ICT4D and E-government

Joshua Okemwa[1], Dr. Alice Nambiro (PhD)[2]

[1]Computing Science Department, School of Information Science and Technology, Kisii University, Kenya

[2]Department of Information Technology, School of Computing and Informatics, Kibabii University, Kenya

ABSTRACT

The advancements surrounding information and communication technologies have become ubiquitous so much so that governments are now compelled to use them to reduce cost and increase their efficiency. E-government entails the application of information and communication technologies to deliver government services, increase interaction between the government and citizens, and improve the efficiency of the government. This paper details the various aspects of e-government implementation, ICT4D policies, and case studies from the United States and Kenya. Kenya is fast catching up with the rest of the world, having benchmarked the local e-government system with systems in Malaysia, Singapore, the UK, and South Africa among other nations. Limitations that the local implementation faces are detailed with the future of e-government being pitted as fruitful despite myriad infrastructural and training deficiencies.

Keywords: ICT4D Policies, E-Government, Government, Citizens, Services

I. INTRODUCTION

The digital government concept represents a major shift in the manner in which governments around the world work and embrace their mission. The concept promotes administrative tasks of setting up goals, enhancing the delivery of services, making decisions that are data driven to making and enforcing policies that are based on evidence. Further, governments are taking advantage of the power of technology, information systems, and their benefits in transformative ways to ensure that government officials are accountable to transparency within the buildings where government official matters are run (Gil-Garcia, Dawes, & Pardo, 2018). The transformation, in the current information age, comes as a necessity rather than a luxury. Without proper access to the proper information for decision making in this online age, developing countries like Kenya are at the risk of missing out on the benefits and promise of the information and technology revolution (World Bank Group, 2019). This paper discusses the instances of e-governments and enabling environment required to enhance access to e-government services, a criterion for the proliferation of ICT4D (ICT for development) applications.

E-government and Development

In the old model of integrating information technology and governments, technology worked in

the internal setups of the government to process data. In the new model, information and communication technologies work by supporting the transformation of the external interactions between the government and its clients. E-governments should be perceived as encompassing all information and communication technologies, but the main innovation is computer networks and communication platforms – from internet to intranets – enabling a wealth of novel digital connections:

i. Connections internally – allowing team thinking
ii. Connections between the governments and citizens as well as organizations - improving accountability.
iii. Connections between the government and citizens as well as businesses – changing the manner in which the government delivers services.
iv. Connections within and without involving NGOs – supporting concerted action and learning.
v. Connections between the government and communities – building social as well as economic development.

Owing to the increasing integration of technology, the focus grows from merely sections of e-administration to include e-citizens, e-society, and e-services (Joshi & Islam, 2018). In developing nations, a government under deliver while the amount of money they cost the tax payer to run is high. E-government platforms promise to improve the delivery of governments in developing nations and bring about the benefits of delivery witnessed in developed nations (Hori & Sakajiri, 2005). At the root of e-government provide three main changes: automation, informatisation, and transformation (West, 2008).

Automation entails replacing processes that are repetitive and rely on human beings with machines that are able to accept information, store the information, process the information, and assist in transmitting the information. Informatisation entails supporting the current human executed processes by enhancing the process of making decision. Transformation entails creating information processes that are enabled by IT. These changes in turn bring about various benefits including, efficiency gains as E-governance makes running the government cheaper by enabling it to produce the same outputs but at minimal cost. E-governance makes governments to be able to produce more for the same amount of cost. Further, E-government results to effective gains makes government to give better output and enables the government to produce new output.

E-governance in the United States

In the United States, there are more than 1500 federal and state websites that provide e-government services. According to a recent survey of the services provided through the platforms in the US, it has been shown that 80% provide fully executable services online, 3% provide personal digital assistant accessible services, 73% provide information about privacy policies, and 58% provide security policies information. Further, around 40% of the sites provide information regarding foreign nations, and around 7% charge fees for the services that they offer(Snead & Wright, 2014). The access to databases and publications when seeking for the availability of information from the American government is excellent. Almost 98% of the government sites in the US provide publications on annual basis. There are several online services fully executable that provide services to the government and its constituents. In the long run, it is projected that the cost of delivering services in the United States will be lower owing to the digitization of services by the government.

