8

CHAPTER

Enterprise Applications: Business Communications

What's in IT for me?

This chapter introduces high-profile strategic initiatives an organization can undertake to help it gain competitive advantages and business efficiencies—supply chain management, customer relationship management, and enterprise resource planning. At the simplest level, organizations implement enterprise systems to gain efficiency in business processes, effectiveness in supply chains, and an overall understanding of customer needs and behaviors. Successful organizations recognize the competitive advantage of maintaining healthy relationships with employees, customers, suppliers, and partners. Doing so has a direct and positive effect on revenue and greatly adds to a company's profitability.

You, as a business student, must understand the critical relationship your business will have with its employees, customers, suppliers, and partners. You must also understand how to analyze your organizational data to ensure you are not just meeting but exceeding expectations. Enterprises are technologically empowered as never before to reach their goals of integrating, analyzing, and making intelligent business decisions.
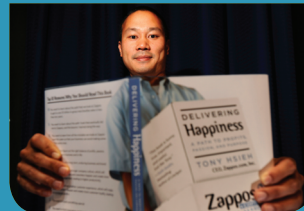
Zappos Is Passionate for Customers

Tony Hsieh's first entrepreneurial effort began at the age of 12 when he started his own custom button business. Realizing the importance of advertising, Hsieh began marketing his business to other kids through directories, and soon his profits soared to a few hundred dollars a month. Throughout his adolescence, Hsieh started several businesses, and by the time he was in college he was making money selling pizzas out of his Harvard dorm room. Another entrepreneurial student, Alfred Lin, bought pizzas from Hsieh and resold them by the slice, making a nice profit. Hsieh and Lin quickly became friends.

After Harvard, Hsieh founded LinkExchange in 1996, a company that helped small businesses exchange banner ads. A mere two years later Hsieh, sold LinkExchange to Microsoft for $265 million. Using the profits from the sale, Hsieh and Lin formed a venture capital company that invested in start-up businesses. One investment that caught their attention was Zappos, an online etailer of shoes. Both entrepreneurs viewed the $40 billion shoe market as an opportunity they could not miss, and in 2000 Hsieh took over as Zappos' CEO with Lin as his chief financial officer.

Today, Zappos is leading its market and offering an enormous selection of more than 90,000 styles of handbags, clothing, and accessories for more than 500 brands. One reason for Zappos' incredible success was Hsieh's decision to use the advertising and marketing budget for customer service, a tactic that would not have worked before the Internet. Zappos' passionate customer service strategy encourages customers to order as many sizes and styles of products as they want, ships them for free, and offers free return shipping. Zappos encourages customer communication, and its call center receives more than 5,000 calls a day with the longest call to date lasting more than four hours.

Zappos' extensive inventory is stored in a warehouse in Kentucky right next to a UPS shipping center. Only available stock is listed on the website, and orders as late as 11 p.m. are still guaranteed next-day delivery. To facilitate supplier and partner relationships, Zappos built an extranet that provides its vendors with all kinds of product information, such as items sold, times sold, price, customer, and so on. Armed with these kinds of details, suppliers can quickly change manufacturing schedules to meet demand.

Zappos Culture

Along with valuing its partners and suppliers, Zappos also places a great deal of value on its employee relationships. Zappos employees have fun, and walking

through the offices you will see all kinds of things not normally seen in business environments—bottle-cap pyramids, cotton-candy machines, and bouncing balls. Building loyal employee relationships is a critical success factor at Zappos, and to facilitate this relationship the corporate headquarters are located in the same building as the call center (where most employees work) in Las Vegas. All employees receive 100 percent company-paid health insurance along with a daily free lunch.

Of course, the Zappos culture does not work for everyone, and the company pays to find the right employees through "The Offer," which extends to new employees the option of quitting and receiving payment for time worked plus an additional $1,000 bonus. Why the $1,000 bonus for quitting? Zappos management believes that is a small price to pay to find those employees who do not have the sense of commitment Zappos requires. Less than 10 percent of new hires take The Offer.

Zappos' unique culture stresses the following:

1. Delivering WOW through service.
2. Embracing and driving change.
3. Creating fun and a little weirdness.
4. Being adventurous, creative, and open-minded.
5. Pursuing growth and learning.
6. Building open and honest relationships with communication.
7. Building a positive team and family spirit.
8. Doing more with less.
9. Being passionate and determined.
10. Being humble.

Zappos' Sale to Amazon

Amazon.com purchased Zappos for $880 million in 2009. Zappos employees shared $40 million in cash and stock, and the Zappos management team remained in place. Having access to Amazon's world-class warehouses and supply chain is sure to catapult Zappos' revenues, though many wonder whether the Zappos culture will remain. It'll be interesting to watch![1]

section 8.1 SUPPLY CHAIN MANAGEMENT

LEARNING OUTCOMES

8.1. Explain integrations and the role they play in connecting a corporation.

8.2 Describe supply chain management and its role in supporting business operations.

8.3. Identify the benefits and challenges of SCM along with its future.

BUILDING A CONNECTED CORPORATION THROUGH INTEGRATIONS

Until the 1990s, each department in the United Kingdom's Ministry of Defense and Army headquarters had its own information system, and each system had its own database. Sharing information was difficult, requiring employees to manually input the same information into different systems multiple times. Often, management could not even compile the information it needed to answer questions, solve problems, and make decisions.

To combat this challenge the ministry integrated its systems, or built connections among its many databases. These connections or *integrations* allow separate systems to communicate directly with each other, eliminating the need for manual entry into multiple systems. Building integrations allows the sharing of information across databases along with dramatically increasing its quality. The army can now generate reports detailing its state of readiness and other essential intelligence, tasks that were nearly impossible before the integrations.

Two common methods are used for integrating databases. The first is to create forward and backward integrations that link processes (and their underlying databases) in the value chain. A *forward integration* takes information entered into a given system and sends it automatically to all downstream systems and processes. A *backward integration* takes information entered into a given system and sends it automatically to all upstream systems and processes. Figure 8.1 demonstrates how this method works across the systems or processes of sales, order entry, order fulfillment, and billing. In the order entry system, for example, an employee can update the customer's information. Via the integrations, that information is sent upstream to the sales system and downstream to the order fulfillment and billing systems. Ideally, an organization wants to build both forward and backward integrations, which provide the flexibility to create, update, and delete information in any of the systems. However, integrations are expensive and difficult to build and maintain, causing most organizations to invest in forward integrations only.

The second integration method builds a central repository for a particular type of information. Figure 8.2 provides an example of customer information integrated using
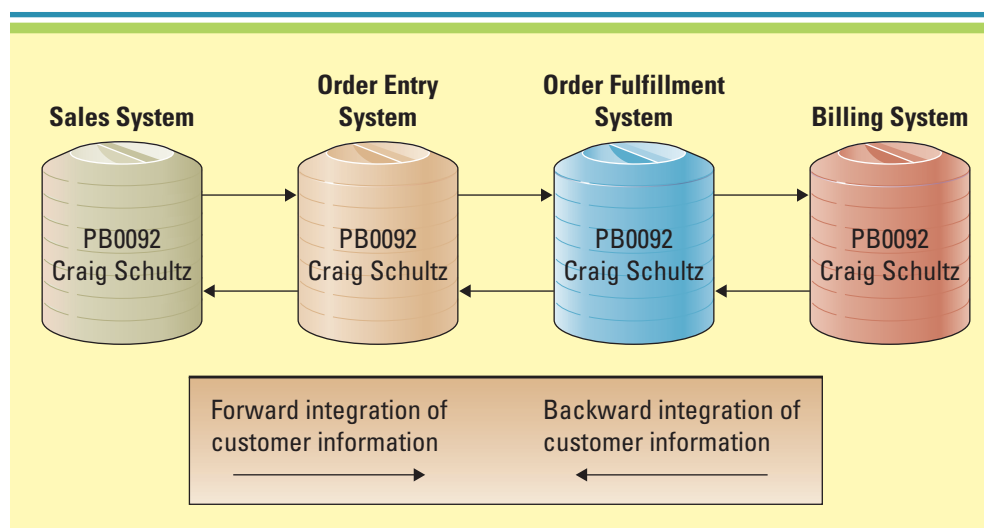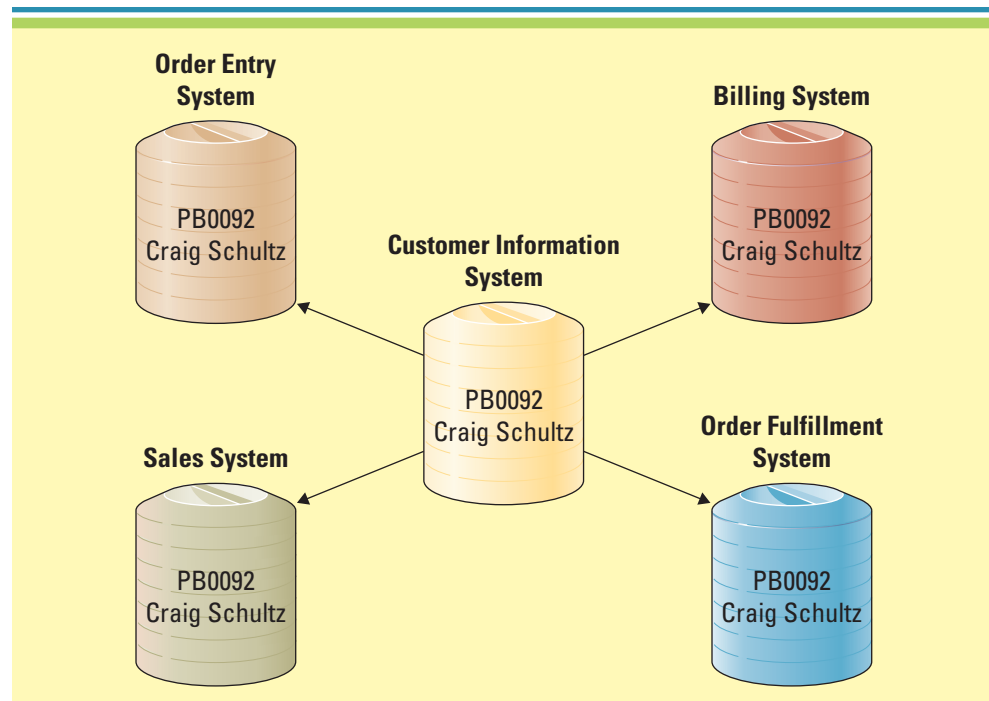

FIGURE 8.1

A Forward and Backward Customer Information Integration Example

FIGURE 8.2

Integrating Customer
Information among
Databases

Figure 8.2 Integrating Customer Information among Databases

this method across four different systems in an organization. Users can create, update, and delete customer information only in the central customer database. As users perform these tasks, integrations automatically send the new and/or updated customer information to the other systems. The other systems limit users to read-only access of the customer information stored in them. Both integration methods do not entirely eliminate information redundancy, but they do ensure information consistency among multiple systems.

Integration Tools

Enterprise systems provide enterprisewide support and data access for a firm's operations and business processes. These systems can manage customer information across the enterprise, letting you view everything your customer has experienced from sales to support. Enterprise systems are often available as a generic, but highly customizable, group of programs for business functions such as accounting, manufacturing, and marketing. Generally, the development tools for customization are complex programming tools that require specialist capabilities.

  Enterprise application integration (EAI) connects the plans, methods, and tools aimed at integrating separate enterprise systems. A *legacy system* is a current or existing system that will become the base for upgrading or integrating with a new system. EAI reviews how legacy systems fit into the new shape of the firm's business processes and devises ways to efficiently reuse what already exists while adding new systems and data.

  Integrations are achieved using *middleware*—several different types of software that sit between and provide connectivity for two or more software applications. Middleware translates information between disparate systems. *Enterprise application integration (EAI) middleware* takes a new approach to middleware by packaging commonly used applications together, reducing the time needed to integrate applications from multiple vendors. The remainder of this chapter covers the three enterprise systems most organizations use to integrate their disparate departments and separate operational systems: supply chain management (SCM), customer relationship management, and enterprise resource planning (see Figure 8.3).

LO 8.2: Describe supply chain management and its role in supporting business operations.
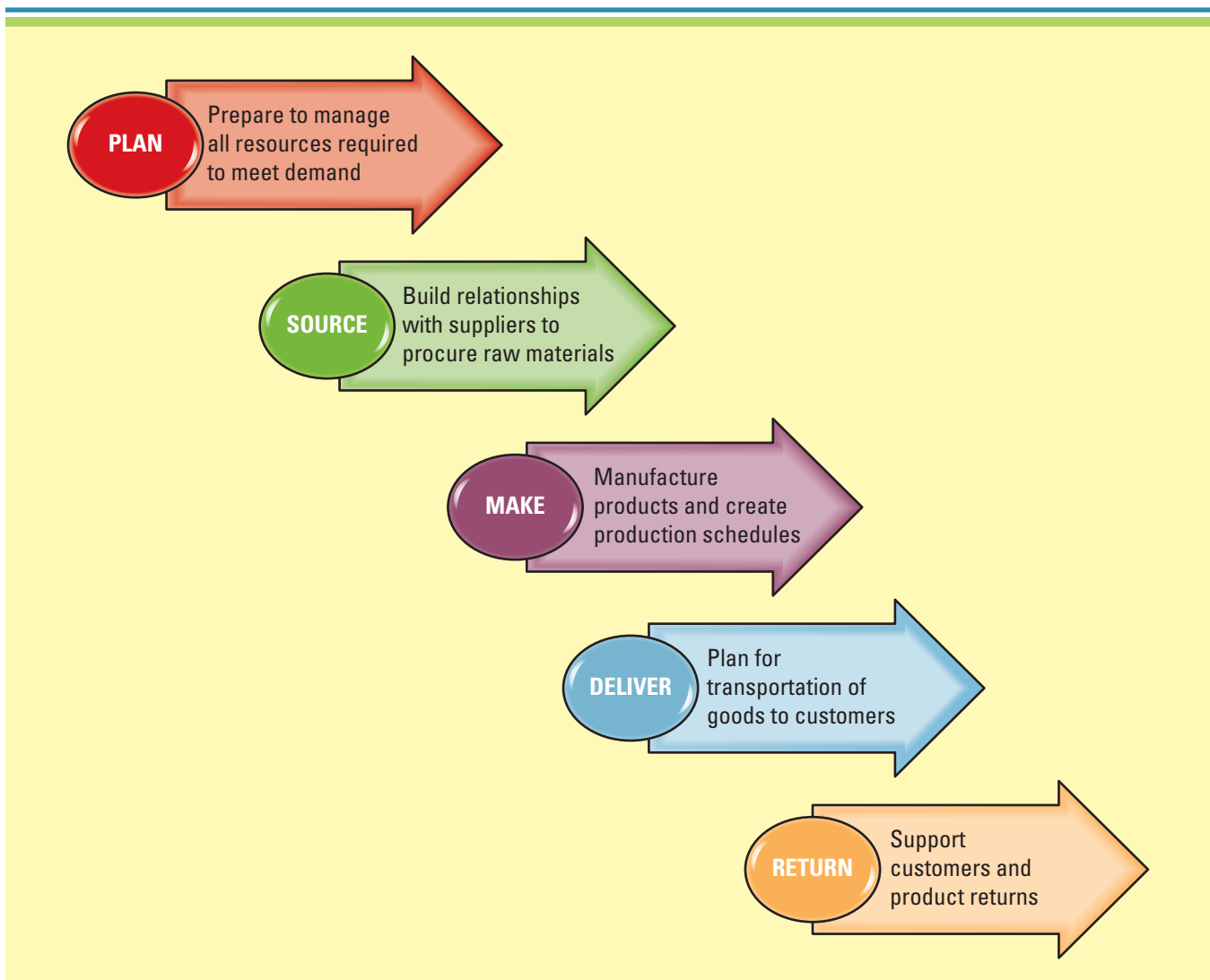
SUPPLY CHAIN MANAGEMENT

The average company spends nearly half of every dollar it earns on suppliers and raw materials to manufacture products. It is not uncommon to hear of critical success factors focusing on getting the right products, to the right place, at the right time, at the

FIGURE 8.3

The Three Primary Enterprise Systems

right cost. For this reason, tools that can help a company source raw materials, manufacture products, and deliver finished goods to retailers and customers are in high demand. A *supply chain* consists of all parties involved, directly or indirectly, in obtaining raw materials or a product. Figure 8.4 highlights the five basic supply chain activities a company undertakes to manufacture and distribute products. To automate and enable

FIGURE 8.4

The Five Basic Supply Chain Activities

PLAN — Prepare to manage all resources required to meet demand

SOURCE — Build relationships with suppliers to procure raw materials

MAKE — Manufacture products and create production schedules

DELIVER — Plan for transportation of goods to customers

RETURN — Support customers and product returns

sophisticated decision making in these critical areas, companies are turning to systems that provide demand forecasting, inventory control, and information flows between suppliers and customers.

Supply chain management (SCM) is the management of information flows between and among activities in a supply chain to maximize total supply chain effectiveness and corporate profitability. In the past, manufacturing efforts focused primarily on quality improvement efforts within the company; today these efforts reach across the entire supply chain, including customers, customers' customers, suppliers, and suppliers' suppliers. Today's supply chain is an intricate network of business partners linked through communication channels and relationships. Supply chain management systems manage and enhance these relationships with the primary goal of creating a fast, efficient, and low-cost network of business relationships that take products from concept to market. SCM systems create the integrations or tight process and information linkages between all participants in the supply chain. Supply chain management performs three main business processes (see Figure 8.5):

1. Materials flow from suppliers and their upstream suppliers at all levels.

2. Materials are transformed into semifinished and finished products—the organization's own production processes.

3. Products are distributed to customers and their downstream customers at all levels.

Consider a customer purchasing a mountain bike from a dealer. Dozens of steps are required to complete this transaction from beginning to end. The customer places an order with the dealer. The dealer purchases the bike from the manufacturer. The manufacturer purchases the raw materials required to make the bike such as aluminum, rubber tires, brakes, accessories, and packaging from different suppliers. The raw materials are stored in the manufacturer's warehouse until a production order requires the bike to be built, at which time the finished product is sent to the dealer or, in some cases, directly to the customer. The supply chain for a bike manufacturer includes all processes and people required to fulfill the customer's order (see Figure 8.6).

