Preface

BACKGROUND FOR THE BOOK

After the first wave of e-commerce and e-business, we are witnessing a paradigm shift in the way businesses, governments, and consumers are using Internet-based technologies and mobile communications to innovate and produce new products and services. This paradigm I call e-services. This trend is also affected and accelerated by a corporate shift from the provision of goods to the provision of services, with a parallel development of relevant new business models and marketing paradigms (Rust, 2001). The concept of e-services is relatively new. The purpose of this book is to lay some theoretical foundations for understanding e-services as well as provide real life cases of e-services. The cases have been chosen in different fields such as accounting, libraries, martial arts, and insurance to illustrate the complexity and the infancy of the e-service paradigm. This preface provides a definition of e-services, creates a typology of e-services, and presents the main characteristics of e-services. The challenges that e-services are posing for companies, businesses, and governments are also discussed.

E-Services: Definition, Characteristics, and Taxonomy

Networked information communication technologies (ICTs) such as the Internet or mobile communications are having a dramatic effect on how services and especially knowledge services are innovated, designed, produced, and distributed (Scupola, 2008). In addition, ICT networks such as the Internet have created the basis for the development of new types of services. These networks may also change the way customers or users experience service functions. For example, in the case of hospital services, "relational times" (person-to-person relations) are increasingly replaced by "technical times" where people are moved from one technical system to another. ICT networks seem to be a catalyst to a renewed use of services, here called e-services.

One feature characteristic of services is that customers are more involved in the service delivery process per se; therefore the service consumption is characterized by a high involvement of the customer or customer interaction. Concerning customer interaction, there are different types of services ranging from customer interaction with less standardized service components to customer interaction with highly standardized service components (self-service). To guarantee that customers' demands are best served by the provided services, the level of customer interaction has to be reflected in the innovation management process of the company. This development could lead to a self-service society. Innovative changes may come in customer relations (service encounters and quality), in organizational forms such as the introduction of virtual organizations (Travica, 2007), in competencies developments, and customer

driven innovation (Scupola, 2008). As a result service firms, manufacturing firms and governmental organizations might face new challenges and may introduce new business models.

Even though the concept of e-services is relatively new, different authors have tried to define e-services. For example Rust (2001) defines e-services as the provision of services by electronic networks such as the Internet (Rust, 2001). According to WhatIs.com, e-services is a business concept developed by Hewlett Packard (HP) and it is based on the idea that the World Wide Web is moving beyond e-business and e-commerce (that is, completing sales on the Web) into a new phase where many business services can be provided for a business or consumer using the Web (Henten, in this book). Some e-services may be provided by the company Web site such as e-accounting; other e-services, such as news updates to subscribers, may be sent to your computer (Ihlstrom Eriksson, Kalling, Åkesson, & Fredberg, 2008). Other e-services such as those functioning as intermediary services and often orchestrating networks of companies will be carried out in the background without the customer's immediate knowledge.

There are many definitions and conceptions of e-services as it is showed by the chapters in this book. Therefore, here a broad definition is used according to which e-services are defined as services that are produced, provided, and/or consumed through the use of ICT networks such as Internet-based systems and mobile solutions. However, e-services also include, for example, the online selling of real estate property or the purchasing of physical goods that are then delivered by other means such as a book that is purchased online, but delivered by surface mail to the buyers. E-services can be produced by consumers, businesses, and governments and can be accessed via a wide range of information appliances (Hoffman, 2003, p. 53). In addition there are three main characteristics of e-services:

- The service is accessible via the Internet or other electronic networks
- The service is consumed either directly or indirectly via the Internet or other electronic networks
- There might be a fee that the consumer pays the provider for using the e-service, but that might not always be the case as is exemplified by some e-services offered by the government.

Normally the production, provision, or consumption of a service requires the interaction between the service provider and the user of the service. Traditionally, this has been based on personal interactions, most often face-to-face interactions. In e-services, the production, consumption, and/or provision of services takes place through the intermediation of an ICT network such as Internet-based systems or mobile solutions.

Familiar e-services are online banking or online retailing (e.g., www.Amazon.com). Other types of e-services are e-learning such as courses offered online, e-health such as remote or online medical advice (see the chapters by Gogia and Rubeck and Miller in this book), e-government (e.g., e-procurement as in the chapter by Federici), e-libraries providing electronic access to journal articles or book chapters (see the chapter by Scupola in this book), and information and location services (Yee, 2006). As a result, four types of e-services can be conceptualized:

- business-to-business
- business-to-consumer
- government-to-business or to-consumer
- consumer-to-consumer

The advent of e-services has raised a number of challenges for knowledge intensive service organizations such as consulting companies, accounting companies, libraries, and publishers as well as for companies selling physical goods, especially those in transition from being a manufacturing to becoming a service company. For example companies have to innovate, have to develop strategies and new business models for the production and provision of e-services, and acquire or develop new competencies (see for example the chapter by Gullvist and Nicolajsen and Falch in this book).

