

E-Government Implementation in Developing Countries

A Neoinstitutional Approach to Explain Failure

Antoine Harfouche and Alice Robbin

Abstract This paper presents preliminary results of an ongoing study of e-government implementation in Lebanon. Following suggestions by various scholars that students of e-government employ theory to strengthen our knowledge about ICT for development, we apply a neoinstitutional theoretical lens to understand the role of international donor agencies that led Lebanese public authorities, since 2000, to invest in e-services despite the country's serious economic difficulties and heavy debt. We situate implementation of an e-government infrastructure in the context of external pressures that Lebanese public administrators confronted. This analysis is based on the triangulation of evidence from semi-structured interviews with senior officials in government agencies who led the implementation effort, official government documents, and newspaper reports on the progress of this project. We find that the response by Lebanese public officials can be explained by the three isomorphic processes of coercion, mimesis, and transmission of norms. This case study suggests that implementing e-administration by developing countries is not necessarily motivated by a search for efficiency; under certain conditions adoption results from external institutional pressures. Nonetheless, this implementation needs to be understood as only a very small part of a larger story of the history and politics of Lebanon that contributed to what has been called the “still born” implementation of e-government in Lebanon.

A. Harfouche
Université Paris Ouest Nanterre La Défense, Tours, France
e-mail: harfoant@yahoo.com

A. Robbin (✉)
Indiana University Bloomington, Bloomington, IN 47405, USA
e-mail: arobbin@indiana.edu; <http://ella.slis.indiana.edu/~arobbin/>

1 Introduction

Electronic government has been a priority throughout the world for more than 25 years, viewed as a critical tool for efficient and effective public services. Evidence in the developed world reveals a number of successes; various reports demonstrate that this form of government has led to improvements in economic development, services, and the quality of governance [1, 25]. However, studies also indicate that more than 85 % of e-government projects in developing countries can be classified as partial or total failures [9, 13, 17–19]. According to some studies, these failures result because the majority of their citizens do not use the Internet and thus e-services, although an infrastructure exists [5]. Heeks [18] and others contend, however, that these failures derive from the gap between design of the technology and its implementation context.

This is certainly the case for Lebanon, a developing country that, despite its serious economic difficulties and heavy debt, invested enormous sums of money since 2000 to build an e-government services infrastructure [38–40]. Internet utilization (penetration) in 2000, when the e-government initiative began, was estimated at 6 % of the population, increasing in 2008 to 24 %, and 35 % in 2011 [31], suggesting that the Lebanon was and remains far from attaining the government’s goal of e-public services adoption. Indeed, some might argue that the Lebanese e-administration project arrived still-born. Why this assessment?

This paper presents preliminary findings from an ongoing study of e-government implementation in Lebanon. We examine this implementation of an e-government infrastructure in the *context of external pressures* that Lebanese public administrators confronted. We show that the objective of gaining legitimacy—eliciting support and underwriting by donor international agencies, trumped the reality of Lebanon’s economic crisis, internal bureaucratic intransigence and structural incapacity, and limited ICT adoption by Lebanese citizens. It is, of course, a well-known story in ICT implementation in developing countries. This analysis triangulates evidence from semi-structured interviews with senior officials in government agencies who led the implementation effort, official government documents, and newspaper reports on the progress of this e-government project.

We respond to Yildiz’s [50] call to e-government scholars to move the field forward by conducting studies that explicitly direct our attention to the “complex political and institutional environments in which e-government policy and development processes take place and to the use of process-oriented theory and methodologies and primary data gathered through interviews, participant observation, and archival analysis” (p. 660). We concur with Avergou [3] that we must understand the context of organizational change. Following Heeks [20] and Heeks and Bailar [21], we employ theory to strengthen our knowledge about ICT for development (ICT4D) by applying a neoinstitutional (aka “new institutional”) theoretical lens to understand the role of external pressures that led the Lebanese public authorities to invest in information and communication technologies (ICT) and e-public services. As Powell [42] notes, “A key analytical task for institutional

analysis is to ascertain which factors are important in particular contexts and the extent to which the [regulative, normative, and cultural/cognitive] mechanisms work to reinforce the prevailing social order or undercut one another” (p. 976).