Walmart and Procter & Gamble (P&G) have implemented a successful SCM system that links Walmart's distribution centers directly to P&G's manufacturing centers (see Figure 8.7). The customer generates order information by purchasing a product from Walmart. Walmart supplies the order information to its warehouse or distributor. The warehouse or distributor transfers the order information to P&G, which provides pricing and availability information to the store and replenishes the product to the distributor.

FIGURE 8.5

A Typical Supply Chain
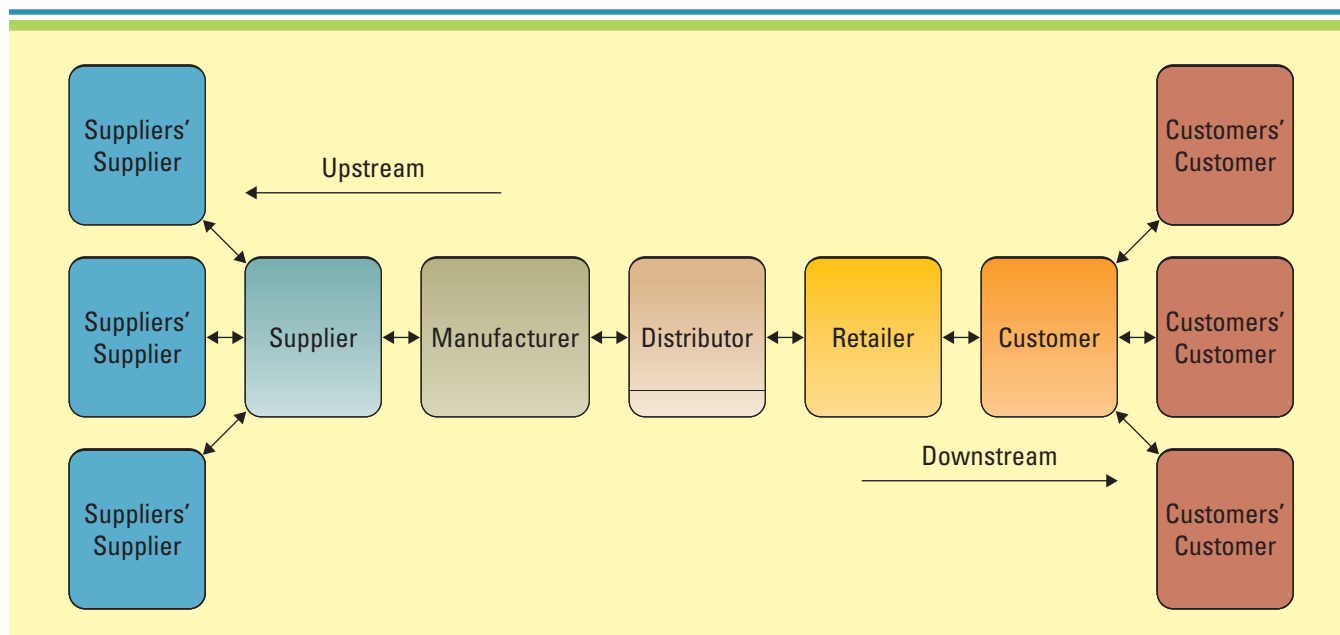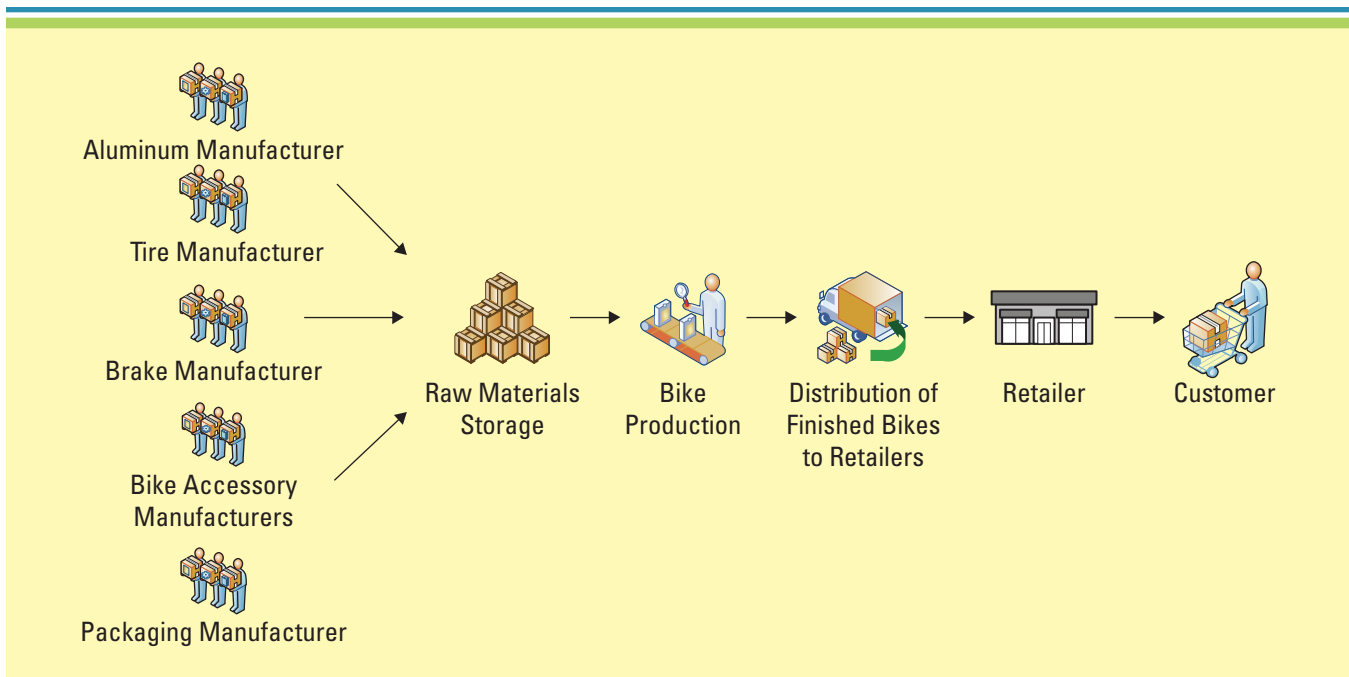
FIGURE 8.6

Supply Chain for a Bike Manufacturer
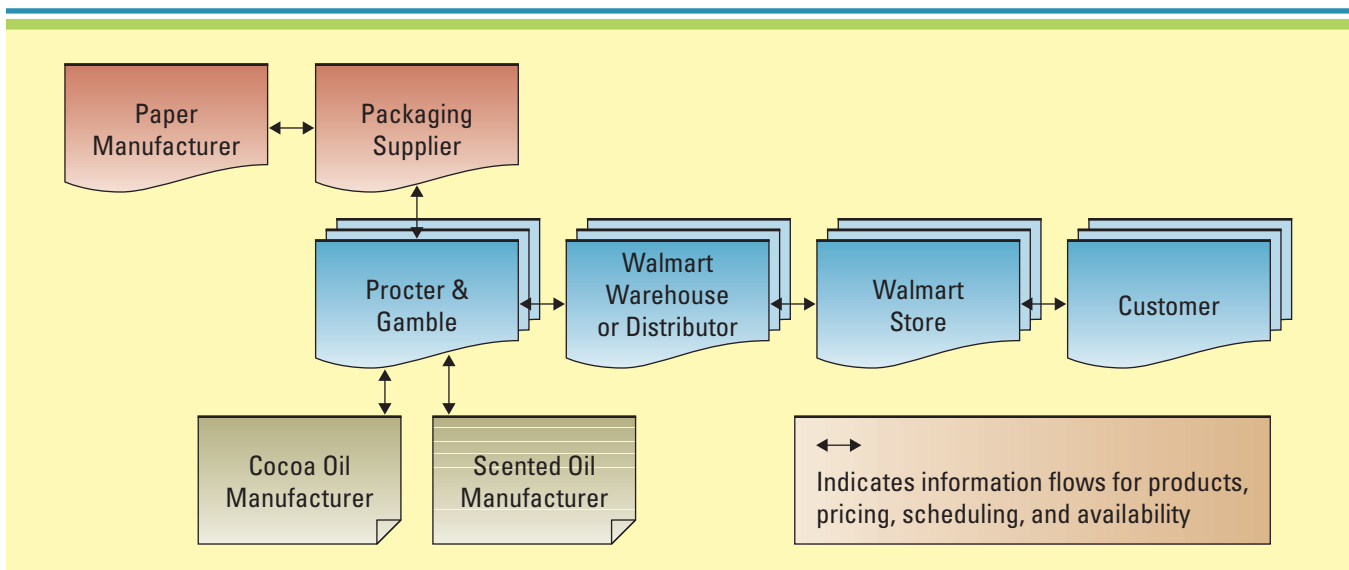
FIGURE 8.7

Supply Chain for a Product Purchased from Walmart

Payment is transferred electronically. Effective and efficient supply chain management systems can enable an organization to have these impacts on Porter's Five Forces Model[2]:

- Decrease the power of its buyers.
- Increase its supplier power.
- Increase buyers' switching costs to reduce the threat of substitute products or services.
- Create entry barriers to reduce the threat of new entrants.
- Increase efficiencies while seeking a competitive advantage through cost leadership (see Figure 8.8).
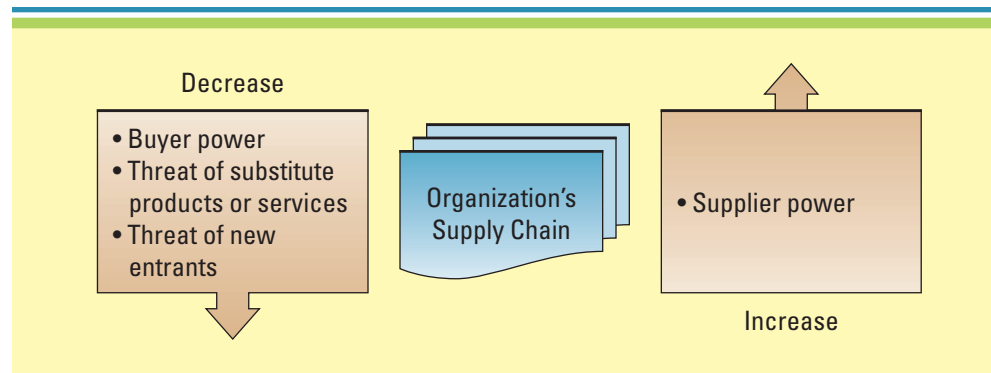
THE BENEFITS OF SCM

Better forecasts for tomorrow result in better preparedness today. Technology advances have significantly improved the ability to perform the five basic supply chain activities such as access to advanced modeling and simulation tools that can combine information from multiple sources to build forecasts that look days, weeks, and months ahead. It is now common, for instance, for suppliers to participate in product development and for retailers to contribute to marketing campaigns. Considerable evidence shows that supply chain integration results in superior supply chain capabilities, which drives a firm's profitability. Although firms have dreamed of integrating their supply chains for a long time, it is only recently that advances in MIS have brought these dreams to life. Improved visibility across the supply chain and increased profitability for the firm are the primary business benefits received when implementing supply chain management systems.

Improved Visibility

Supply chain visibility is the ability to view all areas up and down the supply chain in real time. To react to demand, an organization needs to know all customer events triggered upstream and downstream and so must their suppliers and their suppliers' suppliers. Without this information, supply chain participants are blind to the supply and demand needs occurring in the marketplace, a factor required to implement successful business strategies. To improve visibility across the supply chain, firms can use supply chain planning systems and supply chain execution systems. *Supply chain planning systems* use advanced mathematical algorithms to improve the flow and efficiency of the supply chain while reducing inventory. To yield accurate results, however, supply chain planning systems require information inputs that are correct and up-to-date regarding customers, orders, sales, manufacturing, and distribution capabilities.

Ideally, the supply chain consists of multiple firms that function as efficiently and effectively as a single firm, with full information visibility. *Supply chain execution systems* ensure supply chain cohesion by automating the different activities of the supply chain. For example, a supply chain execution system might electronically route orders from a manufacturer to a supplier using *electronic data interchange (EDI),* a standard format for the electronic exchange of information between supply chain participants. Figure 8.9 details how supply chain planning and supply chain execution systems interact with the supply chain.

A good example of inventory issues that occur when a company does not have a clear vision of its entire supply chain is the bullwhip effect. The *bullwhip effect* occurs when distorted product-demand information ripples from one partner to the next throughout the supply chain. The misinformation regarding a slight rise in demand for a product could cause different members in the supply chain to stockpile inventory. These changes ripple throughout the supply chain, magnifying the issue and creating excess inventory and costs for all. For example, if a car dealership is having a hard time moving a particular brand of car, it might offer significant discounts to try to move the inventory. Without this critical information, the car manufacturer might see a rise in demand for this particular brand of car and increase production orders, not realizing that the dealerships are actually challenged with selling the inventory. Today, integrated supply chains provide
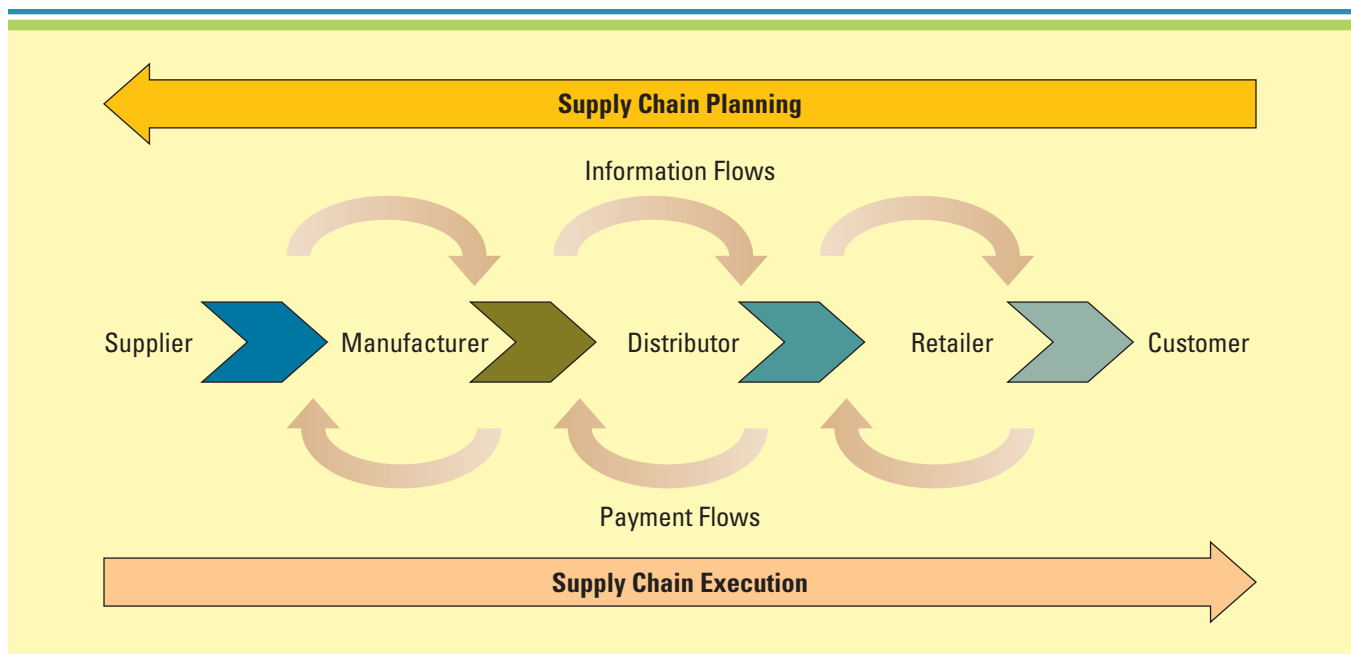
FIGURE 8.9

Supply Chain Planning's and Supply Chain Execution's Roles in the Supply Chain

managers with the visibility to see their suppliers' and customers' supply chains, ensuring that supply always meets demand.

Increased Profitability

Supply chain management systems can increase profitability across an organization. For example, a manufacturing plant manager might focus on keeping the inventory of Product A as low as possible, which will directly reduce the manufacturing costs and make the plant manager look great. However, the plant manager and the business might not realize that these savings are causing increased costs in other areas, such as having to pay more to procure raw materials for immediate production needs or increasing costs due to expedited shipping services. Only an end-to-end view or an integrated supply chain would uncover these issues, allowing a firm to adjust business strategies to increase profitability across the enterprise.

Customers are also more demanding than ever before. Because information is so readily available, they know exactly what they want, when they want it, and how they want it delivered. If your company can't meet their demand, the competition is simply a mouse-click away. Couple supply chain complexity with today's demanding customers and a firm's costs can easily escalate out of control. *Demand planning systems* generate demand forecasts using statistical tools and forecasting techniques, so companies can respond faster and more effectively to consumer demands through supply chain enhancements. Firms are implementing demand planning systems to understand customer demand and production capabilities so they can estimate supply chain costs that ultimately impact the firm's performance and business strategies. Innovative wireless technologies, such as radio-frequency identification (RFID), are also enabling companies to operate with improved speed and accuracy, ensuring that they can satisfy continuously changing customer demands.

