# Chapter 9

# A Quantitative Evaluation of Costs, Opportunities, Benefits, and Risks Accompanying the Use of E-Government Services in Qatar

Karim Al-Yafi Qatar University, Qatar

# **ABSTRACT**

Providers of e-government systems and policymakers recognize that usability and adoption are key success indicators of e-government services. Borrowed from the field of e-commerce, several models were proposed and tested in the literature to evaluate users' adoption of e-government services in different contexts. This chapter examines users' satisfaction with e-government services in Qatar reflected by the cost, opportunity, benefit, and risk of using these e-services. After a quick review on research works done on evaluating e-government services in the Middle East region, quantitative data collected from three e-government services in Qatar is presented and analyzed using structural equation modelling techniques. Results revealed that while the hypotheses linking cost and opportunity to satisfaction were rejected, benefits and risk were significantly able to explain the level of users' satisfaction with e-government services.

DOI: 10.4018/978-1-5225-6204-7.ch009

### INTRODUCTION

Undoubtedly, Web 2.0 technologies have significantly contributed to users' Internet adoption as a mean to fulfil different purposes. These purposes range from entertainment, learning, networking and professional productivity to formal administrative engagement in governmental transactions. This has been facilitated by the recent technological developments such as faster and more reliable network infrastructures and the spread of smartphones and other mobile devices. Another antecedent of users' huge buy in for technology lies in network externalities (Bouni et al., 2017; Tucker, 2017) and the global culture that does not consider the "e-" channel optional anymore but complementary and sometimes mandatory (Leidner and Kayworth 2006). Meanwhile, Qatar demonstrated an interesting and particular aspect of how technology has quickly spread and been accepted (Al-Yafi et al., 2016; Al-Yafi et al., 2014). These developments can be attributed to different factors: global, local and economic. The global propagation of technology and the quasi-instantaneous availability of new technologies in Qatar triggered a high interest in exploiting it optimally. The local context of Qatar is also characterized by a particular social and cultural composition. The population of Qatar includes a high rate of expatriates from different backgrounds where, at the time of this writing, it outnumbers local citizens. This phenomenon constantly motivates policy makers in Qatar to adopt modern technologies for better administration and optimal resource allocations. Finally, the economic factor certainly has a central effect on the proliferation of technology in Qatar. Despite the great efforts in diversifying the local economy, Qatar resources are mainly relying on oil and gas. This secured to Qatar over the past two decades a progressive place in the list of the world's wealthiest countries. Therefore, the cost of innovation remains marginal compared to the utility provided by implementing new solutions based on technologies. This chapter focuses on evaluating the adoption and adaptation of e-Government services offered in Qatar given its recent developments in the field of e-Government. We therefore examine the readiness and maturity of e-Government services from a users' satisfaction point of view. To measure satisfaction, we consider the factors presented in the COBRA model developed by Osman et al. (2014). The model hypothesizes the effects of cost, opportunity, risk and benefit of using e-Government services on the overall users' satisfaction. The aim would therefore be to understand whether these factors are as influential as they proved to be in other contexts and whether the COBRA model is an appropriate instrument to evaluate the modern e-Government services in Qatar. We refer in this study to the term "users" or "residents" rather than "citizens" in order to properly reflect on the actual usage of the services offered, or controlled, by the legal authorities and to do justice to the composition of the society in the country.

27 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: <a href="www.igi-">www.igi-</a>

global.com/chapter/a-quantitative-evaluation-of-costsopportunities-benefits-and-risks-accompanying-the-use-of-egovernment-services-in-qatar/208732

# Related Content

# Studies on Utilizing the Three Famous International Index Systems to Evaluate Scientific Research Level of Higher Learning Institutions

Xun Liu, Changyu Huang, Wei-Liang Qianand Yong-Chang Huang (2011). *International Journal of Strategic Information Technology and Applications (pp. 67-77).* 

www.irma-international.org/article/studies-utilizing-three-famous-international/54710

# Toward a Strategic Perspective of Information Technology

Paul L. Drnevich, Jungpil Hahnand Mark Shanley (2006). *IT-Enabled Strategic Management: Increasing Returns for the Organization (pp. 16-37).*www.irma-international.org/chapter/toward-strategic-perspective-information-technology/24804

## The Effect of Corporate Social Responsibility on Employees' Behaviour

Irene Samanta (2013). *International Journal of Strategic Information Technology and Applications (pp. 103-112).* 

www.irma-international.org/article/the-effect-of-corporate-social-responsibility-on-employees-behaviour/100065

# Group Support Systems and Action Research: An Empirical-Action Research Cycle

Wm. Benjamin Martz Jr.and Toru Sakaguchi (2010). *International Journal of Strategic Information Technology and Applications (pp. 42-59).* 

www.irma-international.org/article/group-support-systems-action-research/39112

## A BPR Approach for e-Governance in Public Transportation

Ajay Kumar Bhartiand Sanjay K. Dwivedi (2014). *International Journal of Strategic Information Technology and Applications (pp. 64-75).* 

www.irma-international.org/article/a-bpr-approach-for-e-governance-in-public-transportation/122829