Chapter 6
Quality-Oriented IT Service Management: A Theoretical Approach Towards High-Quality IT Services

Patrick Wild
PricewaterhouseCoopers WP AG, Germany

INTRODUCTION

Due to the increasing importance of the tertiary sector, information technology (IT) organizations need to face up to new challenges, since their daily business has changed from development and operation of information technology to the customer oriented provision and management of IT services. In order to survive in the market, service providers need to offer and manage competitive and distinctive IT services. The “Profit Impact of Market Strategies” (PIMS) program has emphasized the need for service quality as being a crucial, strategic competitive factor. However, IT service providers do not have guidance of what quality requirements are supposed to be fulfilled to provide high-quality IT services. Different reference models and frameworks such as ITIL (Information Technology Infrastructure Library), COBIT (Control Objectives for Information and related Technology) and ISO 20000 are widely used by many IT organizations for improving service management processes and performance. However, these reference models do not address the improvement of service quality in a consistent manner and it is not clear whether these models have the capability to close quality gaps which may arise within a service provider environment.

Therefore, this chapter proposes an IT service quality model for identifying potential quality gaps and quality dimensions in an IT service provider environment. Furthermore, it proposes a set of different quality requirements combined in a “Quality Requirements Model for IT Services” that are needed in order to close the respective quality gaps and fulfill the individual quality dimensions. The model is developed by mapping the reference models ITIL v3, COBIT and ISO 20000 to the previously developed quality model. The results of the mappings emphasize that all three models are partially capable to close the individual gaps of the quality model as well as

DOI: 10.4018/978-1-61692-889-6.ch006
Quality-Oriented IT Service Management

to guarantee the fulfillment of respective quality dimensions. The fulfillment of these developed quality requirements can be utilized as a guideline for providing and managing high-quality IT services in the long term.

Finally, the maturity level is analyzed and pointed out that most of the quality requirements are assigned to maturity stage 2 or 3. This implies that an IT service provider does not necessarily have to reach a maturity stage 4 or 5 being able offering high service quality.

In summary, the chapter provides guidance and quality-oriented IT Service Management to answer the following questions:

- What kind of quality gaps exist in a service provider environment?
- Do reference models such as ITIL, COBIT and ISO 20000 have the capability to close quality gaps which may arise within a service provider environment?
- What processes, activities and functions from which reference model are needed in order to close the respective gaps?
- What quality requirements need to be implemented in order to provide high-quality IT services?
- What maturity level do service providers need to reach in order to fulfill quality requirements?

MOTIVATION

Studies by the “Statistisches Bundesamt Deutschland” (destatis) and the “Statistical Office of the European Communities” (Eurostat) have shown that new and technical services, such as Information Technology services, are becoming more and more important during recent years (Eurostat, 2006).

Due to the increasing importance of the tertiary sector, IT organizations need to face up to new challenges, since their daily business changed from development and operation of Information Technology to the customer oriented provision and management of IT services. In order to survive in the market, service providers need to offer and manage competitive and distinctive IT services. The “Profit Impact of Market Strategies” (PIMS) program (Buzzle & Gale, 2004) has emphasized the need for service quality as being a crucial, strategic competitive factor. However, neither academics nor practitioners have agreed upon a consistent definition of the term “service quality” and IT service providers do not have guidance of what quality requirements are supposed to be fulfilled to provide high-quality IT services (Schmidt et al., 2007). Moreover, intangibility as characteristic of a service complicates the assessment and evaluation of service quality.

Different reference models and frameworks such as ITIL v3 (Office of Government [OGC], 2007), COBIT (IT Governance Institute, 2005) and ISO 20000 (International Standardization Organization, 2007) are widely used by many IT organizations for improving service management processes and performance. However, these reference models do not address the improvement of service quality in a consistent manner and it is not clear whether these models have the capability to close quality gaps which may arise within a service provider environment.

Therefore, the goal of this chapter is to propose an approach which can support IT organizations to identify potential quality gaps and to define quality requirements which have to be fulfilled for closing these gaps and providing high-quality IT services.

At the beginning, the chapter proposes an IT service quality model by adapting a widely used gap model and identifying quality dimensions in a service provider environment. Based on this quality model, the reference models ITIL, COBIT and ISO 20000 are mapped to the identified quality gaps and dimensions to develop a set of quality requirements. To analyze the expense and time for fulfilling these quality requirements, a
www.igi-global.com/e-resources/library-recommendation/?id=1

Related Content

Organizational Structure and Technology Adaptation
www.igi-global.com/chapter/organizational-structure-technology-adaptation/36537?camid=4v1a

Adaptive Advisory Systems for Oil and Gas Operations
www.igi-global.com/chapter/adaptive-advisory-systems-oil-gas/68721?camid=4v1a

Methods for Solving Fully Fuzzy Transportation Problems Based on Classical Transportation Methods
www.igi-global.com/article/methods-solving-fully-fuzzy-transportation/58895?camid=4v1a

Bikeability Audit in Urban Road Environment: Case Study in the City of Volos, Greece
www.igi-global.com/article/bikeability-audit-in-urban-road-environment/114934?camid=4v1a