Chapter XI

An Overview and Summary

An Overview of E-Services

This book has introduced a model-driven approach for identifying, designing, deploying, and managing business services in software. The concept of e-service is an extension of conventional business services, made possible thanks to the rapid explosion in popularity of the Internet and the World Wide Web (Rust & Kannan, 2003). The first generation of e-commerce was based largely on retailing commodity goods, such as books and CDs, and used mass media advertising to contact consumers. The premise of first generation e-commerce was that operational efficiencies (i.e., minimizing the need and therefore the expense to keep physical stores) would reduce the costs of selling. Unfortunately, selling commodities has low profit margins due to competition. An alternative is required, that allows companies to build sustainable competitive advantage, based on their capability to deliver more individualized and hence more profitable e-services.

The emerging e-service paradigm that we have been concerned with in this book is based on such principles. It uses two-way interactions to build customized service
offerings, and exploits knowledge about the customer, to build strong customer relationships. Companies can use e-services to achieve profitability based on revenue expansion rather than cost reduction, with revenues driven by enhanced service and higher levels of customer satisfaction (Rust & Miu, 2006). Customized service offerings support high margins, by enabling a monopoly on the relevant information about the customer, obtained through better management of the customer relationship. Supermarkets, for example, employ loyalty cards and electronic purchase tracking to use service as a differentiator to ease price competition. Focused one-to-one promotion and marketing efforts based on information gathered using these cards, allow the supermarket chains to develop relationships with their customers. They provide value to customers through focused information-based marketing (e.g., targeted promotions and discounts), reduced search time, increased convenience, and a perception of control in their transactions. The added value of this service is, therefore, derived from information-based components rather than tangible products.

In order to transform from sellers of physical products to providers of services, organizations need to be customer-centric. A one-time transaction becomes a longer term relationship, providing opportunities for focused selling of products/services that increase customers’ value (Rust & Kannan, 2003).

Firms, therefore, must take full advantage of Internet-based e-service opportunities to establish long-term customer relationships and loyalty. New technologies such as wireless networking, broadband, smart cards, data warehousing, data mining, Web services, and software agents all contribute toward the effective accessibility and servicing of the correctly targeted customers while providing more choices, options, and, ultimately, power to customers. As the new technologies and possibilities shape customer expectations, organizations are under pressure to improve their business processes, to develop new markets and to improve their competitive positions using these technologies.

E-services are not, however, only about delivery medium (the Internet, in this case) they also require content and infrastructure for their consumption. Let us then examine the concepts of content and infrastructure more closely. The content of an e-service is the information, resources, capabilities, and capacity the consumer is prepared to pay for. Everything that can be digitized can effectively become content for an e-service. In this book we have already seen the limits of such digitization, as physical materials cannot be digitized, services have to deal with the alter ego of the physical world information. In today’s economy, being restricted to information-based products is not normally a serious limitation. The developed world is increasingly dealing in mainly virtualized commodities (i.e., information-based ones), with the actual physical production of goods (manufacturing) gradually being shifted to the developing countries. Industries, even manufacturing ones, are becoming rapidly e-service-based. The gradual shift from physical products to pure e-service components has significant implications for building customer relationships...