

## **Enterprise Applications**

First, what do we mean by an enterprise system? This term refers to systems that integrate data across an enterprise (organization) to support the business processes related to a variety of business functions—such as the supply chain and customers. This can be done by one large-scale enterprise-wide system that integrates the major functions such as finance, human resources, production, marketing, etc. or through linking (or integrating) individual systems through a type of middleware—usually referred to as enterprise application integration (EAI).

### **Enterprise Resource Planning (ERP)**

ERP systems were originally developed to handle the "back office" types of functions such as: human resource management, financial management and inventory/supply management.

Enterprise resource planning systems have been extended in many organizations to include seamless integration of customer relationship management and supply chain management processes and data across the organization.

Linked with ERPs, supply chain management (SCM) and customer relationship management (CRM) systems provide the end-to-end visibility of a company's information; the ERP provides the "glue" to allow all the systems of an enterprise to work together to get the right information to the right people at the right time.

As you read through this module, two things should become clear: 1) effective ERP can provide great strategic advantage to an organization and help break down the stovepipes of information aligned to specific groups (like human resources, finance, etc.), and 2) ERPs are a lot of work and effort, and can be very expensive, to correctly design and implement.

### **Supply Chain Management (SCM)**

If you think of the basic model of businesses—it's input/process/output. Stuff comes in (this could be raw goods to manufacture materials or human capital and knowledge), and then the work of the company is to transform it in some way to something that the customers want (process), and then send it out to the customers (output)—the output could be to wholesalers, retailers, or individual

customers. Each step in the supply chain provides an opportunity to improve profitability, impact quality, etc. And through the use of supply chain management software, management and employees can view what's happening along the supply chain to make better decisions.

In today's world, it is impossible to have an effective supply chain without the use of technology, including the right technology solution to implement the business strategy. Once again, getting the right information to the right people at the right time is critical to successful SCM, and that is exactly what good SCM systems do. Businesses use SCM to **plan, source, make, deliver, and return** their products. SCM helps them develop a plan for managing all the resources needed; choose reliable suppliers; manufacture their products or services; implement their logistics processes (receive and fulfill orders and receive payment); and provide for returns, excess product, and customer support. This is an iterative process that goes on continuously as companies monitor, evaluate, and modify their supply chains. SCM is a clear example of the relationship between people, information, business processes, and information technology.

### **Customer Relationship Management (CRM)**

CRM is a **business philosophy** (not a technology, as many people use the term) based on the idea that a strong competitive advantage can be achieved by understanding customer needs. Companies who recognize that their customers are not just generators of revenue but are valued assets are moving quickly from a focus on their product to a focus on the customers. As companies deal with customers around the world and expanding competition, they find that adopting a CRM strategy is essential. It costs much less to make a repeat sale to an existing customer than it costs to make a sale to a new customer.

CRM helps organizations of all sizes, but the larger the company, the more complex the problems become. Here's where an information system can provide immense value—allowing the company to capture information, make it available to all functions that need to know something about the customers, and provide superior customer service. In addition, the availability of this data enables companies to analyze the information to determine patterns and trends in customer habits, analyze demographic profiles of customers to target marketing campaigns, and identify ways to build customer loyalty.