# **ICT4Governance in East Africa**

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Abstract. There is growing interest and increasing investment in the role of Information and Communication Technologies (ICTs) in governance across Africa, however, empirical evidence on the use of ICTs in governance in East Africa remains scanty. The ICT for Governance study in East Africa is a study investigating how ICTs are being used in four specific areas of governance (i) access to information, (ii) public service delivery, (iii) tracking corruption and (iv) civic participation. This study seeks to identify, describe and analyze situations in which ICTs have and can be used to successfully facilitate or how they have hindered, two way interaction between government and citizens in Kenya, Uganda and Tanzania. This extended abstract discusses the theoretical frameworks and methodology used in this study.

**Keywords:** e-Governance · Governance · Civic participation · ICT and Governance · ICT4D

#### 1 Introduction

The increasing growth and general prevalence of Information and Communication Technologies (ICTs) in Africa is as a result of various contributing factors. One of the most dominant reasons for governments encouraging the growth of ICTs is for the stimulation of economic growth, and more broadly, social and economic development [1]. The massive support and encouragement of ICT adoption in Africa by governments usually in collaboration with bilateral donor organizations, and the private sector has contributed to an ICT revolution in Africa. ICT is now widely accepted to be a powerful tool with which to combat many of the challenges that African countries struggle with. One of the major challenges faced by African countries is governance. Exploring ways to deal with the poor governance that has plagued many African countries is a fundamental aspect of solving other social and economic challenges.

Information and Communication Technologies (ICTs) are changing how both social and economic structures operate and interact within themselves and outside themselves. In influencing stimulation of positive social and economic changes, ICTs are also changing the ways in which local, regional and national government authorities communicate within themselves, with each other and with the citizens [2]. ICT being a newly prevalent phenomenon, is under researched [3] but this has not slowed down the application of ICTs in various area of governance. ihub Research<sup>1</sup>, as part of the

<sup>&</sup>lt;sup>1</sup> iHub Research, the research arm of iHub, focuses on technology and its uses in East Africa.

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ICT4Democracy East Africa network<sup>2</sup> is undertaking a study to assess how ICT tools are being used for and in various aspects of governance in Kenya, Uganda and Tanzania. This study looks beyond e-governance and examines other channels of ICT use in governance. The following are the questions this study seeks to answer;

- i. Which ICT tools are in use for governance in the three East African countries in these areas; access to information, public service delivery, tracking corruption and civic participation?
- ii. In which ways are ICT tools used in the four areas identified?
- iii. What successes and challenges exist in the use of these tools?

## 2 Concepts and Theoretical Frameworks

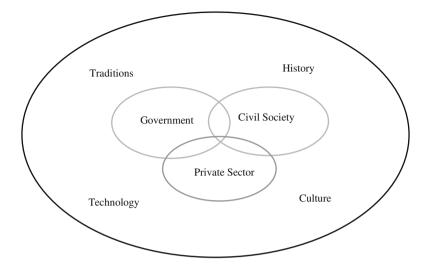
A universal definition of the concept of e-governance does not exist. This study is therefore reliant on a combination of two definitions of e-governance. The first definition is that e-governance is the use of technology (and ICTs) to enhance access to and deliver efficiently, government information and services [4]. The second definition is that e-governance involves relationships between governments and customers (including citizens, businesses, and other governments or government agencies) using electronic means [5].

This study is framed within the first and the third approaches of Garson's [6] four proposed theoretical frameworks on ICT use in governance. The first framework is of ICT use in decentralization and democratization and the third theoretical framework emphasizes a continuous two-way interaction between ICTs and the organizational and institutional environment [7]. The second and fourth approaches proposed by Garson which are excluded in framing this study are; the dystopian approach which underlines technology's limitations and contradictions, and the approach in which e-governance is placed within the theories of globalization.

This study is also framed within the proposition of the interdependence of actors in governance [8] in which Government, Civil Society and the Private Sector (and citizens) are the interdependent actors in governance. These actors are influenced and interact with traditions, technology, history and culture throughout the governance process.

