Perceived Technical Service Quality and Information Satisfaction at the Ministry of Communications, Kuwait

Omar E. M. Khalil, Department of Quantitative Methods & Information Systems, College of Business Administration, Kuwait University, Kuwait City, Kuwait
Haitham G. A. Ghanim, Ministry of Communications, Kuwait City, Kuwait

ABSTRACT

Information technology (IT) has become the backbone for many of today’s organizations in the private and public sectors. However, identifying users’ information satisfaction as well as their perception of the strengths and weaknesses of IT service represents a major challenge for IT management. This research explored the perceived IT service quality (SQ) and user satisfaction (US), the effect of SQ on US, and the impact of a number of demographic and situational characteristics on SQ and US in the Ministry of Communications (MOC) of Kuwait. Three SQ dimensions have emerged, including empathy/assurance, reliability, and tangibles. Users, however, are not certain about the quality of the provided IT service. They are also somewhat satisfied with the systems they regularly use. Age, nationality, job type, sector type, and system use varyingly affect SQ and US. SQ has also emerged as an important determinant of US. These findings as well as their implications are further discussed in the paper.

Keywords: Information Systems, Ministry of Communications, Kuwait, Service Performance (SERVPERF), Service Quality, Service Quality Measure (SERVQUAL), User Satisfaction

INTRODUCTION

Information Technology (IT) has become the backbone for today’s private and public organizations (Pedain, 2003) and a critical enabler of growth and development (Omwenga, 2009; Dutta & Mia, 2009). In particular, public organizations are under growing pressure to satisfy stakeholders’ needs and wants (Crompton & Lamb, 1986). With the increasing use of IT, there is a growing necessity to provide users with technical service, and the internal information systems (IS) organizational units are expected to provide them with the needed technical support (Jiang et al., 2002).

The quality of technical service should be properly measured and managed in order for IS to have the best possible impact on organizations, and to reap the advantages that IT offers (Sanderson, 2004). In addition, the importance
of service quality (SQ) assessment has been recognized in IS effectiveness research models (e.g., DeLone & McLean, 2003). The relevant IS effectiveness research developed and used variant measures to assess SQ and its impact on IS effectiveness measures such as user satisfaction (US), individual impact, and organizational impact. However, much of the relevant prior research was conducted in the private sector, and comparatively less research was conducted in the public sector (Kraemer & King, 2006), especially in the developing countries.

The IS Sector at the Ministry of Communications (MOC) of Kuwait is a relatively large organizational unit and consists of four different departments including technical support, development, operation, and technical office. It is responsible for providing all needed support and assistance to more than two thousand users on hardware and software selection, acquisition and installation, troubleshoot, network connections, system development, systems backup, training, and maintenance of all computers and peripherals available. In spite of its essential role in support of the internal operations of MOC, there is no information available thus far on whether or not the IS Sector in fact provides its users with the technical service they need to effectively utilize the systems they have available.

This research aims to explore users’ perceived service quality (SQ), user satisfaction (US) with the systems they use, the effect that users’ demographic and situational characteristics have on their perceptions of SQ and US, and the effect of SQ on US at MOC. The impetus for this research is to produce empirical evidence that may guide decisions and actions aiming to improve and sustain the IS service at MOC and validate the appropriateness of the marked IS service quality measure (SERVQUAL) in a public organization operating in a developing country.

The rest of the paper is organized accordingly: a research background is presented first, followed by research methodology, data analysis, discussion of the research findings, and conclusions and implications.

**BACKGROUND**

**Information Systems (IS) at the Ministry of Communication (MOC), Kuwait**

IS at MOC is a relatively large Sector. It employs approximately 700 employees. It is responsible for providing users in the Ministry with the needed information systems and related services. It provides an integrated electronic environment and solutions to all MOC sectors and departments in order to accomplish the Ministry’s administrative and technical responsibilities and achieve its mission. Its goal is to provide users with IT services that meet their needs, improve efficiency, and/or allow them to offer new or improved services. In addition, it is responsible for ensuring the integrity, accessibility, and security of the information stored in the databases and the computer systems.

The IS Sector consists of four different departments including Technical Support, Systems Development, Operations, and Technical Office. Of relevance to this research is the Technical Support Department (TSD). TSD is responsible for providing technical service to users in all sectors and departments. It assists them with computers and systems issues that they may encounter. TSD is also responsible for troubleshooting software and hardware failures and implementing internal technical procedures and methods regarding communication systems, network lines (LANs, WANs, etc), Internet access, databases, and PC systems.

In addition to general applications such as e-mail and Microsoft Office applications, MOC has a variety of computer-based systems that are used in its eleven sectors and departments. The following is a brief description of the mainly used systems:

1. The Billing System--the major and the mostly used system in MOC--helps manage and store the data and the bills of the telephonic home subscribers and handle the telephone lines (land lines) operations and disconnections and all related functions.
Managing Value-Creation in the Digital Economy
[www.igi-global.com/chapter/managing-value-creation-digital-economy/14532?camid=4v1a](www.igi-global.com/chapter/managing-value-creation-digital-economy/14532?camid=4v1a)

What Drives Malaysian E-Government Adoption?: An Empirical Analysis
[www.igi-global.com/chapter/drives-malaysian-government-adoption/74501?camid=4v1a](www.igi-global.com/chapter/drives-malaysian-government-adoption/74501?camid=4v1a)