Harnessing Information and Communication Technologies for Diffusing Connected Government Applications in Developing Countries: Concept, Problems and Recommendations

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ABSTRACT

Improving information management practices is a key focus for many organisations across both the public and private sectors. An information society begins with a connected government and ICTs are the bedrock and founding pillars of such societies. To assist public administrators think beyond traditional e-government, this study describes a concept of connected government, whose philosophy rests on the integration story that happens behind the scenes of the visible web interface as well as the collaboration among government agencies. Diffusion of Innovations theory is the conceptual framework underpinning this study. The connected government phenomenon is also put into perspective by the systems theory that is explained in this study. This article describes a case study of an organisation in a developing country environment where even the basic e-government services are barely extant. This study was done to determine the connectedness within and across government agencies, with the idea of stimulating some thinking within and among public administrators, around the possibility that a connected government can indeed be established in a developing country setting. The study exposes shortcomings to e-government diffusion not only of the organisation under investigation, but also of other similar enterprises in developing countries within the same context. The article concludes by proposing a set of recommendations toward diffusing connected government applications as an antidote to identified problems.

Keywords: Back-End, Connected Government, E-Government, Front-End

INTRODUCTION

Improving information management practices is a key focus for many organisations, across both public and private sectors (Robertson, 2005). The PC Magazine defines information management as a discipline that analyzes information as an organizational resource. The discipline covers the definitions, uses, value and distribution of all data and information within
an organization whether processed by computer or not. The following is a more contemporary definition of information management given by Duffey and Assad (1989, p. 6):

\[(\text{Information management})\text{ is the planning, organising, developing and controlling of the information and data in an organisation (at both corporate and individual levels) and of the people, hardware, software, and systems that produce the information and data.}\]

Duffey and Assad’s definition implies that information management is a broader concept that includes information sharing within and across organisations. Impact Consulting (2007) report that one of the most organisation-focused benefits of electronic information management is information sharing. Many government systems specialists argue that government and public institutions are not simple but complex and mammoth bureaucratic establishments with a set of information silos that erect barriers to the access of information and make the provision of services cumbersome and frustrating (Kumar et al., 2007). However, with the emergence and proliferation of Information and Communication Technologies (ICTs), Gichoya (2005), argues that it is possible to improve efficiency and effectiveness of internal administration within governments and to relocate government services from government offices to locations closer to the citizens. This relates well to an earlier insistence by Tapscott (1995), that ICTs support the “age of network intelligence”, reinventing businesses, governments and individuals. Throughout the world, use of ICTs for government reinvention is increasing, though developing countries are still in the early stages of full-scale ICT deployment.

While ICTs have been harnessed in many governments throughout the world, the European Commission (2003) reported the emergency of ‘islands’ of government that are frequently unable to interoperate due to fragmentation resulting from uncoordinated efforts at all levels of public administration. Information sharing across government agencies provides new opportunities to enhance governance, which can include improved efficiency, new services, increased citizen participation, and an enhanced global information infrastructure. Referring to knowledge sharing and information, the Canadian International Development Agency’s Knowledge-Sharing Plan (2007) explains that it is an effort at “knowledge pooling” amongst diverse participants across all sectors of the economy in order to consolidate existing knowledge and generation of fresh intellectual capital with a view to improving programming in governance and development (CIDA, 2007).

The main objective of this article is to examine the diffusion of connected government applications in government organisations in developing countries. The study draws from the systems theory of management where the entire government is perceived as one system with several constituent parts like departments and agencies, people, software, hardware and procedures. A case study approach is adopted where the role of ICTs in promoting inter-organisational information sharing culture is examined. The study is limited to a single organisation, whose inter-organisational relationships will be thoroughly investigated. This article is mainly motivated by our experience with disjoint government agencies in developing countries where getting a full cycle of services is not easy. The main purpose of this article then is to address the concept of connected government as a way of promoting information sharing within government agencies. This article therefore makes a significant contribution to the body of knowledge in e-government as the concept of connected government is virtually unknown in a developing country setting, especially in Africa.

The structure of the article is as follows: The next section describes the theoretical framework underpinning this study and brings to the fore the connected government concept and the systems theory. Diffusion of Innovation theory, connected government concept and the systems theory are all explained in this section. Section 3
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