Structure of the Book

The book is organized into four sections, each one dealing with different aspects of e-services.

The first section is a theoretical section. It presents some different definitions of e-services and touches upon some theoretical issues such as e-services quality, the profile of users of self-services systems, electronic signatures as a necessity for the provision of secure electronic services, and the characteristics of online journalistic services.

The first chapter of this section examines the provision and co-development of electronic services, content, and applications at the conceptual level. It focuses on the provision of services electronically (e-services) and the development of user-produced electronic content and applications that the author defines as "nonservices." The chapter points to codifiability, digitization, and interpretation as three crucial conditions for the development of e-services and nonservices. Codifiability is the basic prerequisite, but even if knowledge is codifiable, it does not necessarily follow that it can be entirely digitized nor that it will be interpreted in the same manner in different contexts. An important issue pointed to by the chapter is that of whether the development of e-services and nonservices leads to specialization and/or convergence in the production and marketing of informational services. Is there reason to anticipate that the production and marketing of informational services will develop differently from other production areas with respect to the implications of technology on the combination of specialization and convergence?

The second chapter examines the role of standardization activities for the promotion of several needs of an "open" European market based on the effective usage of e-signatures. Two major streams of possible standards-setting work have been pointed to by the chapter: (1) qualitative and procedural standards for the provision of certification services; (2) technical standards for product interoperability. The chapter also discusses relevant "feedback" already gained from various market areas and focuses on challenges for further implementation, progress, adoption, and development, especially in the framework for the promotion of converged broadband (Internet-based) communications facilities. It is important for the market that expected standardization work takes into account new technological developments as, in the future, users will move their e-signature key from device-to-device in a connected world. The chapter also concludes that the added value of standards in the e-signatures sector, for both end users and assessing parties (judge, arbitrator, conformity assessment body, etc.), is of extreme importance for the future of the European electronic communications market.

The third chapter proposes a methodology for the quality assessment of e-services. This methodology takes e-government quality features into account. The chapter also defines a reference model with the aim of providing a single value starting from a set of service parameters. To validate the validity of such a methodology, the authors apply it to a case of a shared services management system called TecUt implemented in the Italian region called Marche.

The fourth chapter investigates customers' perceptions of eight dimensions that characterize the quality of the self-service experience. The study attempts to analyse the influence of the self-service users' profile such as gender, Internet usage experience, and online self-service usage experience on the use of self-services, and to provide specific insights about the needs and wants of various categories of customers.

The fifth chapter analyzes the readers' behavior in relation to e-newspapers and traditional newspapers. It identifies the main reading motivations and the behavior patterns in each medium. In addition it examines the possible relationship between readers' objectives for reading and the choice of each channel. The results confirm that the electronic and traditional channels are compatible, but suggest that it is necessary to take the process of differentiation in order to enhance this complementarity, meeting readers' needs in different circumstances and combining effects to raise loyalty to a newspaper.

Section two deals with business-to-consumer e-services and presents four cases.
The first chapter of this section explores the possibilities for small- and medium-sized enterprises (SMEs) to find their way to success in e-services. The basic assumption of this chapter is that the Internet allows SMEs to access niche markets which have not previously been accessible to them. The chapter presents a case study of a Croatian online store developed as a portal which targets the niche market of martial arts. The case focuses on criteria for selecting suppliers, developing a new brand, designing an online store to attract visitors, and opportunities for growth. The authors hope that this particular case will help small companies to take into account niche markets when designing their online stores but also it will help researchers to further explore niche markets as a possible business strategy for SMEs while entering the e-services arena.

The second chapter of this section provides a case about the management of accounting services and e-services in a professional accounting firm in order to identify development and learning issues, which can be used for implementation of similar initiatives within other organizations in the future. The focus is on the perceived problems and opportunities in transforming services into e-services as well as the operational and strategic solutions used to solve the emerging problems by the case company. The professional accounting firm in this study is a service provider of financial, accounting, and taxation related services for client companies, but not internal or external auditing services.

The third chapter of this section introduces an innovative organizational logic for developing and designing electronic services especially in the context of financial services, such as insurance. Furthermore, a novel electronic insurance service concept for consumers is introduced in the chapter. The authors argue that development of electronic service solutions for the use of financial sector formerly rather conducted in an organization may well be executed through a multi-organizational project-based working logic. In fact the chapter establishes that the multi-organizational project-based logic results in a more creative outcome. Hence, the authors hope that the chapter encourages both academics and especially practitioners within the insurance business sector to take steps towards more collaborative working practices in order to generate more creative electronic service solutions for customers.

The fourth chapter is the case of eBay. It addresses management's philosophies, the corporate business model, its challenges, network relationships, and examines corporate growth to date as well as future horizons. As the eighth largest global retailer, eBay's mission is to pioneer new communities around the world built on commerce, sustained by trust, and inspired by opportunity. The chapter concludes that

eBay's ability to maintain or enhance this position will depend on their ability to adapt to new technologies while facing increased competition and anticipating customers' needs.

