Chapter XXIV
ERP and Beyond

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ABSTRACT

Enterprise-wide automation has already transformed the relations among suppliers, purchasers, producers, and customers. Conventional ERP helps only to automate individual departments. It could neither integrate its back-office benefits into the front-office, nor could it establish consistent control of all business processes. Competitive pressures and globalization stresses the need for more effective, total enterprise solutions. The world class competition, modern business environment, and the availability of the Internet are the premises which stress the need for ERP. The salient features of ERP II are presented in addition to describing some of the disruptive technologies which will help reengineer ERP systems rapidly. The results of an international survey pertaining to the embedding of intelligence in the modern day ERP shows an evolutionary trend. The order placement over the Internet by a sales clerk from a remote location forms a part of this chapter to benefit the readers in understanding the functioning of an ERP system.

INTRODUCTION

Enterprise is a group of people and associated resources to achieve a common goal. Enterprise Resource Planning (ERP) System is an enterprise wide system which encompasses corporate mission, objectives, attitudes, beliefs, values, operating style and people who make the organization. It is a software solution that addresses the Enterprise needs, taking a process view of the overall organization to meet the goals, by tightly integrating all functions under a common software platform. In other words, ERP systems are computer based systems designed to process an organization's transactions. It facilitates integrated and real-time planning, production and customer response. ERP has multilingual capability, multi-currency handling ability, and can recognize legal and tax reporting needs of various nations across the world.

The real need for such an integrated system has emerged with the onset of Supply Chain Management, e-business and global operations which calls for exchange of information with other companies and customers directly (Krajewski et al., 2000). A world-class competitor means being successful against any competitor on quality, lead time, flexibility, cost/price, customer service and innovation (Table 1). It needs transforming relations among suppliers, purchasers, producers and customers. This can be achieved only through enterprise automation which assists innovators to achieve their market share and at the same time operate at peak efficiency to satisfy customer needs. The world in which we do business is shrinking, and virtually every enterprise is either marketing or selling to customers in other countries, or simply using parts or materials that are produced elsewhere. Internet has overcome time and distance to a great extent. It has become the need of the hour to think globally and to include the same in plans, processes and strategies.

Globalization and Web commerce riding on the development of the Internet have changed traditional business behaviors and practices. Leveraging the Internet by the business has become a need to quickly establish a virtual presence. They must use collaborative technology in order to respond to customer's requirements better and faster. When the operations are scattered through multiple locations around the world, the need is to gain visibility across all sites. This enhanced visibility can lead to more negotiating power for purchasing parts and more efficient centralized accounts payable and receivable thereby improving overall performance. Solutions like ERP, supply chain management or CRM solutions provide tools to manage the information that is essential to growing business value.

The need to achieve world class status, rapid development in Internet and related technologies, and the evolving business trends are the premises which accelerates the evolution of ERP systems. Virtually every enterprise is either marketing or selling to customers in other countries, or simply buying parts or materials that are produced else-

Table 1. Key success factors for achieving World-Class status

> ➢ Reduce lead time;
> ➢ Speed in time-to-market;
> ➢ Operation cost reduction;
> ➢ Exceed customer expectation;
> ➢ Manage global enterprise;
> ➢ Streamline outsourcing processes;
> ➢ Improve business performance visibility.   **Adapted from www.mapics.com**

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