implementation of e-government at local level, because different models and designs are in place, different eservices available but still low usage by citizens which is a bigger challenge that needs government to focus resources at sensitization and awareness campaigns. Sensitization campaigns can be conducted through radio and

television programmes and adverts, face to face group trainings, schools and institutions trainings, social media, conferences and workshops.

6. FUTURE WORK

This research study aimed to understand the “Effect of Public Sensitization and Awareness Campaigns on Adoption of e-government Services at Local Government level in Uganda”. This study has identified areas for future study due to the fact that most of the areas that need to be studied weren’t covered due to limited time and nature my study.

Future research work should be primary quantitative research that involves a good sample of respondents so that primary data can be analyzed critically to study the effect of public sensitization and that will give a better insight into the topic but as well will supplement this study since this time around I have managed to use secondary data due to shortage of time Future research on the above topic will help government, ministries, departments and agencies understand the importance of public sensitization towards any government projects.

Future research on the e-government stakeholders’ analysis needs to be conducted to assess the type of beneficiaries of the local e-government projects and services and this will form the basis of where the government should focus all the energy and resources and as well lay strategies to attract all categories of citizens to use eservices. Conclusively, further research is required for deeper understanding of the nature of the digital divide and its influence in allowing applicants to access online e-government services.

REFERENCES

- AL-SHEHRY, A., ROGERSON, S., FAIRWEATHER, N. B AND PRIOR, M. 2006. The motivations for change towards e-government adoption: Case studies from Saudi Arabia, e-Government Workshop '06 (eGOV06), Brunel University. Applicability of e-business Maturity models”, in Proceedings of the 37th Hawaii International
- BENAMOU, N. 2005. Bringing e-government interoperability to local governments in Europe, European review of political technologies
- BWALYA, K. J. 2009. Factors affecting adoption of e-government in Zambia. *Electronic Journal of information Systems in Developing countries*. Vol. 38. 4, 1-13.
- BWALYA, K.J., AND HEALY, M. 2010. “Harnessing e-government Adoption in the SADC Region: A conceptual Underpinning” *Electronic journal of e-government*, Volume 8 Issue 1 2010, (pp23-32)
- CAPGEMINI. 2007. The User Challenge Benchmarking: The Supply Of Online Public Services, 7th Measurement. September 2007. http://ec.europa.eu/information_society/eeurope/i2010/docs/benchmarking/egov_benchmark_2007.pdf. 20. 3. 2009.
- CARBO, T., WILLIAMS, J. G., AND EMERITUS, P. 2005. Models and Metrics for Evaluating Local Electronic Government Systems and Services, *Electronic Journal of e-Government*, Volume 2 Issue 2 2004(95-104)
- CORTÉS, E., DE JUANA-ESPINOSA, S., AND JOSÉ TARÍ, J. 2006. E-government maturity at Spanish local levels, European and Mediterranean conference on information systems, Costa Blanca, Alicante, Spain
- Dalsgaard, P. 2010. Challenges of participation in large-scale public projects. In *Proceedings of the 11th Participatory Design Conference*. ACM, New York, NY, 21–30.
- Ehn, P. (1993). Scandinavian design: On participation and skill. In D. Schuler & A. Namioka (Eds.), *Participatory Design: Principles and Practices*, 41–77, Hillsdale, NJ: Lawrence Erlbaum.
- EILU, E. 2009. A systematic approach to designing and implementing e-government systems in the Developing world, Makerere University.

FLAK, L. S., OLSEN, D. H., AND WOLCOTT, P. 2005. "Local E-government in Norway, Current Status and Emerging Issues", *Scandinavian Journal of Information Systems*, 17(2):41–84, [online], www.cs.aau.dk/SJIS/journal/volumes/volume17/no2/05flaketal.pdf

Gulliksen, J., Göransson, B., Boivie, I., Blomkvist, S., Persson, J., & Cajander, Å (2003). Key principles for user-centred systems design. *Behaviour & Information Technology*, 22(6), 397–409.

Halskov, K., & Hansen, N. B. (2015). The diversity of participatory design research practice at PDC 2002–2012. *International Journal of Human-Computer Studies*, 74, 81–92.

HEEKS, R. 2006. "E-government for development": Basic definitions *Information Services, Public Works and Government Services*, Ottawa.

Karlsson, F., Holgersson, J., Söderström, E., & Hedström, K. (2012). Exploring user participation approaches in public e-service development. *Government Information Quarterly*, 29(2), 158–168.

Kristensen, M., Kyng, M., & Palen, L. (2006). Participatory design in emergency medical service: Designing for future practice. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 161–170. New York, NY: ACM.

LÖFSTEDT, U. 2005. "E-Government – Assessment of Current Research and Proposals for Future Directions", *International Journal of Public Information Systems*, 1(1): 39-51. [Online], [http://www.hia.no/iris28/ Docs/ IRIS2028-1008.pdf](http://www.hia.no/iris28/Docs/IRIS2028-1008.pdf).

Obata, A., Ohori, K., Kobayashi, N., Hochreuter, H., & Kensing F. (2012). Challenges of participatory design for social innovation: A case study in aging society. In *Proceedings of the 12th Participatory Design Conference: Exploratory Papers, Workshop Descriptions, Industry Cases*. ACM, New York, NY, 9–12.

Pilemalm S., Lindgren I. & Ramsell E. (2016b). Fourth generation of user-centered design: Developing for e-government and cross-sector collaborations. *Electronic Government and Electronic Participation*.

RWANGOGA, N.T., AND BARYAYETUNGA, A. P. 2007. E-government for Uganda: Challenges and Opportunities. *International Journal of Computing and ICT Research*, Vol. 1, No. 1, pp. 36 - 46. <http://www.ijcir.org/volume1-number1/article 5.pdf>

SHACKLETON, P., AND DAWSON, L. 2007. Doing it Tough: Factors impacting on local e-Government maturity, 20th Bled e-Conference e-Mergence: Merging and Emerging Technologies, Processes, and Institutions, June 4 - 6, Bled, Slovenia.

Simonsen J., & Hertzum M. (2008). Participative design and the challenges of large-scale systems: Extending the iterative PD approach. In Proceedings of the 10th Participatory Design Conference, ACM, New York, NY, 1–10.

UGANDA E-GOVERNMENT. 2006. Uganda e-Government Strategy Framework. (Final Draft). UN (UNITED NATIONS) AND ASPA (AMERICANSOCIETY FOR PUBLIC ADMINISTRATION). 2001. Global survey of e-government.

Von Hippel, E. (1986). Lead users: A source of novel product concepts. Management Science, 32(7), 791–805.

<https://publicadministration.un.org/egovkb/en-us/Data/Country-Information/id/179-Uganda>

[EGOVKB | United Nations > Data > Country Information Uganda Improves in Government Online Service Delivery – UN Survey > EGOVKB | United Nations](#)