Strategic Initiatives for Implementing Competitive Advantages

LEARNING OUTCOMES

- **3.1.** Identify how an organization can use business process reengineering to improve its business.
- **3.2.** Explain supply chain management and its role in business.
- **3.3.** Explain customer relationship management systems and how they can help organizations understand their customers.
- **3.4.** Summarize the importance of enterprise resource planning systems.

Business Process Reegineering

This chapter introduces high-profile strategic initiatives that an organization can undertake to help it gain competitive advantages and business efficiencies—business process reengineering, supply chain management, customer relationship management, and enterprise resource planning (see Figure 3.1). Each of these strategic initiatives is covered in detail throughout this text. This chapter provides a brief introduction only.

A *business process* is a standardized set of activities that accomplish a specific task, such as processing a customer's order. Business processes transform a set of inputs into

LO 3.1 Identify how an organization can use business process reengineering to improve its business.



FIGURE 3.1 Strategic Initiatives for

Competitive Advantages

a set of outputs—goods or services—for another person or process by using people and tools. Understanding business processes helps a manager envision how the entire company operates. *Workflow* includes the tasks, activities, and responsibilities required to execute each step in a business process. Understanding business processes, workflow, customers' expectations, and the competitive environment provides managers with the necessary ingredients to design and evaluate alternative business processes in order to maintain competitive advantages when internal or external circumstances change.

Business process reengineering (BPR) is the analysis and redesign of workflow within and between enterprises. Most companies pride themselves on providing break-through products and services for customers. But if customers do not receive what they want quickly, accurately, and hassle-free, even fantastic offerings will not prevent a company from annoying customers and ultimately eroding its own financial performance. To avoid this pitfall and protect its competitive advantage, a company must continually evaluate all the business processes in its value chain. Improving the efficiency and effectiveness of its business processes will improve the firm's value chain.

The common business processes outlined in Figure 3.2 reflect functional thinking. Some processes, such as a programming process, may be contained wholly within a single department. However, most, such as ordering a product, are cross-functional or cross-departmental processes and span the entire organization. The process of "order



Sample Business Processes





to delivery" focuses on the entire customer order process across functional departments (see Figure 3.3). Another example is "product realization," which includes not only the way a product is developed, but also the way it is marketed and serviced. Some other cross-functional business processes are taking a product from concept to market, acquiring customers, loan processing, providing post-sales service, claim processing, and reservation handling.

Customer-facing processes, also called front-office processes, result in a product or service received by an organization's external customer. They include fulfilling orders, communicating with customers, and sending out bills and marketing information. *Business-facing processes*, also called back-office processes, are invisible to the external customer but essential to the effective management of the business; they include goal setting, day-to-day planning, giving performance feedback and rewards, and allocating resources. Figure 3.4 displays the different categories of customer-facing and business-facing processes along with an example of each. A company's strategic vision should provide guidance on which business processes are core, that is, which are directly linked to the firm's critical success factors. Mapping these core business processes to the value chain reveals where the processes touch the customers and affect their perceptions of value.

Figure 3.5 highlights an analogy to business process reengineering by explaining the different means of traveling along the same route. A company could improve the way it travels by changing from foot to horse and then from horse to car. With a BPR mind-set, however, it would look beyond automating and streamlining to find a completely different approach. It would ignore the road and travel by air to get from point A to point B. Companies often follow the same indirect path for doing business, not realizing there might be a different, faster, and more direct way.