A supply chain is only as strong as its weakest link. Companies use supply chain management metrics to measure the performance of supply chains to quickly identify weak links. A few of the common supply chain management metrics include:

- **Back order:** An unfilled customer order for a product that is out of stock.
- **Inventory cycle time:** The time it takes to manufacture a product and deliver it to the retailer.
- **Customer order cycle time:** The agreed upon time between the purchase of a product and the delivery of the product.
- **Inventory turnover:** The frequency of inventory replacement.

BUSINESS DRIVEN ETHICS AND SECURITY

Kiva's Robots

Zappos, Staples, and Amazon are just a few of the companies taking advantage of the latest innovation in warehouse management by replacing traditional order fulfillment technologies such as conveyor belts with little orange robots. The Kiva Mobile Fulfillment System (Kiva MFS) takes advantage of a unique order fulfillment system that improves productivity, speed, accuracy, and flexibility. Watching an order fulfillment center equipped with Kiva MFS robots is amazing; the operators stand still while the products come to them. Inventory pods store the products that are carried and transferred by a small army of little orange robots, eliminating the need for traditional systems such as conveyors and sorters.[3]

What impact could Kiva MFS have on visibility and profitability of the supply chain? How would your warehouse employees react if you told them you were looking at implementing Kiva robots? What ethical issues arise in the replacement of human labor with robots? What security concerns could a company face when implementing Kiva MFS robots?

THE CHALLENGES OF SCM

The primary challenges associated with supply chain management include costs and complexity. Supply chain management systems can cost millions of dollars for the software and millions of dollars more for help with the implementation. Just walk into any manufacturing plant, distribution center, or factory floor and you will witness the complexity and costs associated with supply chain management. Supply chains cross entire organizations touching multiple departments and spanning organizationwide business processes. Revamping just a single business process can be difficult for a company. Revamping all business processes that touch the supply chain is an incredibly difficult and complex task but is typically required for the SCM system to become effective. And, to top it all off, the supply chain reaches beyond the borders of the organization into partner, supplier, and customer domains, adding another layer of complexity for SCM. A lack of adequate collaboration among marketing, sales, and manufacturing within a company and suppliers, partners, and distributors outside of a company can easily sabotage SCM efforts sending the multimillion-dollar investment down the drain.

The move toward globalization is also increasing supply chain complexity. As supply chains span geographical locations, issues such as time zone differences, transportation fees, cultural and language barriers, and exchange rates all add additional layers to the already complex supply chain. Government relationships, taxes, and local laws also tend to differ across global regions, creating more confusion and issues in supplier relationships. The bottom line is that SCM systems are complex and costly and implementing them correctly can be challenging even for the most sophisticated organization.

THE FUTURE OF SCM

There is a great commercial that depicts the future of supply chain management. A man wearing a uniform is walking through a home and quietly replaces an empty cereal box with a full one just as the child opens the kitchen cabinet. He then produces a new bag of

BUSINESS DRIVEN DEBATE

Lines at the post office are frustrating, and they are also becoming unprofitable as the U.S. Postal Service faces billion-dollar losses for the first time in its history. What is causing this failure? It could be any number of things, but ebusiness competition is one of the primary challengers stealing the Postal Service's market share. Stamps.com allows you to customize and print your own stamps 24 hours a day. If you are getting married, you can place your engagement picture on the stamp for the invitations. If you are starting your own business, you can purchase stamps showing your business logo. And, Stamps.com goes beyond simply delivering a product by tracking customer spending and recommending optimal delivery methods along with postage discounts. Now that is something you can't get at the post office. Talk about a competitive advantage![4]

Why do you think the U.S. Postal Service is losing its market share and becoming unprofitable? What does the Postal Service's supply chain look like? Who are its partners, suppliers, distributors, and customers? What can the Postal Service do to revamp its supply chain so it can become profitable? Many people believe the Postal Service should not be supported by the government, and that if it can't operate efficiently it should fail. Do you agree? Why or why not?

Fixing the Post Office

dog food as soon as the hungry dog's bowl is empty and finally reaches into the shower to hand a new bottle of shampoo to the man in the shower who had just run out. The next wave in supply chain management will be home-based supply chain fulfillment. No more running to the store to replace your products as your store will come to you as soon as you need a new product.

Walgreens is differentiating itself from other national chains as the family's just-in-time supplier, developing custom websites for each household that allow families to order electronically and then pick up their goods at a self-service counter or drive-through window at their convenience. Walgreens even calls its customers to let them know their prescription medications are soon going to run out and offers to fulfill the new prescription.

As the supply chain management market matures, it is becoming even more sophisticated and incorporating additional functionality such as marketing, customer service, and even product development to its extended supply chain. Advanced communications tools, easy-to-use decision support systems, and building trust among participants when sharing information are all making the home-based supply chain possible. A few of the fastest-growing SCM components include:

- **Collaborative demand planning—**reduces inventory investments, while improving customer satisfaction.
- **Collaborative engineering—**reduces product development costs.
- **Selling chain management—**automates order processes from initial customer inquiry to final product delivery.
- **Supply chain event management (SCEM)—**increases real-time information sharing among supply chain partners focusing on reducing response time to unexpected events.

LEARNING OUTCOMES

8.4 Describe customer relationship management and its role in supporting business operations.

8.5. Identify the benefits and challenges of CRM along with its future.

8.6 Describe enterprise resource management and its role in supporting business operations.

8.7. Identify the benefits and challenges of ERP along with the future of the connected corporation.

LO 8.4: Describe customer relationship management and its role in supporting business operations.

CUSTOMER RELATIONSHIP MANAGEMENT

Today, most competitors are simply a mouse-click away, and this intense competition is forcing firms to switch from sales-focused business strategies to customer-focused business strategies. Customers are one of a firm's most valuable assets, and building strong loyal customer relationships is a key competitive advantage. Harley-Davidson offers an excellent example of a company that knows the value of customer loyalty, and it finds itself in the coveted position of demand outweighing its supply. No other motorcycle in the world has the look, feel, and sound of a Harley-Davidson. Demand for Harley-Davidson motorcycles outweighs supply and some models have up to a two-year waiting list. Knowing the value of its customers, Harley-Davidson started the Harley's Owners Group (HOG), which is the largest motorcycle club in the world with more than 600,000 members. HOG offers a wide array of events, rides, and benefits to its members and is a key competitive advantage as it helps to build a strong sense of community among Harley-Davidson owners. Harley-Davidson has built a customer following that is extremely loyal, a difficult task to accomplish in any industry.[5]

Customer relationship management (CRM) is a means of managing all aspects of a customer's relationship with an organization to increase customer loyalty and retention and an organization's profitability. CRM allows an organization to gain insights into customers' shopping and buying behaviors. Every time a customer communicates with a company, the firm has the chance to build a trusting relationship with that particular customer. Harley-Davidson realizes that it takes more than just building and selling motorcycles to fulfill the dreams of its loyal customers. For this reason, the company strives to deliver unforgettable experiences along with its top-quality products. When the company began selling products online it found itself facing a dilemma—its online strategy for selling accessories directly to consumers would bypass Harley-Davidson's dealers, who depend on the high-margin accessories for store revenues. The solution was to deploy Harley-Davidson.com, which prompts customers to select a participating Harley-Davidson dealership before placing any online orders. The selected dealership is then responsible for fulfilling the order. This strategy ensured that the dealers remained the focus point of each customer's buying experiences. To guarantee that every customer has a highly satisfying online buying experience, the company asks the dealers to agree to a number of standards including:

- Checking online orders twice daily.
- Shipping online orders within 24 hours.
- Responding to customer inquiries within 24 hours.[6]

Harley-Davidson still monitors online customer metrics such as time taken to process orders, number of returned orders, and number of incorrect orders, guaranteeing that the company delivers on its critical success factor of providing prompt, excellent customer service consistently to all its loyal customers.

A primary component of managing a customer relationship is knowing when and why the customer is communicating with the company. Imagine an irate customer that has just spent an hour on the phone with your call center complaining about a defective

product. While the customer is on the phone, your sales representative decides to drop by the customer's office in an attempt to sell additional products. Obviously, this is not the ideal time to try to up-sell or cross-sell products to this particular customer. A customer relationship management system would inform the sales representative that the customer was on the phone with customer service and even provide details of the call. Then your sales representative could stop by and offer assistance in resolving the product issue, which might help restore the relationship with the customer and provide opportunities for future sales.

The complicated piece of this puzzle is that customers have many communication channels they can use to contact a company including call centers, websites, email, faxes, and telephones. To make matters even more complex, a single customer can communicate with a firm using all of the different communication channels multiple times. Keeping track of customer communications is important if the firm wants to continue to build and manage that relationship. A CRM system can track every form of customer communication providing this information to all employees (see Figure 8.10). The firm can then implement strategies for the best ways to communicate effectively with each and every customer. With a CRM system a firm can obtain an overview of the customer's products, preferences, account information, communications, and purchasing history, allowing it to send customized product offers, expedite shipping, ensure satisfaction, and other marketing and sales techniques that can greatly add to sales and profits.
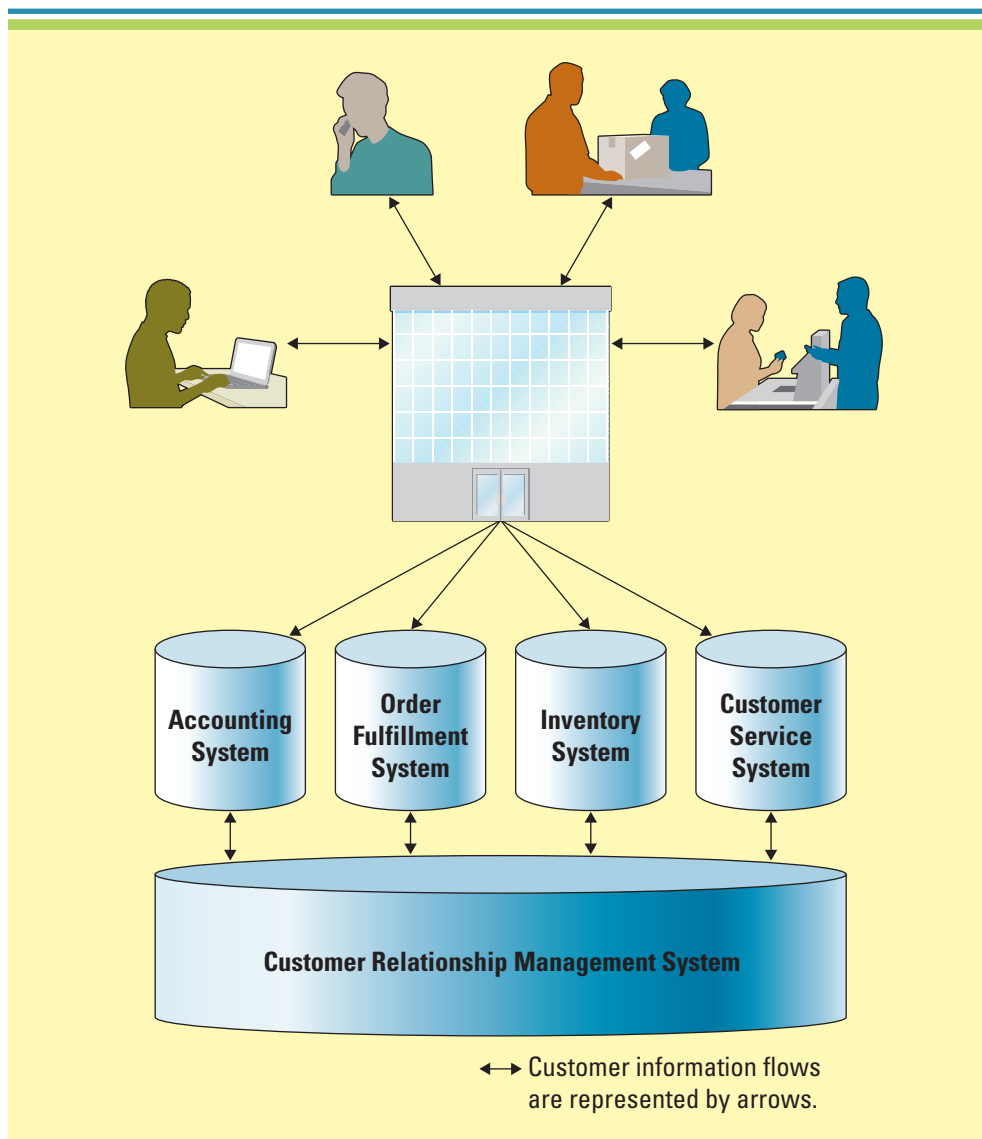

FIGURE 8.10

Customer Relationship Management Overview

THE BENEFITS OF CRM

Companies that understand individual customer needs are best positioned to achieve success. Of course, building successful customer relationships is not a new business practice; however, implementing CRM systems allows a company to operate more efficiently and effectively in the area of supporting customer needs. CRM moves far beyond technology by identifying customer needs and designing specific marketing campaigns tailored to each. This enables a firm to treat customers as individuals, gaining important insights into their buying preferences and shopping behaviors. Firms that treat their customers well reap the rewards and generally see higher profits and highly loyal customers. Identifying the most valuable customers allows a firm to ensure that these customers receive the highest levels of customer service and are offered the first opportunity to purchase new products. Firms can find their most valuable customers by using the RFM formula—recency, frequency, and monetary value. In other words, an organization must track:

- How r*ecently* a customer purchased items.
- How *frequently* a customer purchases items.
- The *monetary value* of each customer purchase.

After gathering this initial CRM information, the firm can analyze it to identify patterns and create marketing campaigns and sales promotions for different customer segments. For example, if a customer buys only at the height of the season, the firm should send a special offer during the off-season. If a certain customer segment purchases shoes but never accessories, the firm can offer discounted accessories with the purchase of a new pair of shoes. If the firm determines that its top 20 percent of customers are responsible for 80 percent of the revenue, it can focus on ensuring these customers are always satisfied and receive the highest levels of customer service.

Evolution of CRM

There are three phases in the evolution of CRM: (1) reporting, (2) analyzing, and (3) predicting. **CRM reporting technologies** help organizations identify their customers across other applications. **CRM analysis technologies** help organizations segment their customers into categories such as best and worst customers. **CRM predicting technologies** help organizations predict customer behavior, such as which customers are at risk of leaving. Figure 8.11 highlights a few of the important questions an organization can answer in these areas by using CRM technologies.

FIGURE 8.11

Evolution of CRM

REPORTING Customer Identification: Asking What Happened	ANALYZING Customer Segmentation: Asking Why It Happened	PREDICTING Customer Prediction: Asking What Will Happen
• What is the total revenue by customer? • How many units did we make? • What were total sales by product? • How many customers do we have? • What are the current inventory levels?	• Why did sales not meet forecasts? • Why was production so low? • Why did we not sell as many units as previous years? • Who are our customers? • Why was revenue so high? • Why are inventory levels low?	• What customers are at risk of leaving? • Which products will our customers buy? • Who are the best customers for a marketing campaign? • How do we reach our customers? • What will sales be this year? • How much inventory do we need to preorder?

BUSINESS DRIVEN GLOBALIZATION

Barclays Bank, a leader in the global financial markets, maintains business operations in more than 70 countries. Barclays chose to invest in CRM technologies to help it gain valuable insights into its personal and business customers, many of which carry credit cards. The purpose of the CRM system was to predict the financial behavior of individual customers and assess whether a customer is likely to pay back a loan in full within the agreed-upon time period and interest rate. Surprisingly, Barclays' CRM system quickly identified that about 50 percent of its customers were nonprofitable, and that 90 percent of its profits were generated by fewer than 30 percent of its customers.

This valuable information allowed Barclays to revamp its offerings and charge customers an interest rate based on risk assessment. Barclays also identifies groups of profitable customers, both on a corporate and personal level, which it can then target for new financial products.[7]

How can a business like Barclays use RFM (recency, frequency, and monetary value) to improve customer relations? Provide three examples of questions a bank would ask in each of the following categories: CRM reporting technologies, CRM analysis technologies, and CRM predicting technologies.

Banking on Customer Relationships

Operational and Analytical CRM

The two primary components of a CRM strategy are operational CRM and analytical CRM. **Operational CRM** supports traditional transactional processing for day-to-day front-office operations or systems that deal directly with the customers. **Analytical CRM** supports back-office operations and strategic analysis and includes all systems that do not deal directly with the customers. Figure 8.12 provides an overview of the two.
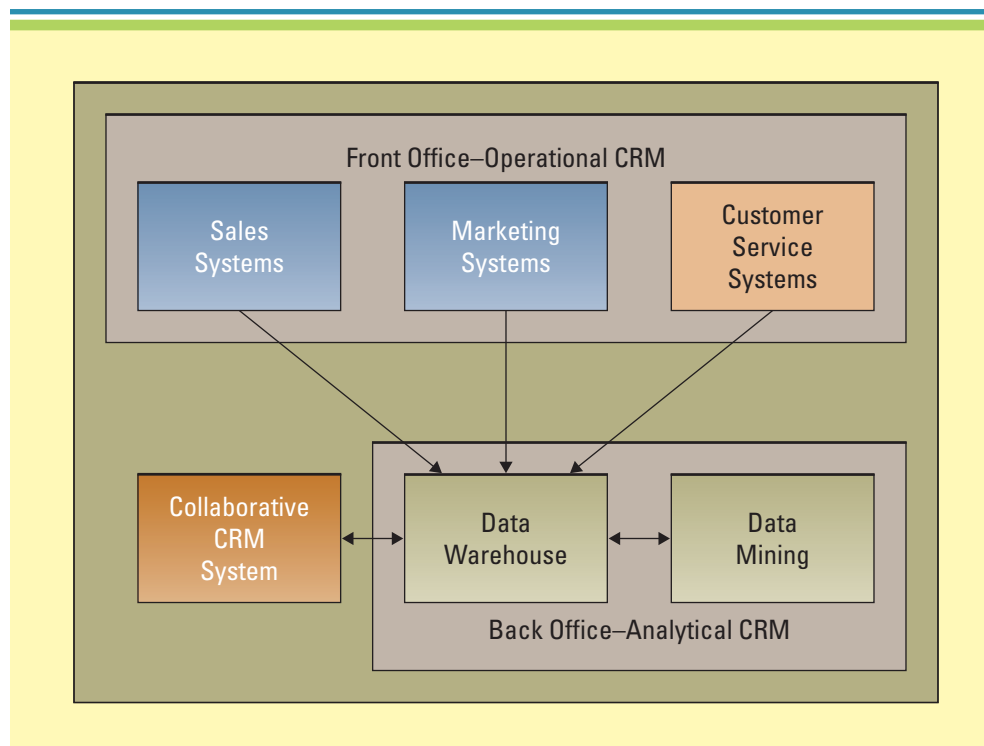
FIGURE 8.12

Operational CRM and Analytical CRM

Figure 8.13 shows the different technologies marketing, sales, and customer service departments can use to perform operational CRM.