The third section focuses on business-to-business e-services and illustrates their complexity with three cases.

The first chapter of this section analyzes the organizational challenges that an engineering consultancy in the building industry has faced in integrating ICTs in the production and delivery of their services, and discusses how the e-service concept can be applied in this context. The analysis is based on a field study on the introduction of 3D-modeling tools within one of the leading engineering companies in Scandinavia (Ramboll). The analysis focuses on the changes in knowledge creation and transfer both within the company and in inter-organizational relations. The analysis points towards a need to change the business model as the projecting part of the technical engineering service becomes standardized.

The second chapter describes the changes which are taking place in the printing business due to the advent of e-services. It tells the story of Lexmark, a printer manufacturer that has recently created differentiated offerings to its business customers. In the case of Lexmark, this repositioning of offerings has been enabled by e-services. Here, the e-services consist of the Lexmark Fleet Manager system which monitors the use and availability of the equipment and makes suggestions on how to improve the printing processes on the customer site. The case ends with a description of the actual challenges that Lexmark is currently facing.

The last chapter of this section focuses on the theme of e-service innovation in financial electronic markets. The chapter covers the theories of "technology bundling" and how bundling creates value-added in servicing electronic markets. More specifically, this chapter looks at innovations created through e-service bundling for online brokers connected to various financial electronic markets. The proliferation of different e-trading systems raises the question of which systems provide better service to online stock traders. The objective of this chapter is to show that several innovations in broker e-services are critical in the following areas: how order processes are efficiently managed in financial e-markets; how responsive e-trading systems are in handling trading rules and regulations; how different systems address unique niches in financial e-markets; and how to improve systems stability and reliability.

Section Four deals with governmental e-services or e-government and includes five cases.

The first case of this section discusses the development and management of e-services at Roskilde University, Denmark. The services in question can be distinguished according to purpose into products meant for administration, communication, education, and integration. The chapter discusses several examples of e-services from the point of view of adoption of technological innovation. Further, it is argued that participatory design and voluntary adoption are factors favorable to, but also challenging to the adoption of e-services. The technical and organizational integration of e-services are also touched upon, as is the importance of maintaining a creative environment for developing the services. The chapter concludes by outlining some challenges to the continued diffusion of e-services in the organization.

The second chapter reports the findings of a case study of e-services adoption at research libraries. The case under consideration is Roskilde University Library (RUB), a research library supporting learning activities at Roskilde University. The research focuses on the main issues that RUB had to deal with in the process of adopting e-services and the future challenges that e-services provide for the organization. The chapter also presents the consequences of e-services adoption for Roskilde University Library organization, its business model, and the relationships with customers, publishers (providers of knowledge), and other research libraries in Denmark.

The third chapter presents a case dealing with the experience of e-procurement implementation promoted by the Italian Local Healthcare Public Agency (LHA) of Viterbo. This case is particularly interesting for the comprehensive design of the e-procurement system, the differentiation of the adopted tools, the long-lasting experimentations (since 2000), and the multiple solutions implemented or in progress. In this case the use of e-procurement tools is seen just as one aspect of a deep reorganization of the entire supply process and the initiatives were followed by a detailed assessment of their outcomes. The chapter examines in detail the history and key features of this experience up to the ongoing project aimed at a wide e-procurement implementation. A framework of healthcare spending characteristics is also introduced together with taxonomy of e-procurement tools in public healthcare sector.

The fourth chapter discusses the Healing Touch project which started after the tsunami disaster in Tamilnadu to address the healthcare needs of the survivors through information technology. The project provided mental health support to the victims near their place of residence. This project was sponsored and managed entirely by NGOs and the local community NGOs were directly trained to manage their own health problems after the natural disaster. The success was linked to the intensive pre and post execution work done. Some problems faced were related to a general lack of awareness and nonpenetration of IT in the community in the disaster area. If people are using IT in their day to day work, adoption of telemedicine and other e-services will be far simpler after a disaster.

The last chapter of this section and the book describes a project conducted at the University of North Dakota that has had the purpose of transforming the delivery of government services to citizens located in rural areas. The chapter points to the need of rural and reservation residents to receive better government services. In spite of the best efforts of the Social Security Administration, a vast number of Native Americans living in rural and remote areas have had their access to program information and social benefits limited by distance, economic, and cultural challenges. As an offshoot of work in telemedicine and rural outreach, staff members of the Centre for Rural Service Delivery collaborated with the Social Security Administration and the Indian Health Service to create the first video link connecting a hospital to a Social Security Office. The social benefits of Video Service Delivery (VSD) have been measured by the number of citizens who use video access to seek answers to questions and to make application for benefits each year. Since it went live, the link has resulted in more than 300 completed applications for disability benefits or income supplements. That total is more than 50 times the number produced through conventional service delivery. The service impact includes increased application completion rates, accelerated claims processing, and increased third party assistance in the application process.

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