Creating value for the customer is the leading reason for instituting BPR, and MIS often plays an important enabling role. Fundamentally new business processes enabled Progressive Insurance to slash its claims settlement time from 31 days to four hours, for instance. Typically, car insurance companies follow this standard claims resolution process: The customer gets into an accident, has the car towed, and finds a ride home. The customer then calls the insurance company to begin the claims process, which includes an evaluation of the damage, assignment of fault, and an estimate

Five Steps in the Order-to-Delivery Business Process

FIGURE 3.4

Customer-Facing, Industry-Specific, and Business-Facing Processes

Customer-Facing Processes

Order processing Customer service Sales process Customer billing Order shipping Industry-Specific Customer Facing Processes

Banking—Loan processing Insurance—Claims processing Government—Grant allocation Hotel—Reservation handling Airline—Baggage handling



Strategic planning Tactical planning Budget forecasting Training

Purchasing raw materials

Business-Facing

Processes

Chapter 3 Strategic Initiatives for Implementing Competitive Advantages * 31

Better, Faster, Cheaper

FIGURE 3.5

Different Ways to Travel the Same Route

of the cost of repairs, which usually takes about a month (see Figure 3.6). Progressive Insurance's innovation was to offer a mobile claims process. When a customer has a car accident, he or she calls in the claim on the spot. The Progressive claims adjuster comes to the accident site, surveys the scene and takes digital photographs. The adjuster then offers the customer on-site payment, towing services, and a ride home. A true BPR effort does more for a company than simply improve a process by performing it better, faster, and cheaper. Progressive Insurance's BPR effort redefined best practices for an entire industry.

When selecting a business process to reengineer, wise managers focus on those core processes that are critical to performance, rather than marginal processes that have little impact. The effort to reengineer a business process as a strategic activity requires a different mind-set than that required in continuous business process improvement programs. Because companies have tended to overlook the powerful contribution that processes can make to strategy, they often undertake process improvement efforts using their current processes as the starting point. Managers focusing on reengineering can instead use several criteria to identify opportunities:

- Is the process broken?
- Is it feasible that reengineering of this process will succeed?
- Does it have a high impact on the agency's strategic direction?
- Does it significantly impact customer satisfaction?
- Is it antiquated?
- Does it fall far below best-in-class?
- Is it crucial for productivity improvement?
- Will savings from automation be clearly visible?
- Is the return on investment from implementation high and preferably immediate?

FIGURE 3.6

Auto Insurance Claims Processes Reengineering



Company A: Claims Resolution Process

Resolution Cycle Time: 3–8 weeks

Progressive Insurance: Claims Resolution Process



Resolution Cycle Time: 30 minutes-3 hours

Supply Chain Management

Trek, a leader in bicycle products and accessories, gained more than 30 percent of the worldwide market by streamlining operations through the implementation of several IT systems. According to Jeff Stang, director of IT and operational accounting, the most significant improvement realized from the new systems was the ability to obtain key management information to drive business decisions in line with the company's strategic goals. Other system results included a highly successful website developed for the 1,400 Trek dealers where they could enter orders directly, check stock availability, and view accounts receivable and credit summaries. Tonja Green, Trek channel manager for North America, stated, "We wanted to give our dealers an easier and quicker way to enter their orders and get information. Every week the number of web orders increases by 25 to 30 percent due to the new system."

A *supply chain* includes all parties involved, directly or indirectly, in obtaining raw materials or a product. To understand a supply chain, consider a customer purchasing a Trek bike from a dealer. On one end, the supply chain has the customer placing an order for the bike with the dealer. The dealer purchases the bike from the manufacturer, Trek. Trek purchases raw materials such as packaging material, metal, and accessories from many different suppliers to make the bike. The supply chain for Trek encompasses every activity and party involved in the process of fulfilling the order from the customer for the new bike. Figure 3.7 displays a typical supply chain for a bike manufacturer including all processes and people required to fulfill the customer's order. Figure 3.8 highlights the five basic supply chain activities a company undertakes to manufacture and distribute products. 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. 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.





Dozens of steps are required to achieve and carry out each of the preceding components. SCM software can enable an organization to generate efficiencies within these steps by automating and improving the information flows throughout and among the different supply chain components.