Finally, this study adopts a general framework for understanding interaction in governance based on Yildiz's [7] general evaluation of the theory and practice of e-government and e-governance. This framework outlines interactions in e-governance as being; Government-to-Government, Government-to-Citizen, Government-to-Civil Society, and Citizen-to-Citizen. This study has gone ahead to add on to the four interactions, Civil Society-to-Citizen, Civil Society-to-Government, Citizen-to-Government and Citizen-to-Civil Society. These are interactions possible in the use of ICT tools for governance (Fig. 1).

<sup>&</sup>lt;sup>2</sup> The ICT4Democracy in East Africa network is "premised on the recognition that ICT enhances communication and the right to freedom of expression as well as the right to seek, receive and impart information."



**Fig. 1.** Interdependence of actors in governance. (Source [8])

#### 3 Methodology

This study is a qualitative audit of the existing ICT tools in governance in Kenya, Uganda and Tanzania. The study also uses both primary and secondary data.

This study is being conducted in specific towns and cities in Kenya, Uganda and Tanzania based on the presence of ICT4Democracy East Africa partners in the towns as explained below.

- i. In Kenya, the study focuses on Nairobi and Nakuru. These selections are based on the prominence of ICT initiatives in the areas. Nairobi, as the ICT hub in the East African region was a natural fit for the study. Nakuru, on the other hand, is the first town in Kenya to get free wi-fi therefore enabling citizens to have access to unrestricted internet connectivity. This move was aimed at enhancing ICT in ensuring better public service delivery and simplifying public participation in governance through social media.
- ii. In Uganda, the study focuses on Kampala, the capital city, and in Apac, a periurban town which is also a post conflict area. Kampala, being the capital city, has prominence of ICT use and infrastructure. Apac, on the other hand, is one of the towns in which there exists heavy use of ICT tools for governance as we discovered in our exploratory study.
- iii. In Tanzania, the study focuses on Dar-es-Salaam and in Mwanza. Both cities have a high presence of organizations and projects whose central theme is ICT for Development, within and outside of the ICT4Democracy East Africa network.

Starting with an exploratory study, data collection through crowdsourcing<sup>3</sup> was carried out on social media and online spaces such as Twitter, Facebook and the ICT4Democracy East Africa Network which iHub Research is a part of, 18 ICT tools were identified and categorized based on the governance actor responsible for their implementation, that is, Government, Civil Society, and Citizens or the Private sector. This was done for all the three East African countries. These tools were further categorized according to their primary functions, that is, (i) access to information, (ii) public service delivery, (iii) tracking corruption and (iv) civic participation.

The exploratory study informs collection of primary data from the three Countries. Data collection will include key informant interviews from two government institutions from each country implementing ICT tools for governance, interviews with five Civil Society Organizations implementing ICT tools or projects for governance in each country, and interviews with three developers of ICT tools used for governance in each of the three countries.

Focus group discussions will be conducted with at least eight participants in each group in two selected towns in each of the three countries to investigate challenges, successes and user experience considerations that went into the design of the ICT tools identified in the exploratory study.

## 4 Data Analysis

This study will use content analysis to answer the research questions as well as quasistatistics for data such as ICT tools used in the four areas of Governance discussed in the introduction section of this extended abstract. Content analysis will be used in particular to understand data collected from Civil Society Organizations, Government Institutions, Developers of ICT tools and the focus group discussions. The broader thematic focus areas will be on successes, challenges in implementation, motivation for using the ICT tools, de-motivation against using the ICT tools.

Findings from this study will be disseminated to the East African governments, Civil Societies, developers and citizens interested and working in governance. Recommendations based on the findings will be drawn and shared with relevant stakeholders in ICT for Governance in the region. In addition, an interactive map will be built using the Ushahidi platform to map the different ICT tools that were discovered in this study together with brief descriptions about each ICT tool.

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<sup>&</sup>lt;sup>3</sup> Crowdsourcing is the process of getting information, funding or work done, online, from a crowd of people.

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