Preface

In the field of IT, the markets, business activities, needs and requirements of internal and external service providers and customers are changing in ever-shortening cycles. This forces companies to increase their organizational flexibility not only as far as their structure is concerned but also with regard to established business processes. This is partly achieved by reducing the added value ratio and partly by integrating partners more and more into processes associated with the delivery of products and services. To do this however, companies have to develop the necessary competencies to manage the various partners and procedures, as well as establish processes to ensure high quality services.

Customer expectations and demands regarding high-quality products and services have also risen. As far as the customer is concerned, studies show that the performance and quality of IT services are much more important than the prices of the services themselves. More in-depth market studies prove that poor services result in damages for companies amounting to several billion Euros.

IT services are especially becoming a more and more important module in commercial value adding. Many business processes would be unable to function without the corresponding IT services. Supplementary technological innovations such as service-orientated architectures, web services and cloud computing will make future IT structures very different to those of today. They will no longer be made up of monolithic systems and applications but rather of separate modular service components.

These developments and the experience we have gained from numerous consulting and research projects prompted us to deal with the subject of IT service quality management in more detail. Up until now, the topic has hardly been researched.

The aim of the book is to reduce this knowledge gap and to encourage people to spend more time researching the numerous facets of this fascinating subject in the future. To present the relevant aspects of IT service quality management in a structured way, we have divided the book into 6 sections with a total of 16 chapters.

The first section of the book introduces the subject of quality management for IT services and presents general concepts and a review of the current state of research.

In the first chapter, the contribution submitted by Spath, Bauer and Praeg outlines the topic of IT service quality management and describes fundamental concepts, models and definitions both for IT service and quality management. A lifecycle model for IT services is presented and also a model for classifying quality management methods into the phases of the IT lifecycle. The last part of the article illustrates the various effects of IT service quality management on company performance.

The contribution written by Barrutia und Gilsanz describes the current state of electronic services in the form of a literature review. Ideas for future research work in the field of e-service quality management are presented based on current research results.
The chapter from Bruhn presents a concept regarding the general quality assurance of generic service processes. The author goes on to describe various instruments for quality planning, quality controlling, quality inspection and quality assurance for service processes. Bruhn then describes 10 steps to be taken in order achieve high quality service management.

In the second section of the book, strategic management concepts and models for IT service quality management are presented.

In order for IT service quality management to be successful, all aspects of company management need to be taken into consideration. Therefore, in their contribution, Köhler and Vauth describe the IBM Component Business Model™, which enables all areas to be recognized which are relevant to successful IT service management in order to provide high quality IT services.

The chapter submitted by Looso, Goeken and Johannsen shows how various governance frameworks can be utilized for and integrated into IT management in order to master growing IT management demands. To do this, various IT governance frameworks are examined with regard to different criteria. A metamodel is then developed from the information gained, which describes how the different concepts interact with one another.

The contribution from Wild describes a model for IT service quality management which examines various areas of quality management and identifies existing gaps in quality. The model also enables a quality requirement to be achieved by defining demands and ascertaining specific quality requirements. Wild's quality model is derived from a combination of various IT service management concepts such as ITIL, CoBIT and ISO 20000.

The third section of the book concentrates on process-based concepts and models relevant to IT service quality management.

The chapter written by Dressler, Ege, Heck, Klein and Walter shows how processes can be consistently and collaboratively modeled using ITIL as a basis. It also points out the problem regarding the fact that processes depicted in ITIL are essentially described in a text-based way and that implementable process models are not shown explicitly. It answers the question as to how textual processes can be represented in ITIL based on the guidelines of modeling. To do this, a metamodel describing ITIL process models is shown, explained and presented by way of a pilot example.

The chapter by Gerke, Petruch and Tamm focuses on the challenge to improve business process support with the aid of IT services. As part of their contribution, the authors describe a concept which enables the continuous improvement of business processes. The model is based on a combination of ITIL reference processes, a 7-step improvement process and process mining.

The contribution submitted by Cortina, Picard, Valdes and Renault demonstrates the relevance of process assessment in improving IT service quality. Based on an evaluation of the initial situation, a concept is presented which allows process assessment to be carried out and an improvement project to be commenced founded on this knowledge.

The fourth section of the book addresses infrastructural components which play a role in IT service quality management.

In his chapter, Boris Otto highlights the importance of quality management with regard to corporate data assets. The author then presents and describes a reference model for Corporate Data Quality Management (CDQM).

In the future, the use of divided IT resources will be strongly influenced by cloud computing. In her contribution, Weisbecker points out how cloud services can be organized with the aid of service engineering and how the quality of cloud services can be managed by enterprises through implementing certain concepts.
The fifth section of the book focuses on the application of practical solutions and case studies.

The chapter contributed by Herzwurm and Pietsch describes a case study which shows how the quality of ITIL processes, especially IT service support, can be improved in complex environments. The case study describes the concept of qualitative process improvement based on an example from the telecommunications industry.

Founded on practical experience gained in the field of application management, the contribution from Kociemba shows which concepts and techniques can be utilized to monitor, measure, record and analyze operational IT data and to achieve the corresponding service quality.

IT service quality management not only has to be capable of fulfilling strategic, process-related and technical requirements but also general economic conditions. Therefore, the sixth section of the book focuses on combining not only economic aspects but also soft factors in the context of IT service quality.

The contribution from Wulf and Zarnekow deals with the economic aspects of service quality management with regard to Internet-based IT services. They describe different dimensions of economic factors as well as the corresponding quality factors.

Luis Kalb Roses explains the importance of taking the expectations of customers and service providers into account with regard to IT service quality management. To do this, the author uses the SERVPERF method, which identifies expectations regarding service performance from the point of view of both the customer and the provider. Based on an empirical study, Luis Kalb Roses demonstrates the importance of aligning IT staff with staff from the customer company as far as quality management is concerned.

The final chapter by Praeg introduces a framework called “value engineering for IT services”, which is used to enable value-orientated IT service management in enterprises. In the process, he integrates concepts from IT business alignment, business process management, strategic IT management and IT service portfolio management. He also outlines interrelationships between consistent value orientation and quality improvement in IT service management.

The aim of the book is to give both scientists and practical experts an insight into the many different facets of IT service quality management.

*Dieter Spath*

*Claus-P. Praeg*

*Editors*