Marketing and Operational CRM

Companies are no longer trying to sell one product to as many customers as possible; instead, they are trying to sell one customer as many products as possible. Marketing departments switch to this new way of doing business by using CRM technologies that allow them to gather and analyze customer information to tailor successful marketing campaigns. In fact, a marketing campaign's success is directly proportional to the organization's ability to gather and analyze the right customer information. The three primary operational CRM technologies a marketing department can implement to increase customer satisfaction are:

1. List generator.
2. Campaign management.
3. Cross-selling and up-selling.

List Generator *List generators* compile customer information from a variety of sources and segment it for different marketing campaigns. These sources include website visits, questionnaires, surveys, marketing mailers, and so on. After compiling the

FIGURE 8.13

Operational CRM
Technologies

Marketing
Operational CRM Technology

List Generator
Campaign Management
Cross-Selling and Up-Selling

Sales
Operational CRM Technology

Sales Management
Contact Management
Opportunity Management

Customer Service
Operational CRM Technology

Contact Center
Web-Based Self-Service
Call Scripting

customer list, it can be filtered based on criteria such as household income, gender, education level, political facilitation, age, or other factors. List generators provide the marketing department with valuable information on the type of customer it must target to find success for a marketing campaign.

Campaign Management *Campaign management systems* guide users through marketing campaigns by performing such tasks as campaign definition, planning, scheduling, segmentation, and success analysis. These advanced systems can even calculate the profitability and track the results for each marketing campaign.
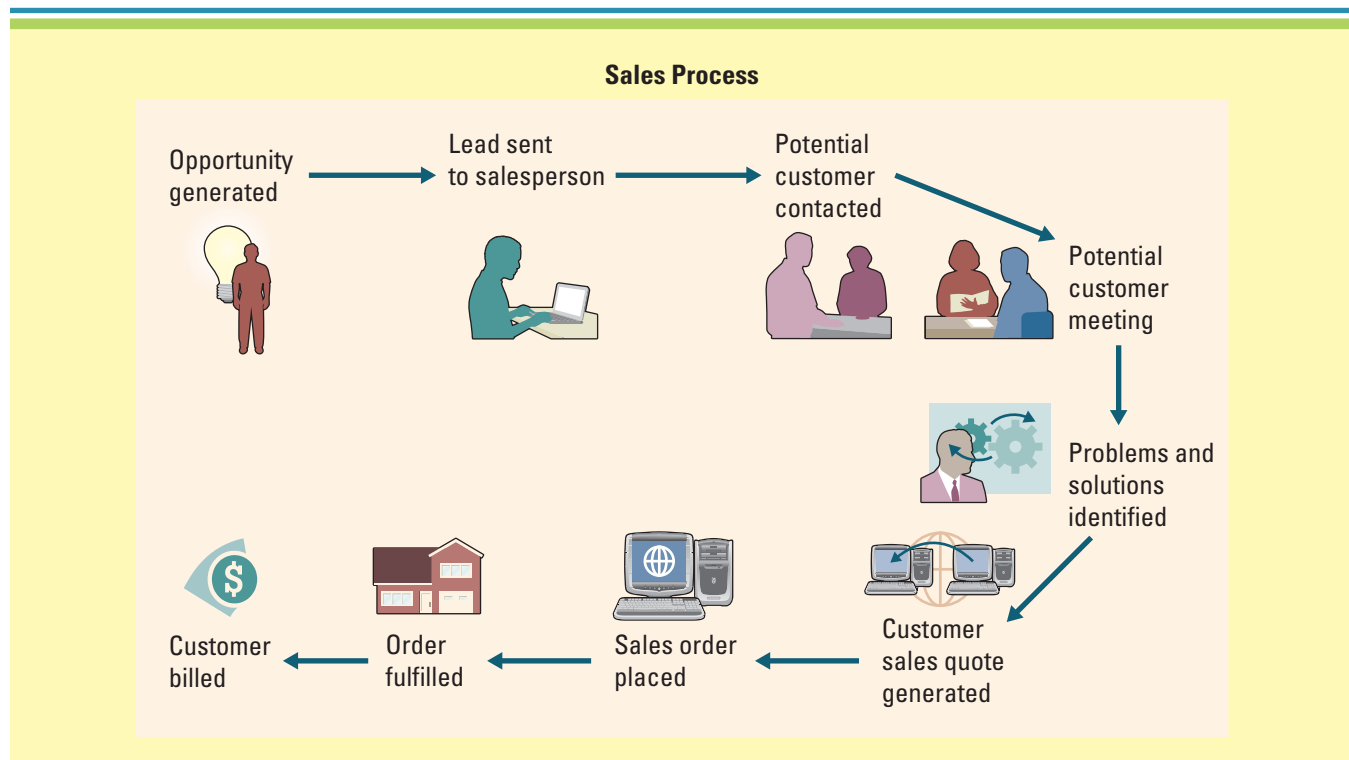
Cross-Selling and Up-Selling Two key sales strategies a marketing campaign can deploy are cross-selling and up-selling. *Cross-selling* is selling additional products or services to an existing customer. For example, if you were to purchase Tim Burton's movie *Alice in Wonderland* on Amazon, you would also be asked if you want to purchase the movie's soundtrack or the original book. Amazon is taking advantage of cross-selling by offering customers goods across its book, movie, and music product lines. *Up-selling* is increasing the value of the sale. McDonald's performs up-selling by asking customers whether they would like to super-size their meals for an extra cost. CRM systems offer marketing departments all kinds of information about customers and products, which can help identify up-selling and cross-selling opportunities to increase revenues.

Sales and Operational CRM

Sales departments were the first to begin developing CRM systems. They had two primary motivations to track customer sales information electronically. First, sales representatives were struggling with the overwhelming amount of customer account information they were required to maintain and track. Second, managers found themselves hindered because much of their vital customer and sales information remained in the heads of their sales representatives, even if the sales representative left the company. Finding a way to track customer information became a critical success factor for many sales departments.

Figure 8.14 depicts the typical sales process, which begins with an opportunity and ends with billing the customer for the sale. Leads and potential customers are the lifeblood of all sales organizations, whether they sell computers, clothing, consulting, or cars. How leads are handled can make the difference between revenue growth and decline.

FIGURE 8.14

A Typical Sales Process

Sales Process

Opportunity generated → Lead sent to salesperson → Potential customer contacted → Potential customer meeting → Problems and solutions identified → Customer sales quote generated → Sales order placed → Order fulfilled → Customer billed

Sales force automation (SFA) automatically tracks all the steps in the sales process. SFA products focus on increasing customer satisfaction, building customer relationships, and improving product sales. The three primary operational CRM technologies a sales department can adopt are:

1. Sales management CRM systems.
2. Contact management CRM systems.
3. Opportunity management CRM systems.

Sales Management CRM Systems   *Sales management CRM systems* automate each phase of the sales process, helping individual sales representatives coordinate and organize all their accounts. Features include calendars, reminders for important tasks, multimedia presentations, and document generation. These systems can even provide an analysis of the sales cycle and calculate how each individual sales representative is performing during the sales process.

Contact Management CRM Systems   A *contact management CRM system* maintains customer contact information and identifies prospective customers for future sales, using tools such as organizational charts, detailed customer notes, and supplemental sales information. For example, a contact management system can take an incoming telephone number and automatically display the person's name along with a comprehensive history including all communications with the company. This allows the sales representative to personalize the phone conversation and ask such things as, "How is your new laptop working, Sue?" or "How was your family vacation to Colorado?" The customer feels valued since the sales associate knows her name and even remembers details of their last conversation.

Opportunity Management CRM Systems   *Opportunity management CRM systems* target sales opportunities by finding new customers or companies for future sales. They determine potential customers and competitors and define selling efforts including budgets and schedules. Advanced systems can even calculate the probability of a sale, which can save sales representatives significant time and money when qualifying new customers. The primary difference between contact management and opportunity management is that contact management deals with existing customers and opportunity management with new or potential customers.

Customer Service and Operational CRM

Most companies recognize the importance of building strong customer relationships during the marketing and sales efforts, but they must continue this effort by building strong post-sale relationships also. A primary reason firms lose customers is due to negative customer service experiences. Providing outstanding customer service is challenging, and many CRM technologies can assist organizations with this important activity. The three primary ones are:

1. Contact center.
2. Web-based self-service.
3. Call scripting.

Contact Center   A *contact center* or *call center* is where customer service representatives answer customer inquiries and solve problems, usually by email, chat, or phone. It is one of the best assets a customer-driven organization can have because maintaining a high level of customer support is critical to obtaining and retaining customers. Figure 8.15 highlights a few of the services contact center systems offer.

Contact centers also track customer communication histories along with problem resolutions—information critical for providing a comprehensive customer view to the service representative. Representatives who can quickly comprehend the customer's concerns provide tremendous value to the customer and to the company. Nothing makes frustrated customers happier than not having to explain their problems all over again to yet another customer service representative.

BUSINESS DRIVEN INNOVATION

Nice Emotions

New emotion-detection software called Perform, created by Nice Systems, helps firms improve customer service by identifying callers who are displeased or upset. Perform determines a baseline of emotion and can detect emotional issues during the first few seconds of a call; any variation from the baseline activates an alert. When an elderly person who was highly distressed over medical costs hung up during a phone call to the insurance company, Perform identified the customer's frustration and automatically emailed a supervisor. The supervisor was able to review a recording of the conversation and immediately called the customer back suggesting ways to lower the costs.[8]

How do you think emotion-detection software will affect customer relationships? What other departments or business processes could benefit from its use? Create a new product that uses emotion-detection software. What business problem would your product solve and who would be your primary customers?

Automatic call distribution: Routes inbound calls to available agents.
Interactive voice response (IVR): Directs customers to use touch-tone phones or keywords to navigate or provide information.
Predictive dialing: Automatically dials outbound calls and forwards answered calls to an available agent.

FIGURE 8.15

Common Services Provided by Contact Centers

Web-Based Self-Service *Web-based self-service systems* allow customers to use the Web to find answers to their questions or solutions to their problems. FedEx uses Web-based self-service systems to let customers electronically track packages without having to talk to a customer service representative. Another feature of Web-based self-service is *click-to-talk* functions, which allow customers to click on a button and talk with a representative via the Internet. Powerful customer-driven features such as these add value to any organization by providing customers with real-time information that helps resolve their concerns.

Call Scripting Companies that market and sell highly technical products have a difficult time finding competent customer service representatives. *Call scripting systems* gather product details and issue resolution information that can be automatically generated into a script for the representative to read to the customer. These systems even provide questions the representative can ask the customer to troubleshoot the problem and find a resolution. This feature not only helps reps answer difficult questions quickly but also presents a uniform response so customers don't receive different answers.

Analytical CRM

Analytical CRM provides information about customers and products that was once impossible to locate, such as which type of marketing and sales campaign to launch and which customers to target and when. Unlike operational CRM, which automates call centers and sales forces with the aim of enhancing customer service, analytical CRM works by using business intelligence to identify patterns in product sales and customer behaviors. Analytical CRM tools can slice-and-dice vast amounts of information to create custom views of customers, products, and market segments highlighting opportunities for cross-selling and up-selling. *Website personalization* occurs when a website has stored enough data about a person's likes and dislikes to fashion offers more likely to

appeal to that person. Many marketers use CRM to personalize customer communications and decide which customers are worth pursuing. Here are a few examples of the information insights analytical CRM can help an organization gain.

- **Find new profitable customers:** Analytical CRM could highlight that the most profitable market segment consists of women between 35 and 45 years old who drive SUVs and live within 30 miles of the city limits. The firm could then find a way to locate these customers for mailings and other opportunities.

- **Exceed customer expectations:** Analytical CRM helps a firm move past the typical "Dear Mr. Smith" greeting by personalizing communications. For example, if the firm knows the customer's favorite brand and size of shoe it can notify the customer that a pair of size 12 Nike cross trainers are available for him to try on the next time he visits the store.

- **Discover the activities the firm performs the best:** Analytical CRM can determine what an organization does better than its competitors. If a restaurant caters more lunches to midsized companies than its competition does, it can purchase a specialized mailing targeting these customers for future mailings.

- **Eliminate competition:** Analytical CRM can determine sales trends allowing the company to provide customers with special deals outsmarting its competition. A sports store might identify its best customers for outdoor apparel and invite them to a private sale right before the competition runs its sale.

- **Care about customers:** Analytical CRM can determine what customers want and need, so a firm can contact them with an invitation to a private sale, reminder that a product needs a tune-up, or send them a personalized letter along with a discount coupon to help spark a renewed relationship.

Measuring CRM Success

Using CRM metrics to track and monitor performance is a best practice for many companies. Figure 8.16 displays a few common CRM metrics a manager can use to track the success of the system. Just remember that you only want to track between five and seven of the hundreds of CRM metrics available.

THE CHALLENGES OF CRM

A standard rule of business states that the customer is always right. Although most businesses use this as their motto, they do not actually mean it. Ebusiness firms must adhere to this rule as the power of the customer grows exponentially in the information age. Various websites and videos on YouTube reveal the power of the individual consumer (see Figure 8.17). A decade ago if you had a complaint against a company you could make a phone call or write a letter. Now you can contact hundreds or thousands of

FIGURE 8.16

CRM Metrics

Sales Metrics	Customer Service Metrics	Marketing Metrics
Number of prospective customers	Cases closed same day	Number of marketing campaigns
Number of new customers	Number of cases handled by agent	New customer retention rates
Number of retained customers	Number of service calls	Number of responses by marketing campaign
Number of open leads	Average number of service requests by type	Number of purchases by marketing campaign
Number of sales calls	Average time to resolution	Revenue generated by marketing campaign
Number of sales calls per lead	Average number of service calls per day	Cost per interaction by marketing campaign
Amount of new revenue	Percentage compliance with service-level agreement	Number of new customers acquired by marketing campaign
Amount of recurring revenue	Percentage of service renewals	Customer retention rate
Number of proposals given	Customer satisfaction level	Number of new leads by product

FIGURE **8.17**

The Power of the Customer

http://www.donotbuydodge.ca/

Getting Started   Latest Headlines

DO NOT BUY
Dodge

My name is Brad, and unfortunately my wife and I decided to lease a brand new 2003 Dodge Grand Caravan (shown to the right).

It looks nice, but it wasn't assembled properly and, as a result, the roof started to leak. This leak, which our dealership was unable to locate for six months, led to several other issues - electrical problems, and mold and mildew growth. That was in May 2004 and we are still fighting to have these issues resolved properly.

This web site has been constructed to communicate our story and to detail our ongoing battle with Daimler Chrysler Canada and MacIVER Dodge to have the above issues resolved. Our goal is to have as many people as possible understand how these two companies treat their "valued" customers, and that future vehicle purchase decisions will be affected accordingly.

Home
Overview
Detailed History
Daimler Chrysler
MacIVER Dodge
FAQs
Media
What I Want
Other Stories
Other Sites
If You Want to Help...
Mailing List
Contact Me

DODGE:
To practice trickery or cunning;
To stray from or avoid the truth.

Total Visitors:	Most Recent Entries (as of June 20, 2005)
Temporarily Out of Order (since November 1, 2004)	Camped Out In Front Of MacIVER Summary - May and June 2005 I Must Be Getting Under Their Skin An updated What I Want page
This web site is featured in PHIL EDMONSTON'S LEMON-AID NEW CARS AND MINIVANS	Please visit **DevelopPhotos.com** to have your digital photos printed and delivered right to your home.

http://jetbluehostage.com/

Getting Started   Latest Headlines

SEARCH BLOG ·FLAG BLOG Next Blog»   Create Blog | Sign

JET BLUE
A VALENTINE'S DAY HOSTAGE CRISIS

NOTHING SAYS "I LOVE YOU" LIKE BEING HELD HOSTAGE ON A FROZEN PLANE WITH THE MAN YOU LOVE, 99 STRANGERS, 4 OTHER PEOPLE YOU HAPPEN TO KNOW, 4 SCREAMING BABIES AND 3 RAMBUNCTIOUS KIDS RUNNING ABOUT, NOTHING BUT CHIPS AND SODA FOR SUSTENANCE, FAULTY POWER, UNRELIABLE DIRECT TV AND OVERFILLED SEWAGE SYSTEM FOR 11 HOURS.