Walmart and Procter & Gamble (P&G) implemented a tremendously successful SCM system. The system linked Walmart distribution centers directly to P&G's manufacturing centers. Every time a Walmart customer purchases a P&G product, the system sends a message directly to the factory alerting P&G to restock the product. The system also sends an automatic alert to P&G whenever a product is running low at one of Walmart's distribution centers. This real-time information allows P&G to efficiently make and deliver products to Walmart without having to maintain large inventories in its warehouses. The system also generates invoices and receives payments automatically. The SCM system saves time, reduces inventory, and decreases order-processing costs for P&G. P&G passes on these savings to Walmart in the form of discounted prices.¹

Figure 3.9 diagrams the stages of the SCM system for a customer purchasing a product from Walmart. The diagram demonstrates how the supply chain is dynamic and involves the constant flow of information between the different parties. For example, 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 the manufacturer, who provides pricing and availability information to the store and replenishes the product to the store. Payment funds among the various partners are transferred electronically.



Effective and efficient supply chain management systems can enable an organization to:

- Decrease the power of its buyers.
- Increase its own supplier power.
- Increase switching costs to reduce the threat of substitute products or services.
- Create entry barriers thereby reducing the threat of new entrants.
- Increase efficiencies while seeking a competitive advantage through cost leadership (see Figure 3.10).

Customer Relationship Management

Today, most competitors are simply a mouse-click away. This intense marketplace has forced organizations to switch from being sales focused to being customer focused.

Charles Schwab recouped the cost of a multimillion-dollar customer relationship management system in less than two years. The system, developed by Siebel, allows the brokerage firm to trace each interaction with a customer or prospective customer and then provide services (retirement planning, for instance) to each customer's needs and interests. The system gives Schwab a better and more complete view of its customers, which it can use to determine which customers are serious investors and which ones are not. Automated deposits from paychecks, for example, are a sign of a serious investor, while stagnant balances signal a nonserious investor. Once Schwab is able to make this determination, the firm allocates its resources accordingly, saving money by not investing time or resources in subsidizing nonserious investors.²

Customer relationship management (CRM) involves 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 in order to develop and implement enterprisewide



Supply Chain for a Product Purchased from Walmart

LO 3.3 Explain customer relationship management systems and how they can help organizations understand their customers.

FIGURE 3.10

Effective and Efficient Supply Chain Management's Effect on Porter's Five Forces



are represented by arrows.

strategies. Kaiser Permanente undertook a CRM strategy to improve and prolong the lives of diabetics. After compiling CRM information on 84,000 of its diabetic patients among its 2.4 million northern California members, Kaiser determined that only 15 to 20 percent of its diabetic patients were getting their eyes checked routinely. (Diabetes is the leading cause of blindness.) As a result, Kaiser is now enforcing more rigorous eyescreening programs for diabetics and creating support groups for obesity and stress (two more factors that make diabetes even worse). This CRM-based "preventive medicine" approach is saving Kaiser considerable sums of money and saving the eyesight of diabetic patients.³

Figure 3.11 provides an overview of a typical CRM system. Customers contact an organization through various means including call centers, web access, email, faxes, and direct sales. A single customer may access an organization multiple times through many different channels. The CRM system tracks every communication between the customer and the organization and provides access to CRM information within different systems from accounting to order fulfillment. Understanding all customer communications allows the organization to communicate effectively with each customer. It gives the organization a detailed understanding of each customer's products and services record regardless of the customer's preferred communication channel. For example, a customer service representative can easily view detailed account information and history through a CRM system when providing information to a customer such as expected delivery dates, complementary product information, and customer payment and billing information.

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 *recently* 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.

There are three phases 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 3.12 highlights a few of the important questions an organization can answer in these areas by using CRM technologies.

REPORTING Customer Identification: Asking What Happened	ANALYZING Customer Segmentation: Asking Why It Happened	PREDICTING Customer Prediction: Asking What Will Happen	FIGURE 3.12 Three Phases of CRM
 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? 	 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? 	 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 marketing campaign? 	
 What are the current inventory levels? 	 Why was revenue so high? Why are inventory levels low? 	 Customers? What will sales be this year? How much inventory do we need to preorder? 	

LO 3.4 Summarize the importance of enterprise resource planning systems.

