

# Chapter 100

## Barriers to E-Government Adoption in Jordanian Organizations From Users' and Employees' Perspectives

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### ABSTRACT

*This research examines the effects of five types of barriers; technology, organization, strategy, policy, and end-user barriers, and investigates their effects on E-government adoption in Jordan using structural equation modeling. A structural model was proposed and then its validity was checked with appropriate measures. A total of 1100 surveys were distributed in person and by electronic ways; of which 600 surveys were distributed to E-government employees, while the remaining were distributed to the users of government e-services. Five hypotheses were tested using the data collected from employees and users. Moreover, the model hypotheses were tested using the data collected from four main Jordanian organizations. The technology barriers were the main obstacle to successful E-government adoption in all organizations. Moreover, the effects of the other four barriers varied among organizations. In conclusion, the results should guide the decision makers in government sector to the right policies and adequate actions that enhance efficiency of E-government adoption.*

### 1. INTRODUCTION

The day-to-day business of government is built on information, which is a very important resource that helps governments to be more efficient, and transparent (Deakins and Dillion, 2002). Generally, E-government uses information technologies in public administration to streamline and integrates workflows and processes to effectively manage data and information to achieve greater efficiency, broader access to government services, enhanced service levels, greater transparency, and citizen empowerment (Golden et al., 2003; Teo, et al., 2008; West, 2004).

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E-government can contribute to solving administrative problems in developing countries whose public administration is characterized by inefficiency, limited capacity, and poorly-trained personnel (Lau et al., 2008; Al-Mamari et al., 2013). Without an understanding of why citizens would use electronic service delivery channels over more traditional service delivery methods, government organizations cannot take the necessary strategic actions to meet their citizen adoption targets for these channels and reduce costs (Reichheld and Schefter, 2000). Therefore, identifying the barriers to E-government adoption has received significant research attention. For example, Ebrahim and Irani (2005) presented an integrated architecture framework for E-government in public sector organizations and studied potential barriers to successful E-government adoption. They examined significant barriers of E-government adoption into five dimensions; IT infrastructure, security and privacy, IT skills, organizational issues, and cost. Lam (2005) identified barriers to E-government integration in Singapore using semi-structured interviews that were conducted with fourteen consultants with significant experience of E-government projects. One of the limitations is that it involved in-depth interviews with a relatively small number of individuals. Elsheikh and Cullen (2008) examined the challenges encountered in E-government implementation by analyzing Jordan's published E-government vision and strategy. They found that Jordan is still lagging behind in utilizing ICTs for delivering E-government services. Previtali and Bof (2009) explored the level of E-government adoption in 49 small Italian municipalities using a survey and in-depth interviews with political and managerial decision makers and IT officers. It was concluded that a lack of infrastructure and IT services; e.g. back-up and security) significantly affect the E-government adoption. Schwester (2009) examined the factors that most impede the adoption of E-government applications in USA municipalities. Multiple regression results indicated that E-government adoption is a function of financial, technical, and human resources. Zhao (2011) examined empirically whether national culture affects E-government adoption in eighty-four countries around the world. Statistical methods including correlation and multiple regression analysis were used to analyze E-government Development Index and culture dimension index scores of eighty-four countries. Al Omari et al. (2012) found that trust in government, website design, beliefs, complexity, and perceived usefulness are the significant factors in Jordanian citizens' intention to use E-government websites. Bwalya et al. (2013) identified factors influencing E-government in three towns in Zambia, including lack of readily available internet access points, lack of affordable internet access points, lack of services relevant to the local context, lack of user-friendly E-government platforms, lack of availability of ICTs infrastructure. Sharma et al. (2013) determined the key factors that affect the quality of E-government services in Oman using a factor analysis method. They found that the quality of E-government services in Oman is determined by reliability, responsiveness, efficiency, and security.

Jordan has recently developed a national E-government strategy (E-government strategy report, 2014-2016) that aims to deliver high-quality demand driven services to government beneficiaries in a phased approach, improve government performance and efficiency, and boost e-commerce activities. Jordan. It achieved a networked readiness Index (NRI) level of 47 out of 144 countries participated (Dutta et al., 2013). The NRI measures the ability of a country to leverage information and communication technologies (ICTs) for improved competitiveness and well-being, it includes four sub-indices; environmental, readiness, usage, and impact. These indices are translated into the NRI, that help in measuring the environment for ICTs, the readiness to use ICTs, the usage of all main stakeholders, and the impacts that ICTs generate in both economy and society. The global information technology report indicates a decline in both readiness sub index from 47 (year 2011-2012) to 55 (2012-2013) and the corresponding usage sub index from 55 to 60. Specifically, the government online service index declined from 22 in

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