THURSDAY, MAY 10, 2007

THANK YOU GOD!

http://money.cnn.com/2007/05/10/news/companies/jetblue_ceo.reut/index.h

JetBlue CEO pushed out

Founder David Neeleman will be replaced by President Dave Barger. The shift comes after an embarrassing service meltdown this winter.

SEARCH JBH.COM

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Search

IMPORTANT SHORTCUTS

ALL THINGS RUTH
ALL OFFICIAL JETBLUE CORRESPONDENCE

BUSINESS DRIVEN START-UP

Straightjacket Customer Service

You might not want to put the fact that you won the Straightjacket Award on your résumé unless you worked for Rackspace, a Texas company that specializes in hosting websites. At Rackspace, the coveted Straightjacket Award is won by the employee who best delivers "fanatical customer support," one of the firm's critical success factors. The company motivates its customer service representatives by dividing them into teams, each responsible for its own profitability. The company then measures such things as customer turnover, upselling, cross-selling, and referrals. The team with the highest scores wins the Straightjacket Award and each member receives a 20 percent bonus.[9]

Assume your professor has hired you as the employee relationship manager for your class. What type of award would you create to help increase class participation? What type of award would you create to help increase the overall average on exams? What type of award would you create to help increase student collaboration? Be sure to name your awards and describe their details. Also, what type of metrics would you create to measure your awards? How could a CRM system help you implement your awards?

people around the globe and voice your complaint or anger with a company or product. You—the customer—can now take your power directly to millions of people and companies have to listen.

THE FUTURE OF CRM

Organizations are discovering a wave of other key business areas where it is beneficial to build strong relationships beyond customers. These include supplier relationship management (SRM), partner relationship management (PRM), and employee relationship management (ERM).

Supplier relationship management (SRM) focuses on keeping suppliers satisfied by evaluating and categorizing suppliers for different projects. SRM applications help companies analyze suppliers based on a number of key variables including prices, inventory availability, and business focus or strategies. It can then determine the best supplier to collaborate with and develop strong relationships with to streamline processes, outsource services, and provide products the firm could not offer alone.

Partner relationship management (PRM) discovers optimal sales channels by selecting the right partners and identifying mutual customers. A PRM system offers real-time sales channel information about such things as inventory availability, pricing strategies, and shipping information, allowing a company to expand its market by offering specialized products and services.

Employee relationship management (ERM) provides Web-based self-service tools that streamline and automate the human resource department. Employees are the backbone of an enterprise and the communication channel to customers, partners, and suppliers. Their relationship with the company is far more complex and long-lasting than the relationship with customers, thus many enterprises are turning to ERM systems to help retain key employees.

ENTERPRISE RESOURCE PLANNING

LO 8.6: Describe enterprise resource management and its role in supporting business operations.

Today's managers require real-time views into their businesses so they can make decisions when they need to. *Enterprise resource planning (ERP)* integrates all departments and functions throughout an organization into a single IT system (or integrated

set of IT systems) so employees can make decisions by viewing enterprisewide information about all business operations.

Many organizations fail to maintain consistency across business operations. If a single department, such as sales, decides to implement a new system without considering other departments, like marketing and accounting, inconsistencies can occur throughout the company, and operations can become discontinuous, like silos. Enterprise resource planning systems provide organizations with consistency. They allow for the effective planning and controlling of all the resources required to plan, source, make, and deliver goods and services. Figure 8.18 shows how an ERP system takes data from across the enterprise, consolidates and correlates it, and generates enterprisewide organizational reports.
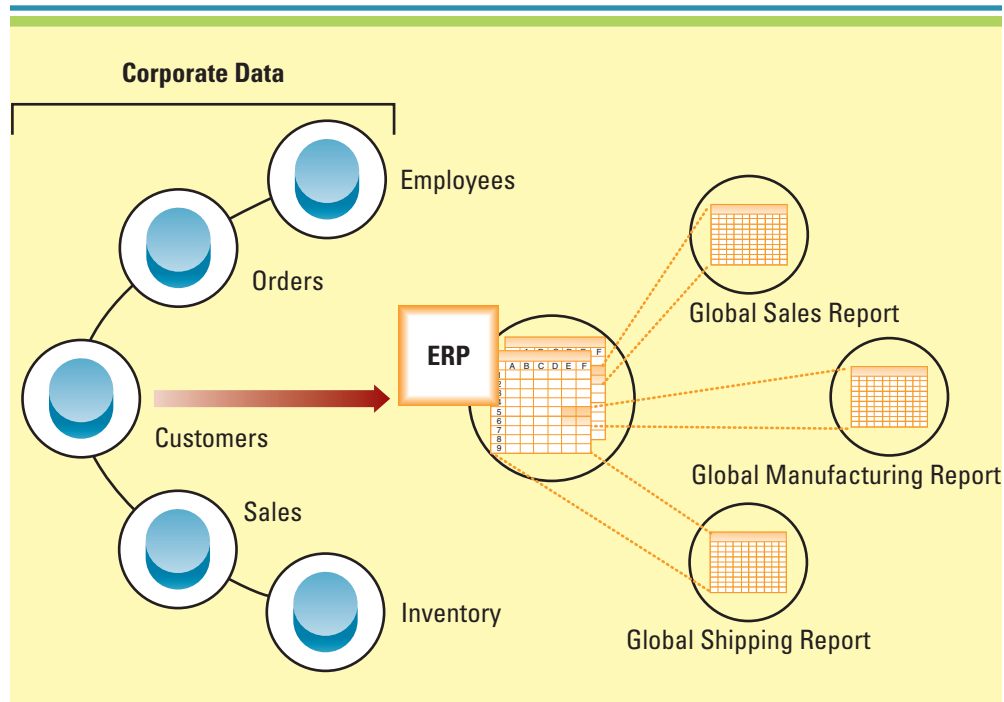

FIGURE 8.18

Enterprise Resource Planning System Overview
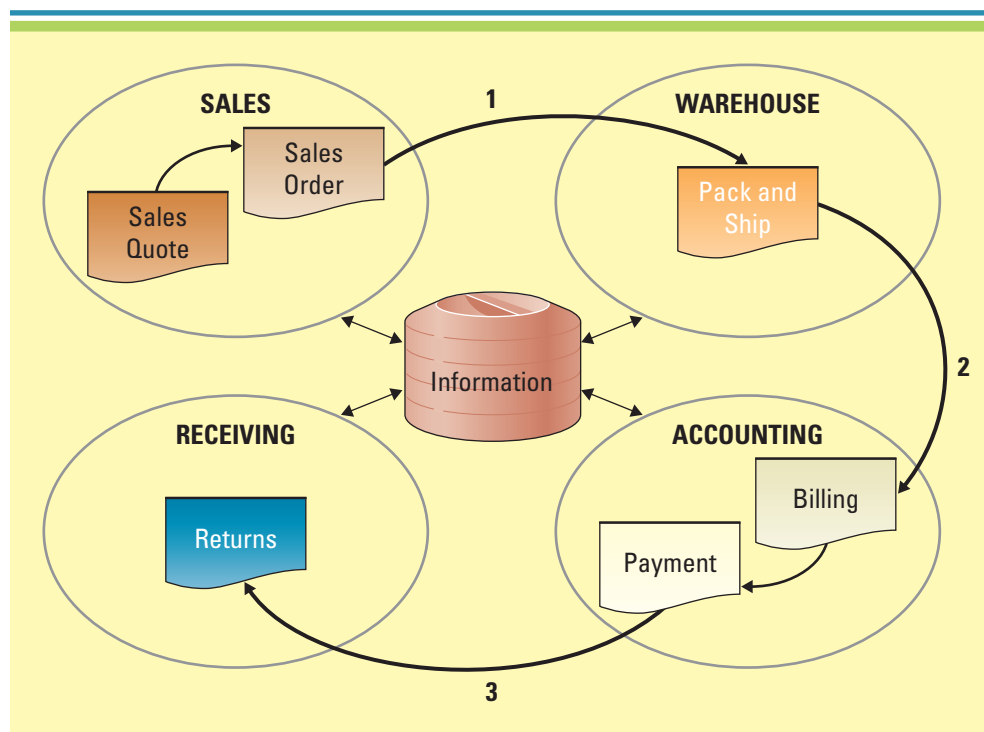
FIGURE 8.19

ERP Process Flow

The key word in enterprise resource planning is *enterprise.* At the core of an ERP system is a central database that gathers transactional data from operational systems across the company. Each time information is altered, it is automatically updated throughout the entire system. For example, sales representatives can access the ERP system to view all necessary information to process orders such as credit rating, order history, inventory levels, and delivery schedules. Once the order is complete, the ERP system automatically routes it to the next department in the order process, as illustrated in Figure 8.19. ERP systems facilitate the order process, ensuring customers receive their purchases faster and with fewer errors. ERP systems can support numerous business processes far beyond order processing, such as employee benefits and financial reporting. An ERP system can also support supplier and customer business processes infiltrating the entire value chain and helping the organization achieve greater operational efficiency (see Figure 8.20).

FIGURE 8.20

The Organization Before and After ERP
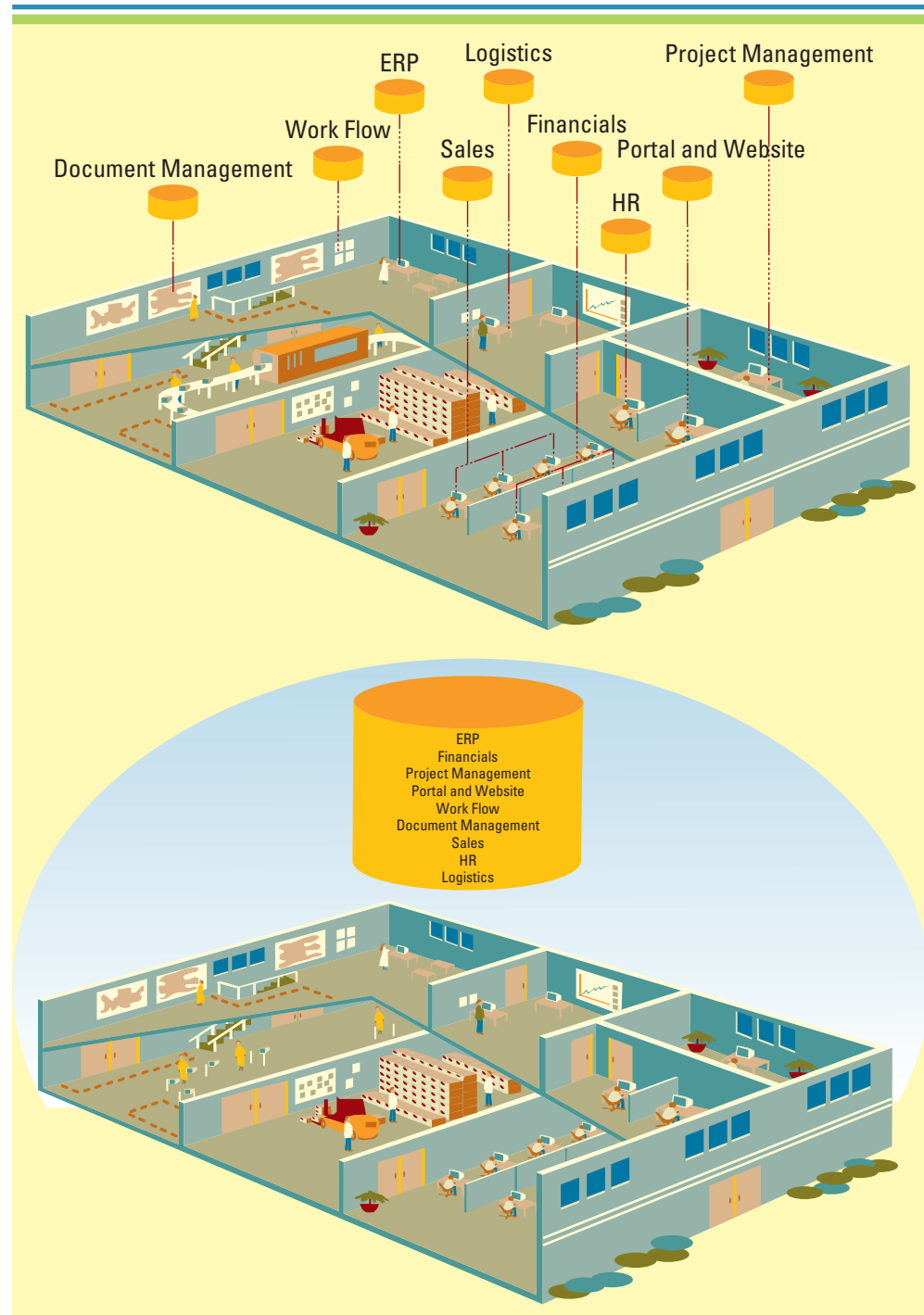
BUSINESS DRIVEN MIS

Classic Cars

Classic Cars Inc. operates high-end automotive dealerships that offer luxury cars along with luxury service. The company is proud of its extensive inventory, top-of-the-line mechanics, and especially its exceptional service, which includes operating a cappuccino bar at each dealership.

The company currently has 40 sales representatives at four locations. Each location maintains its own computer systems, and all sales representatives have their own contact management systems. This splintered approach to operations causes numerous problems in customer communication, pricing strategy, and inventory control, such as:

- A customer can get different quotes at different dealerships for the same car.
- Sales representatives frequently steal each other's customers and commissions.
- Sales representatives send their customers to other dealerships to see specific cars that turn out not to be on the lot.
- Marketing campaigns are typically generic and not designed to target specific customers.
- If a sales representative quits, all his or her customer information is lost.

You work for Customer One, a small consulting company that specializes in enterprisewide strategies. The owner of Classic Cars Inc. has hired you to help him formulate a strategy to put his company back on track. Develop a proposal detailing how an ERP system can alleviate the company's problems and create new sales opportunities.

THE BENEFITS OF ERP

LO 8.7: Identify the benefits and challenges of ERP along with the future of the connected corporation.

The first generation of ERP systems focused on improving the manufacturing process through automation, primarily addressing back-office business processes such as inventory ordering and product distribution. The second generation of ERP systems extended its reach into the front office and primarily addressed customer issues including marketing and sales. The third generation of ERP systems, known as ERP-II, allows a company to compete on a functional level by adopting an enterprisewide approach using the Internet to connect all participants in the value chain. Figure 8.21 shows how ERP has grown to accommodate the needs of the entire organization.

The current generation of ERP, ERP-II is composed of two primary components—core and extended. ***Core ERP components*** are the traditional components included in most ERP systems and primarily focus on internal operations. ***Extended ERP components*** are the extra components that meet organizational needs not covered by the core components and primarily focus on external operations. Figure 8.22 provides an example of an ERP system with its core and extended components.
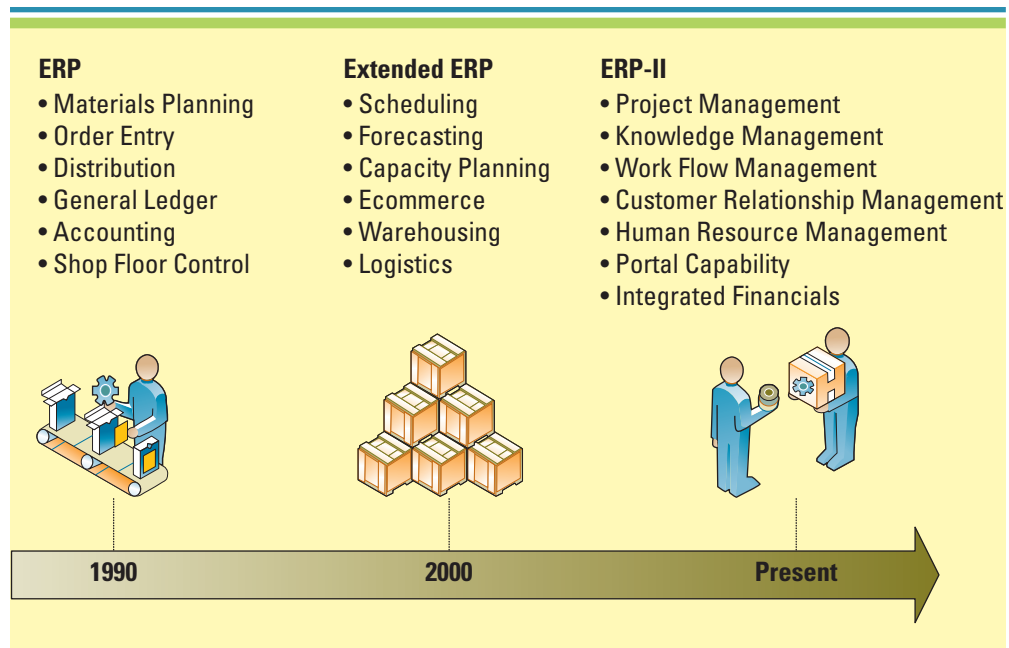
Core ERP Components

The three most common core ERP components focusing on internal operations are:

1. Accounting and finance.
2. Production and materials management.
3. Human resources.

FIGURE 8.21

The Evolution of ERP

ERP
- Materials Planning
- Order Entry
- Distribution
- General Ledger
- Accounting
- Shop Floor Control

Extended ERP
- Scheduling
- Forecasting
- Capacity Planning
- Ecommerce
- Warehousing
- Logistics

ERP-II
- Project Management
- Knowledge Management
- Work Flow Management
- Customer Relationship Management
- Human Resource Management
- Portal Capability
- Integrated Financials

1990   **2000**   **Present**

FIGURE 8.22

Core ERP Components and Extended ERP Components

Core ERP Components

| Accounting and Finance | Production and Materials Management | Human Resources |

Enterprise Resource Planning Software

| Business Intelligence | Customer Relationship Management | Supply Chain Management | Ebusiness |

