## Chapter XII

# Inter-Enterprise Process Integration for E-Supply Chain Business Practices

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## Abstract

*For every industry, the demands for optimization and greater efficiency become particularly urgent when the flow of business information goes beyond the borders of organizations. Driven by the need to attain even greater corporate competitive advantages, many organizations already have reengineered their internal processes, and the focus has shifted to their trading partners. With network connectivity, supply chain integration is now the core strategic competence that enables many companies to act as one. he development of an integrated supply chain by way of the Internet is one of the most important business trends in today's e-business practices. This chapter focuses on the development of an object-oriented enterprise business blueprint for e-supply chain inter-enterprise process integration. The approach described here will illustrate how the enterprise applications can be developed and woven into the very fabric of business practices by using object-oriented techniques. In contrast to an isolated IT system, this approach allows business processes to permeate different organizations, and communication in this system becomes process-to-process oriented.*

# Introduction

The globalization of markets and the subsequent volatile competitions are driving enterprises to optimize their business strategies and operations constantly. Many enterprises already have reengineered their internal processes, and now the focus has shifted to their trading partners. With network connectivity, supply chain integration is the core strategic competence that enables many companies to act as one. This supply chain represents the cross-functional integration of activities that span the borders of organizations and companies. he issues involved in selecting e-supply chain partners extend beyond choosing a trading partner or a contractor and must include configuring business-to-business collaboration among trading partners. Today, every industry is an information-intensive industry. Information and communication have always played a major role in organizations' competitiveness and growth. The development of an integrated supply chain by way of the Internet is one of the most important business trends in today's e-business practices. This chapter focuses on the development of an object-oriented enterprise business blueprint for e-supply chain inter-enterprise process integration. The approach described here will illustrate how the enterprise applications can be developed and woven into the very fabric of business practices by using object-oriented techniques. The goal can be accomplished through the following steps: (a) examination of the current state of general business practices and theories of organizational structures; (b) classification of several business modules and combining them as a whole for enterprise business applications; (c) application of several modeling principles in the concept of creating an object-oriented environment for business; and (d) development of an object-oriented supply chain blueprint for e-business practices.

# The New Dimension of Channel Integration

In order to compete in today's real-time economy, every business must be able to identify and respond quickly to changing market conditions and customer needs. Enterprises need to adapt a new type of agile and responsive organizational structure in order to fit into the global spectrum of business. New market players in today's e-economy gain diverse skills of workers through alliances, and a flat managerial hierarchy enables them to collaborate on a virtual basis that produces flexible products to meet customers' needs. This places the global economy as a whole in a continual restructuring mode, putting pressure on every industry. The situation is intensified by rapid advances in Information Technology (IT), which have drastically shortened the adaptation periods for organizational changes that used to be comparatively long. Hammer (1990) suggested that enterprises use IT to reengineer their existing business processes in order to achieve strategic outcomes and improve competitiveness. Reengineering is critical to an organization's survival during certain periods when there are major economic upheavals that threaten the organization's existence, and many organizations that do not reinvent themselves are doomed to become part of business history.

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