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Chapter VII

The CIO Developing E-Business

Introduction

As companies expand their use of the Internet from electronic commerce to electronic business, the CIO emerges as the most important executive for performance improvements when selecting business models.

Electronic Commerce

Electronic commerce (EC) is an important concept that describes the process of buying, selling, or exchanging products, services, and information, via computer networks, including the Internet (Turban, King, Lee, Warkentin, & Chung, 2002). From a communications perspective, EC is the delivery of goods, services, information, or payments over computer networks or by any other electronic means. From a business process perspective, EC is the application of technology toward the automation of business transactions and workflow. From a service perspective, EC is a tool that addresses the desire of firms, consumers, and management to cut service costs while improving the quality of goods and increasing the speed of service delivery. From an online perspective, EC provides the capability of buying and selling products and information on the Internet and other online services. From a collaboration perspective, EC is the framework for inter- and intra-organizational collaboration. From a community perspective, EC provides a gathering place for community members, to learn, transact, and collaborate.

Electronic commerce over large ubiquitous networks will soon be conducted in routine fashion. While some may question the time frame involved, few will question its imminence. In this transient phase of rapid technological change, it is difficult to see the real implications of these changes for both business and society. Recent writings have elaborated on the power of information technologies to reduce the costs of coordination and transactions, consequently to influence governance structures between buyers and sellers. Much of the popular press is also fairly aggressive in providing anecdotes of innovative companies that have leveraged Web-based technologies by expanding, improving, or modifying product and service offerings. A subliminal theme in all this hyperbole is the notion that these technologies are good and will provide the consumer with many more options, services, and advantages. Grover and Ramanlal (1999) challenged this theme by presenting alternative scenarios in which these technologies did not necessarily work in the best interest of the customer. For example, product customization, enabled by IT networks, can allow sellers to exploit buyers rather than benefit buyers.

The emergence of e-commerce is creating fundamental change to the way that business is conducted. These changes are altering the way in which every enterprise acquires wealth and creates shareholder value. The myriad of powerful computing and communications technology enabling e-commerce allows organizations to streamline their business processes, enhance customer service, and offer digital products and services. This shift underlying marketing fundamentals is now the driving force that is luring many organizations to embrace e-commerce. However, as they are learning, organizations must proceed with caution, as the road to e-commerce is littered with failed initiatives (Chang, Jackson, & Grover, 2003).

While engaging in e-commerce undoubtedly has substantial benefits, this marketplace also is quite competitive. E-commerce reduces customer search and switching costs, has the ability to distribute information on new products, access new sales channels, and reduce entry-level capital requirements, thereby lowering barriers to entry. Companies which exhibit a market orientation, by being vigilant regarding the needs of customers and the actions of competitors, tend to achieve better performance. Over-emphasizing one dimension at the cost of the other tend to lead to sub-optimization in an environment that rewards the ability to sense and respond to a variety of information cues (Chang et al., 2003).