Extended ERP Components
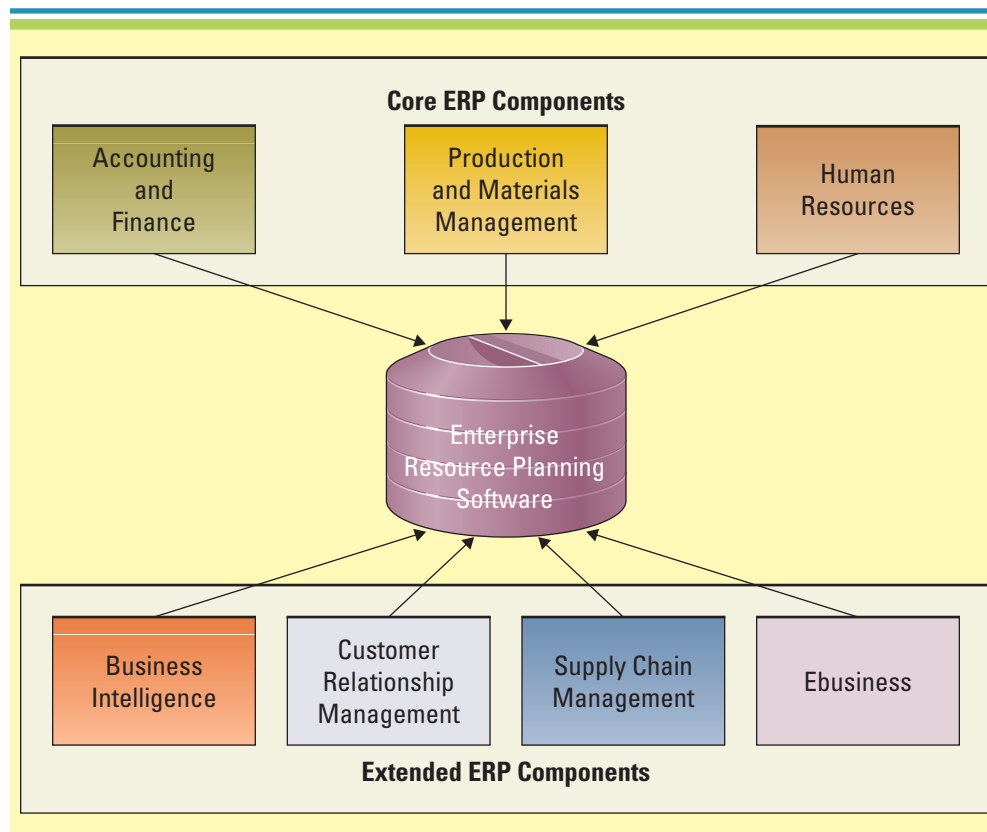
Accounting and Finance ERP Components   *Accounting and finance ERP components* manage accounting data and financial processes within the enterprise with functions such as general ledger, accounts payable, accounts receivable, budgeting, and asset management. One of the most useful features of an ERP accounting/ finance component is credit management. Most organizations manage their relationships with customers by setting credit limits, or limits on how much a customer can owe at any one time. ERP financial systems correlate customers' orders with their account

balances to determine credit availability. They also perform all types of advanced profitability modeling techniques.

Production and Materials Management ERP Components *Production and materials management ERP components* handle production planning and execution tasks such as demand forecasting, production scheduling, job cost accounting, and quality control. Demand forecasting helps determine production schedules and materials purchasing. A company that makes its own product prepares a detailed production schedule, and a company that buys products for resale develops a materials requirement plan.

Human Resources ERP Components *Human resources ERP components* track employee information including payroll, benefits, compensation, and performance assessment and ensure compliance with all laws. They even allow the organization to perform detailed employee analysis, such as identifying who is likely to leave the company unless additional compensation or benefits are provided, and whether the most talented people are working in areas where they can have the greatest impact. Human resource components can also identify which employees are using which resources, such as online training and long-distance telephone services.

Extended ERP Components

Extended ERP components meet the organizational needs not covered by the core components and primarily focus on external operations. Many are Internet-enabled and require interaction with customers, suppliers, and business partners outside the organization. The four most common extended ERP components are:

1. Business intelligence.
2. Customer relationship management.
3. Supply chain management.
4. Ebusiness.

Business Intelligence ERP Components Many organizations have found that ERP tools can provide even greater value with the addition of powerful business intelligence systems. The business intelligence components of ERP systems typically collect information used throughout the organization (including data used in many other ERP components), organize it, and apply analytical tools to assist managers with decisions. Data warehouses are one of the most popular extensions to ERP systems.

Customer Relationship Management ERP Components ERP vendors now include additional functionality that provides services formerly found only in CRM systems. The CRM components in ERP systems include contact centers, sales force automation, and advanced marketing functions. The goal is to provide an integrated view of customer data, enabling a firm to effectively manage customer relationships by responding to customer needs and demands while identifying the most (and least) valuable customers so the firm can better allocate its marketing resources.

Supply Chain Management ERP Components ERP vendors are expanding their systems to include SCM functions that manage the information flows between and among supply chain stages, maximizing total supply chain effectiveness and profitability. SCM components allow a firm to monitor and control all stages in the supply chain from the acquisition of raw materials to the receipt of finished goods by customers.

Ebusiness ERP Components The newest extended ERP components are the ebusiness components that allow companies to establish an Internet presence and fulfill online orders. Two of the primary features of ebusiness components are elogistics and eprocurement. *Elogistics* manages the transportation and storage of goods. *Eprocurement* is the business-to-business (B2B) online purchase and sale of supplies

and services. A common mistake many businesses make is jumping into online business without properly integrating the entire organization on the ERP system. One large toy manufacturer announced less than a week before Christmas that it would be unable to fulfill any of its online orders. The company had all the toys in the warehouse, but it could not organize the basic order processing function to get the toys delivered to consumers on time.

Measuring ERP Success

One of the best methods of measuring ERP success is the balanced scorecard, created by Dr. Robert Kaplan and Dr. David Norton, both from the Harvard Business School. The **balanced scorecard** is a management system, as well as a measurement system, that a firm uses to translate business strategies into executable tasks. It provides feedback for both internal and external business processes, allowing continuous improvement. Kaplan and Norton describe the balanced scorecard as follows: "The balanced scorecard retains traditional financial measures. But financial measures tell the story of past events, an adequate story for industrial age companies for which investments in long-term capabilities and customer relationships were not critical for success. These financial measures are inadequate, however, for guiding and evaluating the journey that information age companies must make to create future value through investment in customers, suppliers, employees, processes, technology, and innovation."[10] The balanced scorecard uses four perspectives to monitor an organization:

1. The learning and growth perspective.
2. The internal business process perspective.
3. The customer perspective.
4. The financial perspective (see Figure 8.23).

FIGURE 8.23

The Four Primary
Perspectives of the
Balanced Scorecard
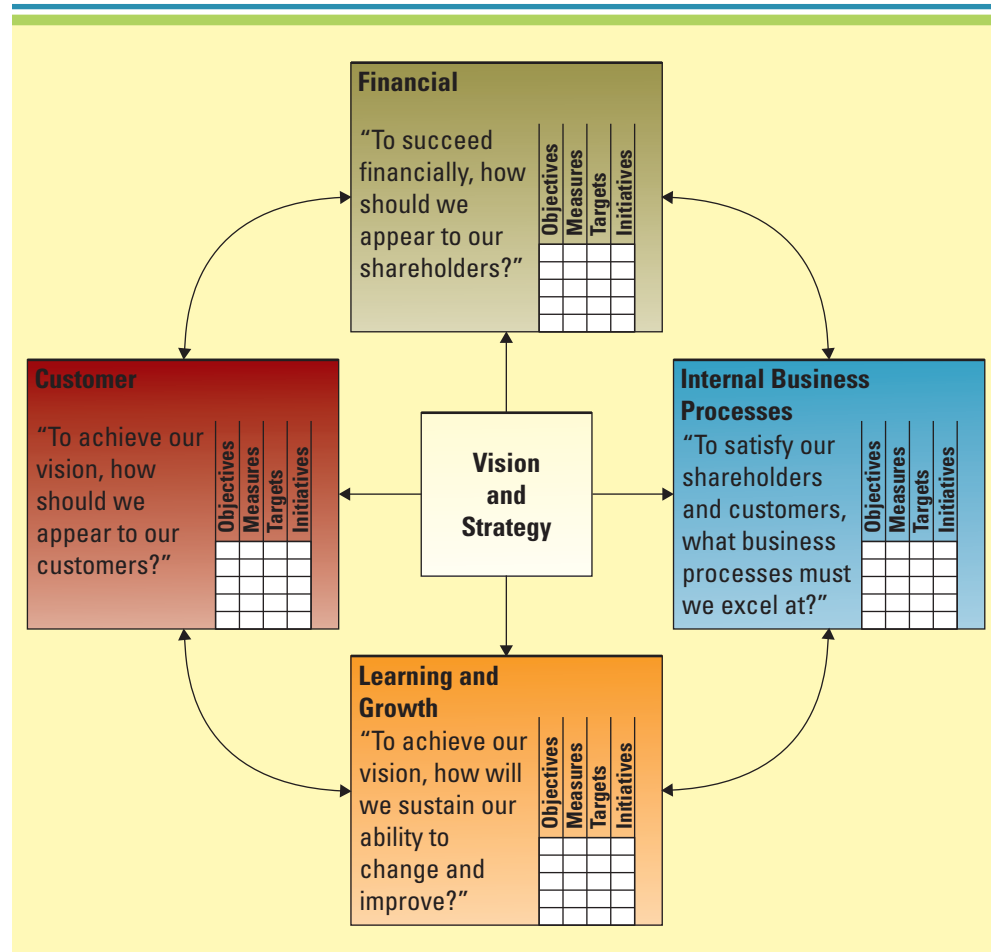
BUSINESS DRIVEN DISCUSSION

Bean Integration

At Flavors, a premium coffee shop, customers receive more than just a great cup of coffee—they also get exposure to music, art, literature, and town events. Flavors offers the following:

- Music center—information about all live music events occurring in the area and an open microphone two nights a week for local musicians.
- Art gallery—a space in the store filled with great pieces from local artists.
- Book clubs—a way for customers to meet to discuss current and classic literature.
- Coffee sampler—free tastings in which experts showcase coffees from around the world.
- Community calendar—weekly meetings to help customers find ways to become more involved in their community.
- Brewing courses—lessons in the finer details of the brewing, grinding, and blending equipment for sale in Flavor stores, from the traditional press to a digital espresso machine. Also includes a trouble-shooting guide developed by brewing specialists.

Flavors' sales are great and profits are soaring; however, operations need an overhaul. The following is a quick look at Flavors' current nonfood offerings.

- Flavors does not receive any information about how many customers attend live events in the music center. Musicians typically maintain a fan email list and CD sales records for the event; however, they don't always provide this information to the store.
- The art gallery is run by several local artists who pay Flavors a small commission on each sale. Flavors has no input on the art displayed in the store or information about who purchases it.
- Book club events are booked and run through the local bookstore, Pages Up, which runs a tab during the meetings and pays Flavor with a check at the end of each month. Flavors has no access to book club customer information or sales information.
- Coffee sampler events are run through Flavors' primary operations.
- Community event information is open to all members of the community. Each event is run by a separate organization, which provides monthly event feedback to Flavors in a variety of formats from Word to Access files.
- Brewing and machine resource courses are run by the equipment manufacturers, and all customer and sales information is provided to Flavors in a Word document at the end of each year.

Flavors' owners want to revamp the way the company operates so they can take advantage of enterprise systems, and they have hired you as an integration expert. They also want to gain a better understanding of how the different events they host affect the different areas of their business. For example, should they have more open-microphone nights and fewer book clubs? The other way around? Currently, they have no way to tell which events result in higher sales. Create an integration strategy so Flavors can take advantage of CRM, SCM, and ERP across the company.

THE CHALLENGES OF ERP

One of the biggest challenges of an ERP system is cost. ERP systems contain multiple complex components that are not only expensive to purchase, but also expensive to implement. Costs can include the software itself, plus consulting charges, hardware expenses, and training fees. A large firm can easily spend millions of dollars and many years completing an ERP implementation. The biggest issue facing an ERP implementation is that it fundamentally changes the way the entire organization operates, causing employees to learn and adjust to new business processes. Many ERP failures occur because the business managers and MIS professionals underestimate the complexity of the planning, development, and training required with an ERP implementation. As a manager, you must carefully assess your company's needs and choose the right ERP system and ensure proper support for all new processes, while avoiding too much change too fast.
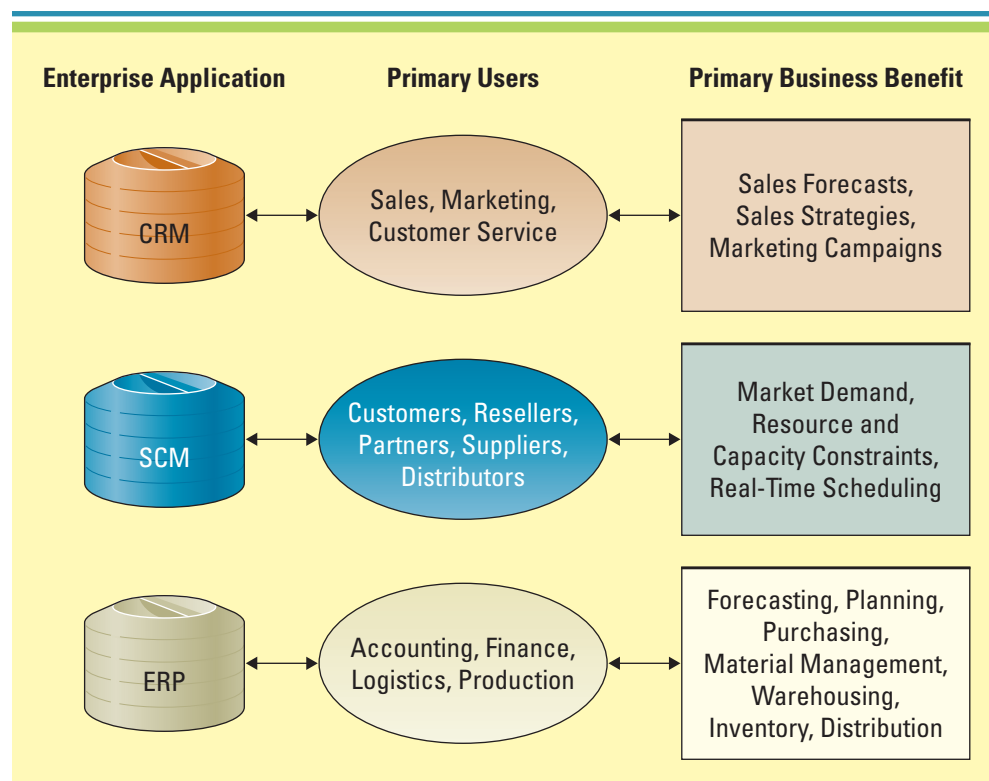
THE FUTURE OF ENTERPRISE SYSTEMS: INTEGRATING SCM, CRM, AND ERP

Applications such as SCM, CRM, and ERP are the backbone of ebusiness, yet most organizations today have to piece together these systems. A firm might choose its CRM components from Siebel, SCM components from i2, and financial components and HR management components from Oracle. Figure 8.24 identifies the general audience and purpose for each of these applications, and Figure 8.25 shows where they are integrated and the underlying premise of an integrated organization. Integrating all of these enterprise systems allows an organization to function as a single unit meeting customer, partner, and supplier needs.

If one application performs poorly, the entire customer value delivery system is affected. For example, no matter how great a company is at CRM, if its SCM system does not work and the customer never receives the finished product, the company will lose that customer. The world-class enterprises of tomorrow must be built on world-class applications implemented today.

FIGURE 8.24

Primary Uses and Business Benefits of Strategic Initiatives

Enterprise Application	Primary Users	Primary Business Benefit
CRM	Sales, Marketing, Customer Service	Sales Forecasts, Sales Strategies, Marketing Campaigns
SCM	Customers, Resellers, Partners, Suppliers, Distributors	Market Demand, Resource and Capacity Constraints, Real-Time Scheduling
ERP	Accounting, Finance, Logistics, Production	Forecasting, Planning, Purchasing, Material Management, Warehousing, Inventory, Distribution

FIGURE 8.25
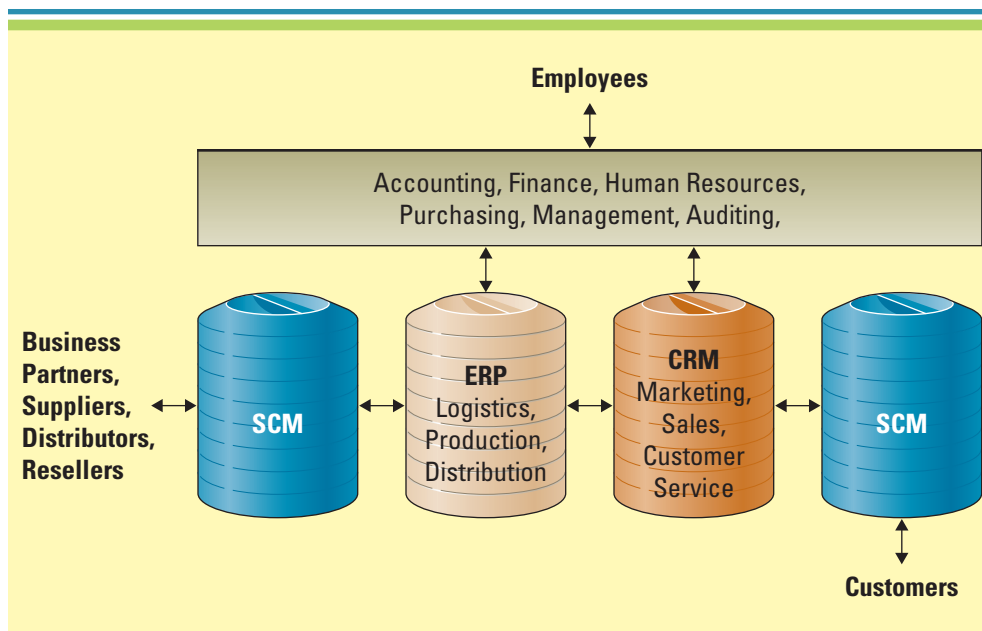
Integrations between SCM, CRM, and ERP

FIGURE 8.25

Integrations between SCM, CRM, and ERP

LEARNING OUTCOME REVIEW

Learning Outcome 8.1: Explain integrations and the role they play in connecting a corporation.

