Chapter 10

Success and Failure of Local E–Government Projects: Lessons Learned from Egypt

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ABSTRACT

This chapter examines the Information Systems success model in the Egyptian context. Much of the existing literature on information system success focuses primarily on the private sector. There are fewer studies that examine success in the context of the development of e-government. This study focuses specifically on local e-government development of projects in Egypt. A survey is administered in three local governments on actual users of Information Systems. The results of this study confirm much of the existing research on information system success, but highlight the importance of net benefit as a success factor that examines the organizational and managerial context of e-government development. The importance of this research indicates that managerial functions matter for the success of e-government projects.

INTRODUCTION AND BACKGROUND

The advancement of e-government projects is critical for the development of countries in Africa (Heeks, 2002a). This chapter examines the success and failure of e-government projects in Egyptian local governments. This chapter applies the Delone and Mclean (1992; 2003) model of information system success to the Egyptian context, something that has not been done in prior research. This chapter examines both the reasons for success and failure of e-government projects and applies an information systems framework using survey data of actual users of a local e-government investment project.
E-Government in Africa shows significant promise according to the United Nations e-government surveys. Despite the fact that Africa falls below the world average in terms of rankings, there has been significant improvement in the region, with Northern African countries leading the continent. The top ranked countries in Africa were Tunisia, Mauritius, and Egypt (United Nations, 2010). The World Bank has recognized the importance of e-government for Africa and called for an e-Transformation, or using Information and Communication Technology (ICT) to promote the lives and well-being of citizens (World Bank, 2010).

This chapter first examines the reasons for success and failure of e-government projects. This is followed by a discussion of the information systems success model and how this model can be translated into testable hypothesis examining e-government projects in Egypt. It also includes background information provided on a local e-government investment service project Egypt. Finally, it involves a testing of the model of information systems success on actual users of this e-government project.

SUCCESS AND FAILURE OF E-GOVERNMENT PROJECTS

It is critical to know the unique challenges and opportunities facing an African country in order to determine the best way to align e-government with national development goals (Maumbe, Owei, & Alexander, 2008; Schuppam, 2009). For instance, there is a lot of “hype” about e-government implementation in Africa and in its ability to transform service delivery. However, these extremely advanced systems may not work in the context of a developing country and should be modified to fit the context of the country (Chen, Chen, Ching, & Huang, 2007).

With the advancement of e-government in developed countries, it is increasingly important to know the reasons for successes and failures of e-government projects (Heeks, 2002a). Research shows that the success rates of African information systems projects have been low, compared to many Western industrial societies (Berman & Tettey, 2001). However, being progressively dependent upon IT development, the reform of African government is significant to study (Peterson, 1998).

On comparing the success rates of information systems in the public to the private sector, governments generally lag behind (Goldfinch, 2007). This is especially apparent in developing countries where there are many factors beyond the control of the project, most notably lack of bureaucratic inertia that prevents wholesale change from a new e-government system (Peterson, 1998). In addition, the larger the scale and scope of the IT project, the more likely for failure of the system (Pardo & Scholl, 2002; Heeks, 2002b; Goldfinch, 2007). There is also the issue of complexity of the system, and this increases the risk of failure of the system in its implementation (Melin & Axelsson, 2009). Besides the issues of bureaucratic culture that prevents the implementation of e-government projects in developing countries, some other common barriers are poor infrastructure, lack of finances, poor data systems and capability, lack of skilled personnel, and leadership styles (Gichoya, 2005).

Drawing on Wilson and Howcroft (2002), Goldfinch (2007) summarizes three types of IT project failures: (1) Project failure: the project does not meet the specification agreed upon, including the functional requirements, budget, or completion deadline; (2) System failure: the system does not work properly, including expected performance, not being used in the way intended, or used as intended but does not deliver the expected benefits, or (3) User failure: the system is not used in the face of user resistance because of such things as lack of training, ability of staff, and the complexity of the new system (Wilson & Howcroft, 2002). Often in developing countries,