ABSTRACT

Despite increased research interest on e-government, the field currently lacks sound theoretical frameworks that can be useful in addressing two key issues concerning the implementation of e-government systems: (1) a better understanding of the factors influencing the adoption of e-government systems, and (2) the integration of various e-government applications. The objective of this paper is to provide a foundation towards the development of a theoretical framework for the implementation of e-government systems via extensive literature review, which resulted in (1) a synthesis of existing empirical findings and theoretical perspectives related to e-government adoption, and (2) development of the premises of a conceptual model that would reflect the multi-level and multi-dimensional nature of e-government systems' acceptance.

Keywords: e-government acceptance; e-government adoption; e-government integration in information technology (IT) implementation; public administration transformation; theory of complementarities

INTRODUCTION

Electronic government refers to the use of IT to improve the efficiency, effectiveness, transparency and responsibility of public governments (Kraemer & King, 2003; World Bank, 2000). Viewed as radical, yet unavoidable transformation projects (Jaeger, 2003), the implementation of e-government systems has been attracting increasing research interest, and is believed to constitute one of the most important IT implementation and organizational change challenges of the next decades (Warkentin, Gefen, Pavlou, & Rose, 2002; Marche & McNiven, 2003). According to some estimates, e-government systems are already helping save 2% of the annual United States Gross Domestic Product (GDP) (UNDP, 2001). However, the realized savings are still far less than what is potentially possible. For example, World Bank (2000) figures indicate that even the most
advanced countries in the implementation of e-government projects are currently able to capture only 20% of the real potential of these systems. Further, implementation failures are also fairly common and often lead to adverse financial consequences (e.g., the Gires project in Québec or the Canadian Firearms Registry, which cost $400 million and $1 billion, respectively) (Radio Canada, 2003).

In addition, despite the potentially significant impacts of e-government systems on public administrations, organizations, individuals and society, so far, only a few systematic and thorough studies have been undertaken on the subject (Jaeger, 2003; Kraemer & King, 2003). Moreover, the research themes, as well as the research approaches and perspectives employed in the study of e-government implementations, exhibit significant diversity, making it difficult to reach conceptual clarity on the subject (Grönlund, 2005a). Finally, several authors remain skeptical (Kallinikos, 2003, 2004; Kraemer & King, 2003) regarding the relevance of a radical transformation of the public bureaucratic model, while others seriously question the viability of the outcomes resulting from the IT-led transformation of institutionalized governmental processes (Ciborra, 2005; Du Gay, 2003, 2004; Kallinikos, 2004; Stokes & Clegg, 2002).

Given the importance and complexity of the topic, and the lack of a published comprehensive review of the e-government adoption literature, this paper’s objective is to synthesize existing empirical findings and theoretical perspectives related to e-government adoption and, based on this synthesis, to establish the theoretical premises of a conceptual framework that reflects the multi-level and multi-dimensional nature of e-government acceptance.

The paper is organized as follows: First, we present our analytical framework for conducting the review; then we present the main findings and, finally, we offer a discussion and conclusion.

LITERATURE REVIEW

Our literature review was mainly based on three data sources: (1) ABI/INFORM and the ACM digital library; (2) Government Information Quarterly, Information Systems Research, International Journal of Electronic Government Research, Journal of MIS, MIS Quarterly, Organization Studies, Organization Science, Public Administration Review, and Social Science Computer Review; and (3) AMCIS, ICIS, and HICSS conference proceedings. The search targeted identification of articles published since 1990 that presented either (1) reviews and studies of e-government adoption in the information system (IS) domain; (2) reviews and studies of e-government adoption in the public administration field; or (3) reviews and studies related to IT-enabled organizational change in the public sector. This search led to the identification of 75 articles related to e-government adoption and acceptance. As the subject of this review is specifically focused on e-government adoption and acceptance, it represents a more focused and fine-grained complement to recent reviews of more general e-government literature (e.g., Andersen & Henriksen, 2005; Grönlund, 2005b). Indeed, the adoption and acceptance papers targeted by this search correspond to two of the four e-government contextual research domains identified by Andersen and Henriksen (2005): diffusion management and administrative e-services. Further, our review specifically selected articles published in top IS, public administration and organization studies journals, as well