Chapter 8

A Holistic Approach to E–Government:
Ongoing Research in Oman

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ABSTRACT

This chapter presents an example of ongoing action research, which uses systemic approaches to diagnose and design a Knowledge Management strategy for the Public Sector in Oman. Based on previous research concerning contributions of holistic approaches to e-government, it describes a framework for supporting an e-government program, based on generic systemic and cybernetic principles. The primary value of this chapter lies in its account of the ongoing experimentation with innovative holistic approaches to e-government. The results contribute to the practice of e-government by supporting more effective and robust e-government programs. The suggested framework also provides a basis for future empirical studies on the relationship between e-government strategies and organisational and Knowledge Management effectiveness.

INTRODUCTION

In recent years there has been significant interest in electronic government *(e-government)*, due to the revolution that the Internet has brought into both private and public management practice. Many governments have designed and implemented massive e-government programs, but reported experiences still leave some questions open, for example: is there a clear way of assessing the impact of such programs on the performance of that government? What is the nature of observable improvement in government activities directly related to e-government programs? What are the current failures of e-government implementation? Are they related to cultural and structural constraints? How can common failures in e-government be addressed? What are the main concerns about the efficiency of the various digital initiatives?

We consider that one relevant way to address these questions is to explore more comprehensive holistic approaches that would allow these questions

to be tacked more consistently and coherently from a humanistic, organisational and technological point of view. Therefore, we focus in this chapter on presenting an example of the use of systemic approaches to the design and implementation of e-government services', with a special emphasis on e-services and e-payment portals. The chapter's reflections are presented in relation to ongoing research on using systemic approaches to support e-government and e-participation in the public sector in Oman.

We first present the background research (a summary of the conceptual and methodological characteristics of the research project), then present the current strategy and method of implementation and finally describe the way the project has progressing, inspired by systemic approaches.

RESEARCH BACKGROUND

Research Context

The idea of e-government loosely relates to the electronic linkage, interaction and communication of a particular government with both its citizens and its trading partners using a variety of gateways, portals and networks. However, there is no clear agreement amongst people coming from the soft and hard approaches to information systems (as in Checkland, 1981) in terms of what is the real coverage and scope on an e-government strategy. Most would recognise that the challenges of designing and implementing an e-strategy constitute a domain of significant complexity where people, processes and technology work together in a highly dynamic and often creative way, usually in complex and interrelated (or "messy" as Ackoff (1981) called them) situations. These are the type of situations where systemic approaches can offer significant benefits to practitioners.

The research introduced in this paper builds on previous research experiences from both authors. Al Maimani (2000) analysed from a critical

systems perspective the impact of information systems on decision-making in Oman. He found that during the study period (2000), information systems in decision-making were not properly used, and also found evidence of strong correlations between inefficiencies in information systems and decision-making. This observation has been taken into account and used as the basis for the design and implementation of a One Stop Shop (OSS) (see footnote 4) in (2004): information systems are now properly and effectively used in decision making both for commercial registration and for providing services to the investors in Oman. Espinosa's doctoral research focused on developing an organisational cybernetic framework in the President's Office in Colombia in the 1990s, to align strategic information systems and organisational transformations (Espinosa, 1995).

The ongoing action research project presented in this chapter aims to explain the gap between theory and practice in the design and implementation of e-services still observable in the Public Sector in Oman, and to address it by developing and testing a systemic framework for e-governance, inspired by an Organisational Cybernetics approach to strategic information systems.

Why We Need a Systems Approach to Improve E-Government Practice

McNabb, (2007) defines e-government as consisting of actions to produce and deliver government services to citizens, not in the traditional face-to-face manner, but instead, through the use of communication technology (specially Internet technologies). The Information Technology Authority-Oman (ITA) defined it as; "the transformation of internal and external government processes toward new and better forms of citizen-centred service delivery opportunities which new communications technologies offer" (MNT, 2007a).

Governments aim to develop and enhance their services to maximise quality assurance benefiting

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