



Chapter VII

The Evolving e-Business Enterprise Systems Suite

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ABSTRACTS

Enterprise systems have emerged recently as a popular approach to outsourcing major application development. In the 1990s, enterprise systems encompassed and integrated core business functions such as manufacturing, logistics, financials, and human resources. During this time, the basic objective of these systems was on streamlining and standardizing information flows and processes. These systems were designed based on the need to optimize the processing of huge numbers of business transactions regularly in an enterprise. As the Internet evolved there has been a greater emphasis on supporting inter-organizational processes. As technologies continue to advance and users become more sophisticated, a greater opportunity to incorporate higher-level decision making tools and capabilities into enterprise systems packages arises. This chapter provides a review of several core areas currently being developed. The view

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of the authors is that enterprise systems as they are evolving today will serve as the foundation for the intelligent enterprise of the 21st century. The last section provides a perspective on how firms should view these systems and their many challenges.

INTRODUCTION

“We are at the dawn of an age of networked intelligence—an age that is giving birth to a new economy, a new politics, and a new society. Businesses will be transformed, governments will be renewed, and individuals will be able to reinvent themselves—all with the help of information technology.”

Tapscott (1996)

In 1865, roughly 50 percent of the workforce worked in the agricultural industry. This marked the peak of the Agrarian Era. By 1940, less than 5 percent of the workforce worked in agriculture, but close to 40 percent worked in manufacturing. Today, less than 10 percent of the workforce is involved in agriculture and manufacturing combined and the vast majority of workers could be more generally classified as knowledge workers. Federal Reserve Chairman Alan Greenspan has commonly used the term “creative destruction” to describe the radical transformation that the economy in virtually all industries has gone through. Creative destruction is the process by which new products and production methods render old ones obsolete. U.S. Treasury Secretary Lawrence Summers points out (Whalen, 2000) that “If the agricultural and industrial economies were Smithian, the new economy is Schumpeterian.” Schumpeter has been credited with having viewed technological change at the core of economics. The digital computer created a technology that could effectively leverage information, giving managers a new tool for creating wealth. The move to the information era has provided business with a tremendous opportunity to knock out old hierarchic bureaucracy and replace it with leaner, more responsive, and more intelligent structures. A critical factor for the successful adoption and diffusion of information technology has been successful leadership and management.

Management leaders have provided keen insight and leadership during this era of reengineering and business transformation. Thomas Peters and Robert Waterman (1982) wrote a seminal book identifying eight basic practices characteristic of successfully managed companies. Many of the ideas were considered part of management’s conventional wisdom in highly profitable Japanese corporations, but few were common practice in the majority of American business concerns. This book motivated much of the organizational improvement initiatives that were so popular in the 1980s. None of the eight steps referred to technology but rather focused on people, organization, and behavior. Later, Davenport (1990, 1993) clearly identified the opportunity for, and success of, technology-enabled change in an organization. Business Process Reengineering (Hammer & Champy, 1993) emerged as the buzz-word for technology-enabled organizational change and improvement. The importance of *process* and *process-oriented* organizations was popularized by Thomas Davenport (1993) and Michael Hammer (1996). Throughout the ’80s and ’90s, most organizations in the U.S. were involved in this great process change journey to the Information Economy, only to realize that this was not a destination but rather a lifelong journey.

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