Among some of the helpful services and features on the American e-governance platforms include database of opinions by the Supreme Court, email directories, employee telephone directory, user guides, customer support, and notifications regarding mission persons, registration for new services, e-postcards,

price comparisons, and personal views by government officials. One of the most important aspects of the e-government platforms in the US is the capability to bring the people closer to the government. An assessment of the government e-platforms show that Americans are able to register in the various sites and this allows them to receive information regarding various things from the government (West, 2008).

ICT4D policies regarding e-government provide a number of considerations in the United States that promote the delivery of services by the government to the people. Among the recommendations of the policies are that no site should exist without a valid privacy policy, no agency should have layouts that are similar to the portal page for the site, no site should redirect users to other sites outside the government sites without notifying the users, there should be navigations guides and the sites should have site maps, there should be a "what's new section, all sites should have search engines, agencies should endeavor to personalize pages such as kids pages, and sites should be able to provide accessibility services such as translation services(West, 2008).

E-government in the UK

The United Kingdom stands as the oldest constitutional monarchy at the heart of Europe. Its legislative power is held in parliament with the House of Lords and Commons sharing that power. The implementation of e-government in the country serves the same purpose as in the United States. A study on the e-government implementation in the UK shows that 33% of the individuals in the UK access the e-government to obtain information, 22% to download forms, and 22% to return forms that they have filled(EU, 2014). A significant percentage also accesses the e-government systems using the internet resource that is widely distributed in the UK.

The digital strategy in the UK aims at making access to digital services in the UK accessible to all. This strategy sets out the manner in which the UK

government will become digital. According to the most recent e-government strategy in the UK, the following actions have been set out including improving departmental digital leadership, development of digital capacity through the country's civil service, redesigning of the transactional services to meet the novel digital through default service standard, completing the transition to Gov.uk, increasing the number of citizens who can access the various government services online, broadening the range of those who are able to tender the supply of digital services, building common platform for technology, improving the manner in which the government can make policies and communicate the policies to the people, collaborating with partners across the sectors, and helping third party organizations develop new strategies as well as better information access for their own users through opening up government transactions and data(EU, 2014).

E-government in Kenya

The ICT4D policy regarding e-governance in Kenya is included in the E-government strategy (2004). The strategy document aims to improve the collaboration between the agencies of the government and that ensure that the citizens receive effective services by the effective utilization of resources. The strategy also aims at improving the competitiveness of the country while reducing the cost of delivering government services. The strategy also aims at reducing the transaction costs for the government and its citizens and offering a forum to allow the participation of the citizens. The strategy follows successful practices in countries such as Malaysia, Singapore, Australia, the United Kingdom, and South Africa.

The government of Kenya through technology aims at implementing e-governance based on coherent information processing as well as management policies, providing adequate and proper skills to users, providing a conductive information and legal structure, providing sites comprising information

regarding the government ministries, putting in place searchable databases and systems for monitoring projects with facilities for sharing files.

In the implementation, the national strategy for e-governance aims at integrating best practices in the present day economy, offering services efficiently, and offering simple publishing services. The sites should be able to integrate the services of the government in a fairly easy manner and offer one point of access through an e-government portal (Kaaya, 2004). In 2004, the government sought to implement the e-government platform and achieve the following objectives: finalize the e-government strategy, operationalize the implementation of the strategy through the development of adequate strategies, undertake an audit regarding the training needs, complete the implementation of information infrastructure with the necessary security features, implement integrated and shared databases across the government, improve and enhance the systems and databases, review procedures, processes, and regulations, eliminate duplication of resources, integrate computerized systems, implement systems such as IPPD and IFMIS, and enforce control standards as well as processes(Ochara, 2010).

Additionally, the government's strategy regarding ICT included plans to develop websites for all government ministries and have them hosted centrally, facilitate the connectivity by all agencies of the government, and continue with the implementation of collaboration and messaging services.

