



CHAPTER NINE

ERP + E-Business = A New Vision of Enterprise System

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INTRODUCTION

Companies have invested billions of dollars collectively in enterprise resource planning (ERP) systems with the objective of attaining an important business promise — complete enterprise integration. For companies faced with incompatible information systems and inconsistent operating practices, ERP has been a dream come true. ERP presents companies with the opportunity to standardize and automate business processes throughout the organizations, thus increasing productivity and reducing cycle time.

Although ERP systems have delivered value, it is becoming clear that the ERP model, which wraps organizational processes into one end-to-end application, may no longer be sufficient for today's fast-moving, extended enterprises. With the rapid growth of the Internet, the business environment has changed dramatically. The world has become a global marketplace. According to Gartner Group, the worldwide business-to-business (B2B) market is forecasted to grow from 145 billion in 1999 to 7.29 trillion in 2004 (King, 2000).

E-business has changed the definition of enterprise systems. Beyond the core business functions that ERP has traditionally focused on, e-business pushes the ERP from the inside core of the companies to the network edge. Companies are realizing that the most challenging part of e-business initiatives is not in developing a Web storefront but in extending ERP to accomplish business-to-business (B2B) and business-to-consumer (B2C) solutions. A new extended enterprise system emerges by integrating ERP with e-business, which creates business that is more agile, more focused and more competitive than traditionally structured business and tight B2B connections. With the help of the componentization concept, a seamless, end-to-end flow of information and process across the value chain of companies becomes realistic.

ERP AND E-BUSINESS

ERP is a structured approach to optimizing a company's internal value chain. The software, if implemented fully across an entire enterprise, connects the various components of the enterprise through a logical transmission and sharing of data (Norris et al., 2000, pp.12-13). When customers and suppliers request information that have been fully integrated throughout the value chain or when executives require integrated strategies and tactics in areas such as manufacturing, inventory, procurement and accounting, ERP systems collate the data for analysis and transform the data into useful information that companies can use to support business decision-making. ERP systems, if implemented successfully, enhance and redesign business processes to eliminate non-value-added activities and allow companies to focus on core and truly value-added activities. The following are two examples where ERP systems have dramatically increased the efficiency and productivity of companies: IBM has used ERP to reduce the processing time for updating pricing data from 80 days to five minutes and Chevron has used ERP to decrease its annual purchasing cost by 15%.

E-business stands for "electronic business," which involves communications and doing business electronically through the Internet. E-business is defined as "the use of electronically enabled communication networks that allow business enterprises to transmit and receive information" (Fellenstein and Wood, 2000). It can significantly improve business performance by strengthening the linkages in the value chain between businesses (B2B) and consumers (B2C). Besides increasing efficiency in selling, marketing and purchasing, e-business achieves effectiveness through improved customer service, reduced costs and streamlined business processes. Furthermore, e-business creates a strategic, customer-focused business environment for shared business improvements, mutual benefits and joint rewards. Companies use the Internet to implement customer-relation-management (CRM) and supply-chain-management (SCM) capabilities, which enable them to link their operations seamlessly with customers and suppliers. For example:

Nantucket Nectars, a juice manufacturer with 40% growth and \$70 million in annual sales revenue, sells its organic juices through 150 distributors nationwide as well as general stores and juice bars in Nantucket. By using Oracle's ERP system and e-business platform, the salespersons can track sales and promotions through the Internet, and are provided assistance and suggestions to enhance their performance. The salespersons and distributors have access to commission reports, and they can track and adjust sales orders. Through consolidating its financial, compensation, sales and depletion data into a single report, Nantucket prevents out-of-stock and partial shipments. The forecasted need for 50% more labor force to handle customer service issues in the past was eradicated by integrating ERP system with e-business (Oracle, 2000).

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