Integrations allow separate systems to communicate directly with each other, eliminating the need for manual entry into multiple systems. Building integrations allows the sharing of information across databases along with dramatically increasing its quality.

Learning Outcome 8.2: Describe supply chain management and its role in supporting business operations.

A supply chain consists of all parties involved, directly or indirectly, in obtaining raw materials or a product. To automate and enable sophisticated decision making in these critical areas, companies are turning to systems that provide demand forecasting, inventory control, and information flows between suppliers and customers. Supply chain management (SCM) is the management of information flows between and among activities in a supply chain to maximize total supply chain effectiveness and corporate profitability. In the past, manufacturing efforts focused primarily on quality improvement efforts within the company; today these efforts reach across the entire supply chain, including customers, customers' customers, suppliers, and suppliers' suppliers. Today's supply chain is an intricate network of business partners linked through communication channels and relationships.

Learning Outcome 8.3: Identify the benefits and challenges of SCM along with its future.

Improved visibility across the supply chain and increased profitability for the firm are the primary business benefits received when implementing supply chain management systems. Supply chain visibility is the ability to view all areas up and down the supply chain in real time. The primary challenges associated with supply chain management include costs and complexity. The next wave in supply chain management will be home-based supply chain

fulfillment. No more running to the store to replace your products as your store will come to you as soon as you need a new product.

Learning Outcome 8.4: Describe customer relationship management and its role in supporting business operations.

Customer relationship management (CRM) is a means of managing all aspects of a customer's relationship with an organization to increase customer loyalty and retention and an organization's profitability. CRM allows an organization to gain insights into customers' shopping and buying behaviors. Every time a customer communicates with a company, the firm has the chance to build a trusting relationship with that particular customer.

Learning Outcome 8.5: Identify the benefits and challenges of CRM along with its future.

Companies that understand individual customer needs are best positioned to achieve success. Building successful customer relationships is not a new business practice; however, implementing CRM systems allows a company to operate more efficiently and effectively in the area of supporting customer needs. CRM moves far beyond technology by identifying customer needs and designing specific marketing campaigns tailored to each.

A decade ago if you had a complaint against a company you could make a phone call or write a letter. Now you can contact people around the globe and voice your complaint or anger with a company or product. Companies have to listen, making CRM the primary challenge facing organizations.

Organizations are discovering a wave of other key business areas where it is beneficial to build strong relationships beyond customers. These include supplier relationship management (SRM), partner relationship management (PRM), and employee relationship management (ERM).

Learning Outcome 8.6: Describe enterprise resource management and its role in supporting business operations.

Enterprise resource planning (ERP) integrates all departments and functions throughout an organization into a single IT system (or integrated set of IT systems) so employees can make decisions by viewing enterprisewide information about all business operations. Enterprise resource planning systems provide organizations with consistency. They allow for the effective planning and controlling of all the resources required to plan, source, make, and deliver goods and services.

Learning Outcome 8.7: Identify the benefits and challenges of ERP along with the future of the connected corporation.

The first generation of ERP systems focused on improving the manufacturing process through automation, primarily addressing back-office business processes such as inventory ordering and product distribution. The second generation of ERP systems extended its reach into the front office and primarily addressed customer issues including marketing and sales. The third generation of ERP systems, known as ERP-II, allows a company to compete on a functional level, adopting an enterprisewide approach using the Internet to connect all participants in the value chain

One of the biggest challenges of an ERP system is cost. ERP systems contain multiple complex components that are not only expensive to purchase, but also expensive to implement. Costs can include the software itself, plus consulting charges, hardware expenses, and training fees.

Applications such as SCM, CRM, and ERP are the backbone of ebusiness, yet most organizations today have to piece together these systems. A firm might choose its CRM components from Siebel, SCM components from i2, and financial components and HR management components from Oracle. Integrating all of these enterprise systems allows an organization to function as a single unit meeting customer, partner, and supplier needs.

1. **Knowledge:** Define SCM and how it can benefit Zappos.

2. **Comprehension:** Explain CRM and why Zappos would benefit from the implementation of a CRM system.

3. **Application:** Demonstrate why Zappos would need to implement SCM, CRM, and ERP for a connected corporation.

4. **Analysis:** Analyze the merger between Zappos and Amazon and assess potential issues for Zappos customers.

5. **Synthesis:** Propose a plan for how Zappos can use Amazon's supply chain to increase sales and customer satisfaction.

6. **Evaluate:** Argue for or against the following statement: "In the electronic age customer relationships are more important than ever and Zappos provides the new benchmark that all corporations should follow."

KEY TERMS

Accounting and finance ERP component, 312
Analytical CRM, 301
Backward integration, 289
Balanced scorecard, 314
Bullwhip effect, 294
Call scripting system, 305
Campaign management system, 303
Click-to-talk, 305
Contact center or call center, 304
Contact management CRM system, 304
Core ERP component, 311
CRM analysis technologies, 300
CRM predicting technologies, 300
CRM reporting technologies, 300
Cross-selling, 303
Customer relationship management (CRM), 298
Demand planning system, 295

Electronic data interchange (EDI), 294
Elogistics, 313
Employee relationship management (ERM), 308
Enterprise application integration (EAI), 290
Enterprise application integration (EAI) middleware, 290
Enterprise resource planning (ERP), 308
Enterprise system, 290
Eprocurement, 313
Extended ERP component, 311
Forward integration, 289
Human resources ERP component, 313
Integration, 289
Legacy system, 290
List generator, 302
Middleware, 290
Operational CRM, 301
Opportunity management CRM system, 304

Partner relationship management (PRM), 308
Production and materials management ERP component, 313
Sales force automation (SFA), 304
Sales management CRM system, 304
Supplier relationship management (SRM), 308
Supply chain, 291
Supply chain execution system, 294
Supply chain management (SCM), 292
Supply chain planning system, 294
Supply chain visibility, 294
Up-selling, 303
Web-based self-service system, 305
Website personalization, 305

REVIEW QUESTIONS

1. How do integrations connect a corporation?

2. What is the difference between forward and backward integrations?

3. What are the five primary activities in a supply chain?

4. What is the bullwhip effect and how can it impact a supply chain and a firm's profitability?

5. What are supply chain planning systems, supply chain execution systems, and demand planning systems?

6. What are the challenges associated with SCM systems?

7. Why are customer relationships important to an organization? Do you agree that every business needs to focus on customers to survive in the information age?

8. What is the difference between operational and analytical CRM?

9. How can a sales department use CRM to improve operations?

10. How can a marketing department use CRM to improve operations?

11. What is the difference between customer relationship management, supplier relationship management, and employee relationship management?

12. What is an enterprise resource planning system?

13. What are the components in a core ERP system?

14. What are the components in an extended ERP system?

15. What does a company need to integrate to become connected?

CLOSING CASE ONE

Can Customer Loyalty Be a Bad Thing?

What happens when you find out that your business's most faithful customers aren't necessarily the most profitable ones? The economic crisis has jolted companies into the need to redouble efforts to foster customer loyalty. Numerous articles now tout the increased importance of giving customers premium service in troubled times to ensure customer retention. The underlying reasoning is simple—through their continued patronage, loyal customers help a company to weather the storm.

Without question, there is some truth to this logic. No firm can survive for long without loyal customers. The problem, however, is that success through loyalty isn't nearly so simple. Like most big ideas, there are conditions where it is unarguably correct, and less popular but equally true conditions where it is wrong.

Loyalty is a big idea. At its most basic level, it is a feeling of attachment that causes someone to be willing to continue a relationship. And while exclusive loyalty has been replaced in customers' hearts and minds with multiple loyalties for many if not most product categories, often greater than 50 percent of a company's customers would classify themselves as holding some level of loyalty to a particular company. Even if we narrow our classification of loyalty to customers who feel loyal and give the majority of their purchases in a category to the firm, typically we find this to represent one-third of a firm's customers.

The fly in the ointment is that typically only 20 perceny of a firm's customers are actually profitable. And many—often most—of a company's profitable customers are not loyal. This presents managers with a loyalty problem, although not one that they expect. If typically most loyal customers in a firm aren't profitable, how does a customer loyalty strategy ever generate a positive return on investment? Instead of asking whether you have enough loyal customers in your customer base, you need to ask yourself three more complex questions: (1) which loyal customers are good for the business, (2) how do we hang onto them, and (3) how do we get more customers like them.

In this slow economy, customers in both B2B and B2C settings are naturally much more sensitive to economic issues. Furthermore, companies in B2B relationships are often more

reliant on their vendor partners to help them shoulder this burden. There is nothing inherently wrong with this, and managers need to recognize that their job is to meet customers' needs to deserve their loyalty.

But the simple solution to improving customer loyalty in a down market is to offer price deals. Firms that track their customer loyalty can be guaranteed that loyalty scores will increase with each substantial decrease in price.

But that's a bad loyalty strategy. This doesn't mean businesses shouldn't find ways to be more efficient so they can pass cost savings on to customers. But price-driven loyalty is always the lowest form of loyalty. It means the firm isn't offering differentiated value to its customers.

The place to begin any loyalty strategy is to determine which loyal customers are profitable and which are not. A closer examination of these two types of customers always reveals very different reasons for their loyalty. Unprofitable loyal customers tend to be loyal for one of two reasons: (1) they are driven by unprofitable pricing or exchange policies, or (2) they demand an excessive amount of service that they are not willing to pay fairly to receive.

Profitable loyal customers, on the other hand, are almost always driven by differentiating aspects of the product or service offering. The key to a successful loyalty strategy is to become clear as to what these differentiating aspects are, and to focus on tangibly improving these elements. It is also imperative to actively tell customers and prospective customers that these are the things the company stands for and that the firm is committed to being best at. By doing this, the best customers will have the necessary information to clearly articulate why an organization deserves their loyalty in good times and in bad.[11]

Questions

1. Why are customer relationships important to an organization? Do you agree that every business needs to focus on customers to survive in the information age?

2. How can a company find its most loyal customers?

3. Choose a business (maybe Starbucks, Disney, or Nissan). Answer each of the following questions based on your business choice.

   a. Which loyal customers are good for the business?

   b. How do we hang onto them?

   c. How do we get more customers like them?

4. Do you agree or disagree with the following statement: "The fly in the ointment is that typically only 20 percent of a firm's customers are actually profitable. And many—often most—of a company;s profitable customers are not loyal."

CLOSING CASE TWO

Got Milk? It's Good for You—Unless It's Contaminated!

Dong Lizhong bet that being a dairy farmer was his golden ticket out of a factory job in China. Unfortunately, a contamination crisis in 2008 shattered his dairy business when babies mysteriously started developing kidney stones from contaminated baby formula. A chemical called melamine, an additive used to make plastic, was discovered in the milk supply of one of China's third-largest dairy producers. Four infants died from the contamination and at least 53,000 fell ill. According to the official Xinhua news agency, officials knew about problems with the milk for months before informing the public.

China's four largest dairy organizations, accounting for nearly half the country's milk market, pulled their goods off shelves. More than 20 countries, including France, India, and South Korea, banned not only dairy products from China, but also candies, cookies, and chocolates. "This is a disastrous setback. I estimate that it will take one or two years to rebuild confidence in dairy products," says Luo Yunbo, dean of the College of Food Science & Nutritional Engineering at China Agricultural University.

The local milk-collection station in Dong Lizhong's village discontinued purchasing milk. Farmers continued to milk their cows, but they drank the milk themselves or poured the milk into their cabbage fields.

Cutting Corners

Chinese do not traditionally drink milk. However, as the country has grown more affluent over the past few decades, the domestic dairy industry has skyrocketed. China's two largest dairy companies have greatly benefited from this new trend: China Mengniu Dairy and Inner Mongolia Yili Industrial Group. Simultaneously, numerous entrepreneurs—from dairy farmers to milk-collection station owners to milk distributors—have jumped into the supply chain of dairy products to make their fortunes. Due to the fierce competition within China's dairy industry, a few companies decided to cut corners to reduce costs, regardless of the consequences.

As Mengniu and Yili expanded at breathtaking speed, they found themselves in the unique position where supply could not keep up with demand. According to KPMG, China consumes 25 million tons of milk yearly, putting its dairy market ahead of France and Germany. In their quest for more raw milk, Mengniu and Yili have expanded outside their base in the northern province of Inner Mongolia and set up production facilities in other parts of China. Most of the quality problems in milk were found in dairy farms in Hebei and Inner Mongolia provinces, where the competition for raw milk supplies has been the fiercest.

Most dairy farmers in Hebei province traditionally sold their milk to milk-collection stations established by local heavyweight Sanlu. In recent years, new privately owned milk-collection stations to buy raw milk for Mengniu and Yili started popping up next to existing stations. These new entrants captured raw milk supplies by offering dairy farmers slightly higher prices. "This competition broke the rules. As milk buyers fought over milk supplies, their standards for quality fell," says Roger Liu, vice chairman of American Dairy Inc., a Heilongjiang province-based powdered milk company.

Additives to Boost Protein

Many of the milking stations do not have the equipment to test milk for additives. At the Nanxincheng station, 16 households bring their dairy cows in the area to be milked in the red brick farmhouse. The farmers hook up the cows to a milking machine, which pumps the milk directly into a big vat. "They didn't test the milk here. They sent it to Sanlu for testing," says Du Yanjun, a government inspector who was posted to monitor the Nanxincheng station after the contamination crisis broke.

The milk is collected from the stations and shipped by middlemen to big dairy companies such as Sanlu, which would do their own testing and grading. It now appears that unscrupulous middlemen added melamine to the raw milk to increase protein levels in their milk samples, so their milk would be graded higher. However, ingesting melamine can also cause kidney stones or kidney failure, especially in infants.

Matthew Estes, president and CEO of BabyCare, had looked into switching from Australian and New Zealand sources of milk for the company's infant-formula business in China. BabyCare tested possible Chinese suppliers and realized it could not locate a suitable supplier in China. "We couldn't the find quality that met our standards. We chose to not sell in China rather than take the risk," he says.

Stiff Sentences

A Chinese court sentenced two of the middlemen to death and a dairy boss to life in prison for their roles in the milk contamination scandal. The swift trial and harsh sentences show

Beijing's resolve in tackling the country's stubborn food safety problems and an eagerness by the communist leadership to move past the embarrassing scandal.[12]

Questions

1. List 10 products that could possibly be affected by a problem in the U.S. milk supply chain. What would be the damages to an ice cream business that used contaminated milk in its manufacturing process? Who do you think should be held liable for such an issue?

2. Do you think a CRM system could have helped communicate issues in the milk production supply chain? How could a company use a CRM system to perform damage control after finding out about contaminated milk in the supply chain?

3. Do you agree with the Chinese court in sentencing of the middlemen to death and a dairy boss to life in prison for their roles in the milk contamination scandal? Do you think the United States should implement similar laws for unethical corporate behavior?

4. Many companies in the United States use Chinese suppliers in the sourcing of raw materials and manufacturing of products. Research the Internet and find three examples of recent issues for U.S. companies because of Chinese products. What will happen in the long run as companies use Chinese suppliers?

CRITICAL BUSINESS THINKING

1. Political Supply Chains

The U.S. government brokered a deal with the United Arab Emirates (UAE) allowing the UAE government-owned firm Dubai Ports World (DPW) to operate six major U.S. ports (New York, New Jersey, Baltimore, New Orleans, Miami, Philadelphia) after DPW purchased the current United Kingdom-based port operator, P&O, the fourth largest port company in the world.

Some citizens are worried that the federal government may be outsourcing U.S. port operations to a company prone to terrorist infiltration by allowing a firm from the United Arab Emirates to run port operations within the United States. The United Arab Emirates has had people involved in terrorism. Some of its financial institutions laundered the money for the 9/11 terrorists. You have been called in on an investigation to determine the potential effects on U.S. businesses' supply chains if these ports were shut down due to terrorist activities. Create an argument for or against outsourcing these ports to the UAE. Be sure to detail the effect on U.S. businesses' supply chains if these ports are subjected to terrorist acts.[12]

2. Analyzing Dell's Supply Chain Management System

Dell's supply chain strategy is legendary. If you want to build a successful SCM system, your best bet is to model your SCM system after Dell's. In a team, research Dell's supply chain management strategy on the Web and create a report discussing any new SCM updates and strategies the company is currently using that were not discussed in this text. Be sure to include a graphical presentation of Dell's current supply chain model.

