Challenges and Policy Imperatives for E-Government in Africa

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INTRODUCTION

Government is a system of social control under which the right to make laws, and the right to enforce them, is vested in a particular group in society. Organizationally, governments may be classified into parliamentary or presidential systems, depending on the relationship between executive and legislature. Government may also be classified according to the distribution of power at different levels. It may be unitary—that is, with the central government controlling local affairs—or it may be federated or confederated, according to the degree of autonomy of local government. When this system of social control is being implemented to a large extent on the platform of information and communication technology (ICT), then we have an electronic government (*e-government*).

E-government refers to the provision of online public services to citizens and businesses. Services for citizens include registration to government services, such as health care, education or employment benefits. For businesses, e-government services can take the form of online alerts for public procurements or funding opportunities as well as information and support on applicable legislation in a given sector. E-government is widely viewed as an extraordinary opportunity for administrations to cut down their costs, speed up procedures and, therefore, increase their efficiency and reactivity. No doubt, e-government has grown in the past decade worldwide. Its efforts can vary from Web portals to online license renewals to experimentation with online voting. E-government is generally recognized as a means of making government more efficient while allowing it to be more responsive to customer needs (Jeffery, 2005).

The growth in e-government has been rapid. For example, in the United States, the percentage of local governments with Web sites increased from 8.7% in 1995 to more than 80.0% in 2000 (Holden, Norris, & Fletcher, 2003). Advances in ICT are helping to make the growth in e-government a global phenomenon. A United Nations report shows that governments around the world are moving towards higher levels of e-government to better serve their citizens (UN-ASPA, 2002).

In Africa, e-government is not yet widespread. However, some African countries have embarked on e-government initiatives and have recorded varying degrees of success. This article aims at reviewing some of these initiatives and ultimately recommends the way forward in terms of policy issues and strategies that African governments must put in place for their e-government projects and initiatives to be worthwhile.

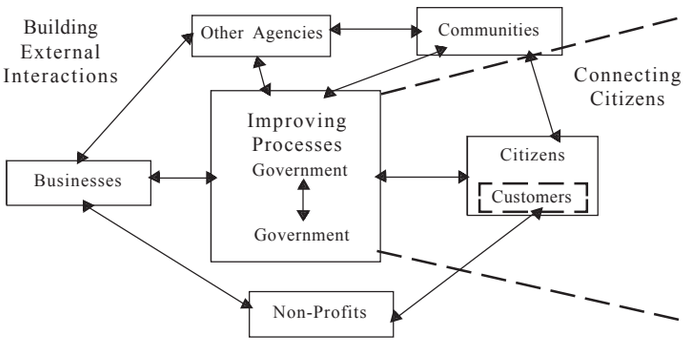
BACKGROUND

There is no unique, agreed definition of e-government. The term is being used extensively nowadays to refer to the use of ICT by government agencies. It is the application of ICT to improve efficiency and effectiveness, create transparency and accountability of informational and transactional exchanges within government, between governments and government agencies at national, state and local levels (G2G), citizens (G2C) and businesses (G2B) (Heeks, 2001a). According to Abet Open University (2004), G2C, G2B and G2G e-government is all about government agencies working together to use technology so that they can better provide individuals and businesses with government services and information. Much of it is about: establishing common standards across government; delivering services more effectively; and providing ways for government agencies to work together, all using the best technologies available.

Put differently, e-government refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet and mobile computing) that have the ability to transform relations with citizens, businesses and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth and/or cost reductions (Abet Open University, 2004).

According to Heeks (2001b), e-government is the use of ICTs to improve the activities of public sector organizations. He holds that all digital ICTs are included, as well

Figure 1. Domains of e-government initiatives (Source: Heeks, 2001b)



as all public sector activities. He holds that there are three main domains of e-government, illustrated in Figure 1:

- **Improving Government Processes:** e-administration
- **Connecting Citizens:** e-citizens and e-services
- **Building External Interactions:** e-society

Respectively, these particularly address the problems that government is too costly, too inefficient and too ineffective (e-administration); too self-serving and too inconvenient (e-citizens and e-services); and too insular (e-society).

HIGHLIGHTS OF E-GOVERNMENT INITIATIVES IN AFRICA

An e-government project in Nigeria was the management information system (MIS) to assist with management of the university sector in Nigeria. The MIS was originally planned to run on a PC using dBase software, with a PC placed in the administrative sections of every Nigerian university, and further PCs at the federal-level Nigerian Universities Commission (NUC). The application was supposed to perform the following functions: to act as the central point for collection of data from individual Nigerian universities on students and staff, building a comprehensive statistical database; to have that data utilized by the NUC and Federal Ministry of Education for the purpose of planning and development of infrastructure, and for the production of statistics such as student registrations, staff/student ratios, gender and geographical distributions; and to provide support to individual universities for the purpose of processing examination results and transcripts.

The project began in 1993, and despite the significant sums that have been invested, it has still not been able to achieve the objectives that were set, leading it to be seen as a white elephant and a waste of money. No university has been able to generate either transcripts or correct enrollment data from the system, and the NUC has stopped the funding of the project in a number of universities. The project has been largely unsuccessful, considering its long duration and the level of achievements recorded. This was due to the fact that the project and its design given by the individual universities were not well used by the project coordinating unit within the NUC and to frequent changes in political leadership, which was mirrored by a lack of continuity within the government policy-making body overseeing the use of data and ICTs in the university system (Anonymous, 2002a).

In Mozambique, the Beira Executive Council (the local government authority for the city of Beira in Mozambique) initiated development of a decision support system, with a simple geographic information system (GIS) interface. Jackson (2002) reported that the data for the main database was based upon the register of city land plots, their zoning (open space, industrial, residential) and their status (vacant, under development, built on). The application produced information in two forms: a database report with information on plot status, and a digitized map of city plots that spatially represented the database. A common database package was used to hold the database, which was run on two stand-alone PCs linked to a digitization tablet and two printers.

The operation of the database produced politically sensitive information about plot usage, some of which was used as an excuse to settle old scores. However, the application never properly worked, it never replaced the old system and it was never updated after initial implementation. Its impact on operational decisions was negligible. Thus, the project failed to influence decision-making as anticipated and, therefore, can be deemed a total failure. However, the installation introduced computer literacy into the Registry and, as an adjunct, greatly increased use of word processing (Jackson, 2002).