More goals were designed in 2007 and over the years the government has sought to improve its delivery of services to the citizens through e-platforms. The e-platforms that provide functional services currently include: e-citizen.go.ke is digital payment platform that enables citizens access and pay for government online services; mygov.go.ke is a platform to relay government information to its citizens such as information that relate to available government tenders, open vacancies in government ministries, government agenda among others; transport.go.ke is portal for the ministry of transport; mfa.go.ke is an online site that allows citizens and visitors access services from the ministry of foreign affairs. Others include: president.go.ke; delivery.go.ke; environment.go.ke; ict.go.ke and industrialization.go.ke

Infrastructure and the adoption of e-governance in Kenya

A study in Kenya has shown that infrastructure serves a critical role in the adoption of e-governance. Infrastructure includes logical and physical connectivity. Physical infrastructure includes cables, communication devices, and other items that promote connectivity. Logical infrastructure on the other hand includes service provides that provide the connectivity of data. The research shows that infrastructure is indeed critical in the adoption of e-governance (Muraya, 2019). Such availability guarantees that convenience and flexibility that provide citizens with services that they value.

In many public instances, there is an absence of the capacity to offer these services. Thus, from the findings of the study, it would be safe to note that the services that are offered through e-governance have to be accessible for the various initiatives to success. The aspect of accessibility is formed by the items that comprise telecommunications, electricity, and access to the internet. For the citizens to access the services of the government, they need to have the necessary prerequisites in place such as national identification number. Despite the efforts made by the Kenyan government to have all its citizens access government resources and services, it is evident that not all locations have access to these resources (Muraya, 2019). Barriers to accessibility to the internet, unreliable network and networks infrastructure, limited infrastructure, and other technological

challenges limit the accessibility of citizens in Kenya to e-citizen and other government platforms.

II. CONCLUSION

It is clear and evident that e-government platforms are important. Such e-government initiatives enhance and promote efficient and effective delivery of services by respective governments both in developed and developing countries. The existing infrastructure in developing nations, however, does not allow for the full utilization of electronic and internet resources. As such, the existing infrastructure should be maintained on a regular basis while more resources should be directed to procuring the pre-requisite network and the associated infrastructure, development and maintaining online portals, training citizens and also putting in place the required policies and legal frameworks.

III. REFERENCES

[1]. EU. (2014). e-Government Factsheet. London: Gov.UK.

[2]. Gil-Garcia, J. R., Dawes, S. S., & Pardo, T. A. (2018). Digital government and public management research: Finding the crossroads. Public Management Review, 20(5), 633–646. https://doi.org/10.1080/14719037.2017.1327181

[3]. Hori, K., & Sakajiri, A. (2005). e-Government: from excitement to effectivenes. Washington Dc.

[4]. Joshi, P., & Islam, S. (2018). E-Government Maturity Model for Sustainable E-Government Services from the Perspective of Developing Countries. Sustainability, 10(6), 1882. https://doi.org/10.3390/su10061882

[5]. Kaaya, J. (2004). Implementing e-government services in East Africa: Assessing status through content analysis of government websites. Electronic Journal of E-Government.

[6]. Muraya, B. (2019). Factors affecting successful adoption of e-government in Kenya's Public Sector (Vol. 53). https://doi.org/10.1017/CBO9781107415324.004

[7]. Ochara, N. M. (2010). Assessing irreversibility of an E-Government project in Kenya: Implication for governance. Government Information Quarterly. https://doi.org/10.1016/j.giq.2009.04.005

[8]. Snead, J. T., & Wright, E. (2014). E-government research in the United States. Government Information Quarterly, 31(1), 129–136. https://doi.org/10.1016/j.giq.2013.07.005

[9]. West, D. M. (2008). State and Federal Electronic Government in the Key Findings. In Electronic Government. Nairobi.

[10]. World Bank Group. (2019). Digital Government for Development [Text/HTML]. Retrieved October 13, 2019, from World Bank website: https://www.worldbank.org/en/topic/digitaldevelopment/brief/digital-government-for-development

Cite this article as :