3. Total Recall

The Firestone Tire Company issued a recall for all tires issued on a certain brand of Ford's sport-utility vehicles. The tire treads on some SUVs separated during use, which could cause a fatal accident as the defect caused vehicles to roll over. In the beginning Firestone denied it had a tire problem, stating that Ford had incorrectly matched its SUVs with the wrong brand of tires. It also suggested that the shock absorbers might have been rubbing against the tires, causing the defect. Firestone soon recalled the tires as the company

received more and more pressure from government and consumer advocacy groups. Interestingly, all of the defective tires were manufactured at the same tire factory and the company soon shut down that facility. Information was soon found that Firestone had recalled the identical type of tire in South America and had already settled a lawsuit for an accident caused by the tread defect. Discuss each of the following factors in relation to this case: quality, inventory, ethics, supply chain visibility, profitability, customer loyalty.[13]

4. Finding Shelf Space at Walmart

Walmart's business strategy of being a low-cost provider by managing its supply chain down to the minutia has paid off greatly. Each week, approximately 100 million customers, or one-third of the U.S. population, visit Walmart's U.S. stores. Walmart is currently the world's largest retailer and the second-largest corporation behind ExxonMobil. It was founded by Sam Walton in 1962 and is the largest private employer in the United States and Mexico. Walmart is also the largest grocery retailer in the United States, with an estimated 20 percent of the retail grocery and consumables business, and the largest toy seller in the United States, with an estimated 45 percent of the retail toy business, having surpassed Toys "R" Us in the late 1990s.

Walmart's business model is based on selling a wide variety of general merchandise at "always low prices." The reason Walmart can offer such low prices is due to its innovative use of information technology tools to create its highly sophisticated supply chain. Walmart has famously invited its major suppliers to jointly develop powerful supply chain partnerships. These are designed to increase product flow efficiency and, consequently, Walmart's profitability.[14]

You are the owner of a high-end collectible toy company. You create everything from authentic sports figure replicas to famous musicians and movie characters including Babe Ruth, Hulk Hogan, Mick Jagger, Ozzy Osbourne, Alien, and the Terminator. It would be a huge win for your company if you could get your collectibles into Walmart. Compile a strategic plan highlighting the steps required to approach Walmart as your supply chain partner. Be sure to address the pros and cons of partnering with the chain, including the cost to revamp your current supply chain to meet Walmart's tough supply chain requirements.

5. Customer Relationship Management Strategies

On average, it costs an organization six times more to sell to a new customer than to sell to an existing customer. As the co-owner of a medium-sized sports equipment distributor, you have recently been notified that sales for the past three months have decreased by an average of 20 percent. The reasons for the decline in sales are numerous, including a poor economy and some negative publicity your company received regarding a defective product line. In a group, explain how implementing a CRM system can help you understand and combat the decline in sales. Be sure to justify why a CRM system is important to your business and its future growth.

Also, search the Internet for at least one recent and authoritative article that compares or ranks customer relationship management systems. Select two packages from the list and compare their functions and features as described in the article(s) you found as well as on each company's website. Find references in the literature where companies that are using each package have reported their experiences, both good and bad. Draw on any other comparisons you can find. Prepare a presentation for delivery in class on the strengths and weaknesses of each package, which one you favor, and why.

6. Searching for Employee Loyalty

You are the CEO of Razz, a start-up Web-based search company, which is planning to compete directly with Google. The company had an exceptional first year and is currently receiving over 500,000 hits a day from customers all over the world. You have hired 250 people in the past four months, doubling the size of your organization. With so many new employees starting so quickly you are concerned about how your company's culture will

evolve and whether your employees are receiving enough attention. You are already familiar with customer relationship management and how CRM systems can help an organization create strong customer relationships. However, you are unfamiliar with employee relationship management and you are wondering what ERM systems might be able to offer your employees and your company. Research the Web, create a report detailing features and functions of ERM systems, and determine what value will be added to your organization if you decide to implement an ERM solution.

7. Driving Up Profits with Loyalty (or Driving Down?)

The Butterfly Café is located in downtown San Francisco and offers specialty coffee, teas, and organic fruits and vegetables. The café holds a number of events to attract customers such as live music, poetry readings, book clubs, charity events, and local artist's night. A listing of all participants attending each event is tracked in the café's database. The café uses the information for marketing campaigns and offers customers who attend multiple events additional discounts. A marketing database company, InTheKnow.com, has offered to pay the Butterfly Café a substantial amount of money for access to its customer database, which it will then sell to other local businesses. The owner of the Butterfly Café, Penny Dirks, has come to you for advice. She is not sure if her customers would appreciate her selling their personal information and how it might affect her business. However, the amount of money InTheKnow.com is offering is enough to finance her much-needed new patio for the back of the café. InTheKnow.com has promised that the sale will be completely confidential. What should Dirks do?

8. Supporting Customers

Creative.com is an ebusiness that sells craft materials and supplies over the Internet. You have just started as the vice president of customer service, and you have a team of 45 customer service representatives. Currently, the only form of customer service is the toll-free number and the company is receiving a tremendous number of calls regarding products, orders, and shipping information. The average wait time for a customer to speak to a customer service representative is 35 minutes. Orders are being cancelled and Creative.com is losing business due to its lack of customer service. Create a strategy to revamp the customer service center and get the company back on track.

9. Implementing an ERP System

Blue Dog Inc. is a leading manufacturer in the high-end sunglasses industry, reaching record revenue levels of more than $250 million last year. Blue Dog is currently deciding on the possibility of implementing an ERP system to help decrease production costs and increase inventory control. Many of the executives are nervous about making such a large investment in an ERP system due to its low success rates. As a senior manager at Blue Dog Inc., you have been asked to compile a list of the potential benefits and risks associated with implementing an ERP system along with your recommendations for the steps the company can take to ensure a successful implementation. Be sure to also explain why ERP systems include CRM and SCM components, and the advantages the company can gain by implementing all of the components for a connected corporation.

ENTREPRENEURIAL CHALLENGE

BUILD YOUR OWN BUSINESS

1. Netflix reinvented the video rental business using supply chain technology. Netflix is the largest online DVD rental service, offering flat-rate rental by mail and over the Internet to customers. Customers can create their own personal list of movie favorites and the DVDs

are delivered by the US Post office from one of Netflix's warehouses. Customers can keep the DVDs for as long as they want and simply return it by mail to receive their next selection. Netflix's business is video rental, but it used technology to revamp its supply chain to completely disrupt the entire video rental industry. Define a way that you can revamp or reinvent your business using supply chain technologies.

2. Business is booming, and you have achieved your goal of driving operating costs down, which helps to drive revenues up. One of your best new products is from China, and it is accounting for a 20 percent increase in your profits. Yesterday, a dockworkers union strike began and shut down all of the West Coast shipping docks from San Francisco to Canada. Work will resume when the union agrees to new labor contracts, which could take months. You need to quickly assess the impact of the shutdown on your business. How will you keep business running if you cannot receive your shipments? What strategies do you recommend to help the business continue working while the supply chain is disrupted by the strike?

3. The Web contains numerous examples of customer power. Examples include www .ihatedell.net and www.donotbuydodge.ca. Customers are using YouTube, MySpace, blogs, and a number of other Web tools to slam or praise companies. Do you believe that the most influential person in your business is the customer? How could customers hurt or help your business? Will your employees agree that customers are the most important part of the business?

APPLY YOUR KNOWLEDGE BUSINESS PROJECTS

PROJECT I   Shipping Problems

Entrepreneurship is in Alyssa Stuart's blood. Stuart has been starting businesses since she was 10 years old, and she finally has the perfect business of custom-made furniture. Customers who visit her shop can choose from a number of different fabrics and 50 different styles of couch and chair designs to create their custom-made furniture. Once the customer decides on a fabric pattern and furniture design, the information is sent to China where the furniture is built and shipped to the customer via the West Coast. Stuart is excited about her business; all of her hard work has finally paid off as she has more than 17,000 customers and 875 orders currently in the pipe.

Project Focus

Stuart's business is booming. Her high-quality products and outstanding customer service have created an excellent reputation for her business. But the business is at risk of losing everything and she has come to you for help solving her supply chain issues. The parcel delivery companies like Fed Ex and UPS are on strike and Alyssa is not sure how she is going to get her raw materials or finished products delivered. What strategies do you recommend for Alyssa's business to continue working to overcome the strike?

PROJECT II   Great Stories

When customers have an unpleasant customer experience, the company no longer has to worry about them telling a few friends and family; the company now has to worry about them telling everyone. Internet service providers are giving frustrated consumers another means of fighting back. Free or low-cost computer space for Internet websites is empowering

consumers to tell not only their friends, but also the world about the way they have been treated. A few examples of disgruntled customer stories from the Internet include:

- A bike-riding tourist requires stitches after being bitten on the leg by a dog. The tourism company is banned from renting bikes and in turn bars the tourist from taking any future tours.

- A customer leaving Best Buy refuses to voluntarily show the receipt to the guard at the door. The Best Buy employees try to seize the customer's cart and then decide to park a car behind the customer's vehicle.

- Enterprise Rent-A-Car operates a high-stress business, and frequently its customers find that the company did not honor reservations, did not have cars ready for reservations, rented cars with empty tanks of gas, and charged higher rates to corporate account holders.

Project Focus

The pervasive nature of the Internet is increasing customer power and changing business from product-focused to a customer-focused. Explain the difference between product-focused business and customer-focused business and why CRM is more important than ever before?

PROJECT III   JetBlue on YouTube

JetBlue took an unusual and interesting CRM approach by using YouTube to apologize to its customers. JetBlue's founder and former CEO, David Neeleman, apologized to customers via YouTube after a very bad week for the airline: 1,100 flights were canceled due to snowstorms, causing thousands of passengers to be stranded at airports around the country. Neeleman's unrehearsed, unrefined, and sincere YouTube apology made customers understand the issues and accept the company's apology.

Project Focus

You are the founder and CEO of GoodDog, a large pet food manufacturing company. Recently, at least 16 pet deaths have been tied to tainted pet food, fortunately not manufactured by your company. A recall of potentially deadly pet food has dog and cat owners studying their animals for even the slightest hint of illness and swamping veterinarians nationwide with calls about symptoms. Create a strategy for using YouTube as a vehicle to communicate with your customers as they fear for their pets' lives. Be sure to highlight the pros and cons of using YouTube as a customer communication vehicle. Are there any other new technologies you could use as a customer communication vehicle that would be more effective than YouTube? With all the new advances in technology and the many ways to reach customers, do you think using YouTube is a smart approach? What else could you do to help gain back customers' trust?

PROJECT IV   Gaining Business Intelligence from Strategic Initiatives

You are a new employee in the customer service department at Premier One, a large office supply distributor. The company, , has been in business for three years and focuses on providing top of the line office supplies at a low cost. The company currently has 90 employees and operates in seven states.

Project Focus

Sales over the past three years have tripled, and the manual systems currently in place are no longer sufficient to run the business. Your first task is to meet with your new team and create a presentation for the president and chief executive officer describing supply chain

management, customer relationship management, and enterprise resource planning. The presentation should highlight the main benefits Premier One can receive from these enterprise systems along with any additional added business value that can be gained from the systems.

PROJECT V   Second Life CRM

New virtual worlds such as Second Life are becoming the first point of contact between many firms and customers. To say the least, virtual relationships are far different from traditional relationships. Firms such as Adidas, Dell, Reuters, and Toyota are all embracing Second Life; however, beyond opening a virtual office in a virtual world, they are struggling with how to build virtual customer relationships.

PA Consulting quickly learned that building a virtual office to answer customer queries is not nearly good enough to find and attract loyal customers. The company realized that real people behind the avatars need to be housed in a real office similar to having a call center to answer questions for online shopping. When a potential customer wants to speak to a human, one must appear or else the customer will leave the website.

Project Focus

You are the executive director of CRM at StormPeak, an advanced technological company that develops robots. You are in charge of overseeing the first virtual site being built in Second Life. Create a CRM strategy for doing business in a virtual world. Here are a few questions to get you started:

- How will customer relationships be different in a virtual world?
- What is your strategy for managing customer relationships in this new virtual environment?
- How will supporting Second Life customers differ from supporting traditional customers?
- How will supporting Second Life customers differ from supporting website customers?
- What customer security issues might you encounter in Second Life?
- What customer ethical issues might you encounter in Second Life?

PROJECT VI   Searching Telephone Calls

Imagine being able to search a database of customer phone calls to find specific requests or to be able to sort through digital customer complaints to detect the exact moment when the interaction between the customer service representative and the customer went wrong. A new tool called Find It allows the sorting of digital voice records as easily as using Google to sift through documents. Find It is opening limitless business opportunities as organizations begin to understand how they can use this technology to help employees search voice mails or recorded calls for keywords and phrases.

Project Focus

You have recently started your own marketing firm and you want to use the power of Find It to help your customers query all of their unique data records, including digital voice recordings. Now all you need is to prepare your marketing materials to send to potential customers. Create a marketing pitch that you will deliver to customers detailing the business opportunities they could uncover if they purchase Find It. Your marketing pitch can be a one-page document, a catchy tune, a video, or a PowerPoint presentation.

PROJECT VII   Sharptooth Incorporated

Stephen Kern is the founder and CEO of Sharptooth, a small business that buys and sells comic strips to magazines and newspapers around the country. Some of Sharptooth's artists have made it big and are syndicated in hundreds of magazines and newspapers, while others

are new to the industry. Kern started in the business as an artist and began contracting other artists when he realized he had a knack for promoting and marketing comic materials. His artistic background is great for spotting talented young artists, but not so great for running the business.

Project Focus

Kern recently began selling comics to new forms of media such as blogs, websites, and other online tools. He has hired you to build him a new system to track all online comic sales. You quickly notice that Kern has a separate system for each of his different lines of business including newspaper sources, magazine sources, billboard sources, and now online sources. You notice that each system works independently to perform its job of creating, updating, and maintaining sales information, but you are wondering how he operates his business as a whole. Create a list of issues Kern will encounter if he continues to run his business with four separate systems performing the same operations. What could happen to the business if he cannot correlate the details of each? Be sure to highlight at least 10 issues where separate systems could cause problems.

PROJECT VIII   Eating In

Having been employed by the same company for more than 20 years, Mary Lou Smith was shocked when she was suddenly terminated along with about 900 of her co-workers. It took Smith a few weeks to recover from the shock, then she finally began focusing her efforts on searching for a new job. Smith was sure her loyal employment history and strong skill set would land her a new job in no time; however, after several months of searching she wasn't having any luck. With her emergency funds quickly being depleted, Smith knew she had to find a new job soon or else she'd need to start selling her assets or cashing in her retirement.

The one positive aspect of having so much free time was that she could focus on her true passion, cooking. She began making a little money by catering lunches and dinners for local businesses and neighbors. Smith overheard a neighbor remark that she was hosting a large party and didn't have enough time to prepare the meal. Almost jokingly, Smith asked her how much she'd be willing to pay for a catered event. Soon Smith was catering for numerous neighbors and small businesses and she knew she had to make a decision if she would go into business for herself or continue searching for other employment.

Project Focus

After a year in the catering business, Smith was earning a good living and building a stellar reputation. She began catering for all types of events, including weddings, and business was so good that she hired several employees to help grow her business. As Smith begins to plan her expansion, she has asked for you help in answering the following questions:

1. How important is customer loyalty for Smith's business? What can she do to ensure her customers remain loyal? How could one disgruntled customer hurt business? What can she do to combat this challenge?

2. Research the business Yelp.com. What service does Yelp.com perform? Would a small business see Yelp.com as an opportunity or a threat? What are the pros and cons a customer should be aware of when using yelp.com?

3. Smith's responsibilities include forecasting, inventory control, scheduling, and ensuring high-quality products. What types of forecasts would she require to run her business? What types of inventory would she want to track? What might happen if her inventory tracking tool was off by 50 percent? What types of schedules does Smith need to generate? What things might occur to disrupt schedules and cause her to reschedule? How can a supply chain management system help run the business?

4. Smith wants to create a business based on loyal customers and loyal employees. She offers her employees bonuses for new ideas, recipes, or business referrals. What risks

is Smith encountering by offering these bonuses? One employee idea that she has implemented is turning out to be a competitive advantage for her business; however, the employee has quit and is now working for a competitor. Should Smith still pay the employee the bonus? What should she do to ensure she is building strong employee relationships?

5. Smith overheard one of her customers talking about enterprise systems such as CRM, SCM, and ERP. However, she is sure they are available only to big companies that have lots of capital. Research the Internet and find examples of enterprise systems for small business. Do you think she should invest in these types of systems to run her business? Why or why not?

AYK APPLICATION PROJECTS

If you are looking for Excel projects to incorporate into your class, try any of the following after reading this chapter.

Project Number	Project Name	Project Type	Plug-In	Focus Area	Project Level	Skill Set	Page Number
9	Security Analysis	Excel	T3	Filtering Data	Intermediate	Conditional Formatting, Autofilter, Subtotal	AYK.7
10	Gathering Data	Excel	T3	Data Analysis	Intermediate	Conditional Formatting	AYK.8
11	Scanner System	Excel	T2	Strategic Analysis	Intermediate	Formulas	AYK.8
12	Competitive Pricing	Excel	T2	Profit Maximization	Intermediate	Formulas	AYK.9
13	Adequate Acquisitions	Excel	T2	Break Even Analysis	Intermediate	Formulas	AYK.9
15	Assessing the Value of Information	Excel	T3	Data Analysis	Intermediate	PivotTable	AYK.10
16	Growth, Trends, and Forecasts	Excel	T2, T3	Data Forecasting	Advanced	Average, Trend, Growth	AYK.11
18	Formatting Grades	Excel	T3	Data Analysis	Advanced	If, LookUp	AYK.12
22	Turnover Rates	Excel	T3	Data Mining	Advanced	PivotTable	AYK.15
23	Vital Information	Excel	T3	Data Mining	Advanced	PivotTable	AYK.15
24	Breaking Even	Excel	T4	Business Analysis	Advanced	Goal Seek	AYK.16
25	Profit Scenario	Excel	T4	Sales Analysis	Advanced	Scenario Manager	AYK.16