Ready, Set, Govern: Readiness of Saudi Arabian Organizations for E-Government

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ABSTRACT

Despite the importance of organizational readiness for successful e-Government, limited studies examine internal organizational factors needed for the transformation to e-Government. This study contributes to the literatures pertaining to e-Readiness and e-Government, by offering an Organizational E-Government Readiness (OEGR) model which uncovers critical factors imperative for e-Government readiness in public organizations. Based on a quantitative survey of key government officials in Saudi Arabia, the study applied structural equation modelling to test the OEGR model. Quantitative findings revealed that various factors including strategy, national e-Government program, processes, ICT infrastructure, and human resources had a positive impact on OEGR as compared to the no direct link between user’s access and OEGR. The model equips government agencies with a systematic approach for assessing OEGR.

KEYWORDS

Developing Countries, e-Government, Information and Communication Technology, Public Sector, Readiness, Saudi Arabia, Strategic Planning

1. INTRODUCTION

New Information and Communication Technologies (ICTs) have been introduced in the government sector throughout the world in the past two decades in an attempt to achieve greater operational efficiency and effectiveness (O’Neill, 2009). Readiness for e-Government is not limited to the governmental organization. It is significant at the levels of society, economy, health, education, information policies, and other issues related to e-Government readiness (Alghamdi et al., 2011). While the literature adequately addresses these macro social and economic impacts of e-Government (Patel et al., 2012), limited studies examine main internal factors in the assessment of e-Government from an organizational perspective and how they lead to successful organizational e-government readiness (OEGR). The reality is that e-Government has several dimensions. Every dimension requires leadership, cross-coordination and knowledge, all integrated with an information technology strategy to achieve the actual action of the vision (Bakry, 2004).

Although there are several e-Readiness assessment tools, there are no fixed guidelines on how these tools can be applied effectively as models in implementing e-Government assessment in particular environments (Andersen, 2010). The design of e-Government readiness assessment models requires comprehensible measurement of the assessment design that determines factors clearly derived from information needs (ACM, 2008; APEC, 2000; CID, 2002).
Existing studies remain limited in assessing specific internal OEGR factors. They predominantly create their assessment of OEGR derived from a macro-level (national). On the other hand, only few studies pertain to the assessment OEGR on a micro-level (organization). Furthermore, those micro-level studies have limited focus on developing countries such as Saudi Arabia. Conversely, they are conducted on developed countries without validation of their suitability and applicability to developing contexts. As a result, government organizations are not being adequately equipped with models to evaluate the internal factors affecting OEGR. Therefore, the research question of this study focuses on:

What are the key factors influencing organizational e-Government readiness (OEGR) within the Public sector in Saudi Arabia?

2. LITERATURE REVIEW

In an attempt to address the research question, the study first undertakes a literature review of the main sources of Information Systems (IS), e-Commerce, e-Readiness, and e-Government readiness. It then focuses on the following areas i) perceptions of e-Government from its diverse viewpoints ii) e-Readiness evaluation models; and iii) e-Government studies and models assessments.

It is crucial to examine IS success to isolate its precise factors (Dörr et al., 2013). Most notably, the DeLone and McLean success model and the revised DeLone and McLean success model are among the most widely acceptable IS success models. Through the course of ten years of refinement, DeLone and McLean identified the significant issues leading to impact: System Use – Individual Impacts; System Quality – Individual Impacts; Information Quality – Individual Impacts (DeLone & McLean, 2003). All interdependencies have been confirmed except one which is System Use – Organizational Revenues (DeLone & McLean, 2003). DeLone and McLean refute Seddon’s (1999) criticism about the complexity of the Use particularly e-Commerce, arguing that systems use by costumers is necessary.

Withstanding criticism, the DeLone and McLean model has become the most common e-Commerce model used to measure success and have formed the basis of many studies. These include Loiacono et al. (2000, 2002); Palmer (2002); Barnes and Vidgen (2002, 2003); Liu and Arnett (2000); and Huizingh (2000). DeLone and McLean’s (1992) model had been extended by Molla and Licker (2001) to adapt factors to ensure applicability to marketing phases of e-Commerce. Molla and Licker (2001) change user satisfaction to be customer e-Commerce system satisfaction as an independent construct to e-Commerce success. In addition, they replace information quality by content quality, and system quality by e-Commerce system quality.

In addition, researchers into web presence assessment have taken into account revisions and extension of the model, for example ServQual (Parasuraman et al., 1988) and WebQual (Loiacono & Watson, 2000). An extended WebQual tool applied by Barnes and Vidgen in order to evaluate online auctions including seven factors: website navigation, website look and feel, information quality, trustworthiness, customer relationship, selling quality and buying quality. It confirmed that e-Commerce aspects above are more important to customers compared to technical aspects (Alotaib, 2013). Derived from a ServQual scale, Long and McMellon (2004) propose a model comprising five factors to assess awareness of e-service quality including tangibility, assurance, reliability, purchase process and responsiveness.

In addition, e-Readiness models take into account important factors to e-Government readiness in regard to the quality of ICT infrastructure, stakeholder’s expectations, and advantages accomplished from ICT implementation (APEC, 2000, 2008) and United Nations (2008) “METTER”. E-Readiness tools such as Center for International Development and Conflict Management (CIDCM), International Telecommunication Union (ITU), and the World Information Technology and Services Alliance (WITSA) do not comprise e-Government in their assessments. Furthermore, additional tools such as
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