Chapter XXII
Perspectives of IT–Service Quality Management:
A Concept for Life Cycle Based Quality Management of IT–Services

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ABSTRACT

This chapter introduces an IT-Service management framework for the use of quality management
concepts in the context of the life cycle phases of IT-Services. It argues that IT-Service management,
combined with quality management and a life cycle approach for IT-Services provides a new perspective
for organizations to provide high quality IT-Services. Based on the IT-industrialisation and an increased
customer orientation in the IT-Service management the aspect of quality becomes increasingly impor-
tant. Therefore, the authors give an overview about existing concepts of IT-Service management, life
cycle management and quality management for IT-Services. The aim is to support organizations in the
effective use of quality management concepts depending on IT-Service life cycles.

INTRODUCTION

In context of IT-Governance there are numerous concepts and models that can enable organizations
to be more effective and more efficient in using IT-Solutions. IT-Governance is supposed to help
organizations to enhance their competitiveness by using Information Technology (IT). On the one
hand a big issue in this discussion is the realization and evaluation of the business value due to
the use of IT (Weill & Ross, 2004). On the other hand the constant change of business needs also
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demands a reliable and effective IT support for the business processes. Therefore IT-Governance and IT-Business alignment are key success factors for creating business value due to the use of IT-Services in an organization. In the wake of constantly changing business requirements the existing IT-Infrastructure and the IT-Services which support the business processes have to adapt as well. The developments in Information Technology and IT-Service management enable organizations to use IT-Solutions in a way which differs completely from earlier concepts. Therefore the management concepts for IT-Service management have to adjust to these new developments. In this situation the quality of the provided IT-Services becomes an important issue for IT-Service providers and service recipients. Hence quality management is one important aspect in the context of IT-Governance.

Experiences from the industrial sectors show that organizations are able to achieve strategic and operational targets concerning quality and customer satisfaction by using quality management approaches. In the context of IT-Quality management, IT-Governance defines the rules for the decision making process and competencies within an organization. It describes the framework for the IT-Strategy and defines the guidelines for the IT-Service management within an organization. Based on the importance of service quality, as outlined above, this chapter focuses on the quality management of IT-Services in dependence on the life cycle phase of IT-Services.

In the current discussion about IT-Services and quality management has so far not provided a concept which integrates these two dimensions in a life cycle based concept for IT-service quality management. This chapter aims to close this gap and provide a model which enables organizations to map selected quality management methods with previously defined phases of an IT-Service life cycle. The goal is to present managers a practical approach for matching quality management methods with life cycle phases of IT-Services.

From a research point of view, relevant questions concern the possibilities of transferring quality management concepts from the industrial sector to IT-Service management. In the context of the developments for IT-Service management it is important how a holistic life cycle for IT-Services can be illustrated. The final research question in this chapter focuses on mapping the different life cycle phases of IT-services and quality management concepts. To answer these questions the chapter will follow the structure outlined below (see Figure 1). It illustrates the several aspects in the context of life cycle management and IT-Service quality management which shall

**Figure 1. Structure of the chapter life cycle based IT-service management**

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Developments and Trends in the context of IT-Service Management

Life-cycle Management

Quality Management

Life-cycle based IT-Service Quality Management

Conclusion and outlook
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