The paper is organized in the following way. Research on information technology and e-government adoption and implementation in developed and developing countries is vast and our audience well informed. We thus provide only a minimal description of what has been defined as “e-government” and its theoretical foundation of modernization and focus on the core concept of isomorphism of new institutional theory that is relevant to this case study (Sect. 2). How this case study was conducted is then described (Sect. 3). We next describe the context for implementing Lebanon’s e-government project between 2000 and 2008 (Sect. 4). We then discuss the relevance of the three forms of isomorphic processes (Sect. 5) and conclude with an acknowledgement of the limitations of our explanation and future research directions (Sect. 6).

2 E-Government and Institutional Theory

2.1 *The e-Government Concept as the “Modernization Effort”*

The discourse of e-government in advanced and developing economies is infused with normative conceptions about government, civil society, the corporate sector, and citizens and their relationships. These may be deemed the rules and norms that shape, give meaning to, rationalize, and constrain choice by public officials. Derived from modernization theory of the 1950s, has been the presumption that “the transfer of capital goods, technologies, industries and Western norms to the developing countries would bring rapid economic productivity and social development in the developing countries, which were considered to be ancient and primitive” [37, p. 141]. The New Public Management (NPM) model was heralded as a managerial alternative to the traditional model of public administration, introducing a “performance management system (PMS) with the aim of measuring and enhancing the success of public organizations and holding public administrators accountable for their performance and elected officials accountable for their leadership” [36, p. 457].

International development donor agencies and countries advanced an e-government (ICT) implementation agenda to modernize public administration in developing countries. The World Bank [49] conceives of e-government as “the use by government agencies of information technologies. . .to transform relations with citizens, businesses, and other arms of government” in its role as service provider, from a “product- or process-centric” provider that serves citizens “to a customer-centric provider” [7, p. 267]. ICTs modernize the bureaucracy’s functions of production, coordination, control, and integration through computer networks

and thus improve productivity, internal managerial efficiency, and the effectiveness of public service delivery to citizens [4]. ICT implementation (e-governance) would enable good governance.

The conclusion of analysts of modernization efforts is that information systems and ICT adoption represents the implementation of forms of “techno-economic rationality of development that stem from Western conceptions of modernity,” that is, “the ultimate fundamental value” is “economic growth in a free market economy through IT adoption” [2, p. 2]. E-government represents “an organizing principle” [2, p. 2], an effort to “reorder” and “control organizational processes and structures through market mechanisms” [7, pp. 261, 262]. The emphasis is on efficiency, productivity, and transparency based on scientific (techno)-rationality. The restructuring of citizen–government relationships is governance by the marketplace according to the tenets of neoliberalism. Ciborra [7] comments that the “model is supposed to address state failures due to governance breakdown, corruption, rent seeking, distortions in markets and the absence of democracy” (p. 269). The goal is to “destroy archaic superstitions and relations” that “should be applied at whatever social, cultural, and political cost” [2, p. 6].

2.2 The Status of Public Organizations Under Pressure: Neoinstitutional Theory in Management, Information Systems, and e-Government

All organizations are subject to internal and external pressures of legitimacy and competition [6]; organizations adapt not only to internal constraints but equally to values of the external society [43, 44]. These two types of pressures may explain whether or not organizations adopt technological innovations. Studies have shown that, in general, public organizations, more than other types of organizations, are uniquely subjected to external pressures of legitimacy but not to pressures of competition due to their reliance on resources from their environment [24, 28, 41, 45]. This suggests that adoption of e-administration by government agencies is not exclusively motivated by a search for efficiency. According to Naveh et al. [34], early adopters of a management innovation act with the goal of maximizing alignment between the organization’s needs and proposals for the innovation. This may explain why certain developed countries were early adopters and implementers of electronic administration. However, Naveh et al. suggest that those late adopters did so under pressure of external forces and thus imitate first adopters. This assessment is supported by Ciborra [7], above all for those countries on route to development. In effect, according to Ciborra, e-government adoption does not automatically lead to better governance, but is the result of behavior whose objective is to increase assistance received from rich countries. We can, following Ciborra and Naveh et al., hypothesize that late adoption of e-administration and