Enterprise Resource Planning

Today's business leaders need significant amounts of information to be readily accessible with real-time views into their businesses so that decisions can be made when they need to be, without the added time of tracking data and generating reports. *Enterprise resource planning (ERP)* integrates all departments and functions throughout an organization into a single IT system (or integrated set of IT systems) so that employees can make decisions by viewing enterprisewide information on 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 the other departments, inconsistencies can occur throughout the company. Not all systems are built to talk to each other and share data, and if sales suddenly implements a new system that marketing and accounting cannot use or is inconsistent in the way it handles information, the company's operations become siloed. Figure 3.13 displays sample data from a sales database, and Figure 3.14 displays samples from an accounting database. Notice the differences in data formats, numbers, and identifiers. Correlating this data would be difficult, and the inconsistencies would cause numerous reporting errors from an enterprisewide perspective.

Los Angeles is a city of 3.5 million, with 44,000 city employees, and a budget of \$4 billion. Yet a few years ago each department conducted its own purchasing. That meant 2,000 people in 600 city buildings and 60 warehouses were ordering material. Some 120,000 purchase orders (POs) and 50,000 checks per year went to more than 7,000 vendors. Inefficiency was rampant.

"There was a lack of financial responsibility in the old system, and people could run up unauthorized expenditures," said Bob Jensen, the city's ERP project manager. Each department maintained its own inventories on different systems. Expense-item mismatches piled up. One department purchased one way, others preferred a different approach. Mainframe-based systems were isolated. The city chose an ERP system as part of a \$22 million project to integrate purchasing and financial reporting across the entire city. The project resulted in cutting the check processing staff in half, processing

👝 🖌 🥙 🗸 🖾) 🔻 AYK 40_Solution_Version 1 [Compatibility Mode] - Microsoft Excel									
Home Insert Page Layout Formulas Data Review View									
Cut									
Arial VI			ap lext	General					
Paste	• 💁 • 🛕 • 📑 🚍 🚎 🎏 🔤 Merge & Center •			\$ - % , .0 .00 .00 .00 Conditional Format					
Clipboard 🕞 Font	G Alignment G			Number 🕞					
A	B C D			E	F	G			
OrderDate	ProductName	Quantity	Unit Price	Unit Cost	Customer ID	SalesRep ID			
2 Monday January 04 2015	Mozzarella cheese	41.5	\$ 24.15	\$ 15.35	AC45	EX-107			
3 Monday January 04 2015	Romaine lettuce	90.65	\$ 15.06	\$ 14.04	AC45	EX-109			
4 Tuesday January 05 2015	Red onions	27.15	\$ 12.08	\$ 10.32	AC67	EX-104			
5 Wednesday, January 06, 2015	Romaine lettuce	67.25	\$ 15.16	\$ 10.54	AC96	EX-109			
6 Thursday, January 07, 2015	Black olives	79.26	\$ 12.18	\$ 9.56	AC44	EX-104			
7 Thursday, January 07, 2015	Romaine lettuce	46.52	\$ 15.24	\$ 11.54	AC32	EX-104			
8 Thursday, January 07, 2015	Romaine lettuce	52.5	\$ 15.26	\$ 11.12	AC84	EX-109			
9 Friday, January 08, 2015	Red onions	39.5	\$ 12.55	\$ 9.54	AC103	EX-104			
10 Saturday, January 09, 2015	Romaine lettuce	66.5	\$ 15.98	\$ 9.56	AC4	EX-104			
11 Sunday, January 10, 2015	Romaine lettuce	58.26	\$ 15.87	\$ 9.50	AC174	EX-104			
12 Sunday, January 10, 2015	Pineapple	40.15	\$ 33.54	\$ 22.12	AC45	EX-104			
13 Monday, January 11, 2015	Pineapple	71.56	\$ 33.56	\$ 22.05	AC4	EX-104			
14 Thursday, January 14, 2015	Romaine lettuce	18.25	\$ 15.00	\$ 10.25	AC174	EX-104			
15 Thursday, January 14, 2015	Romaine lettuce	28.15	\$ 15.26	\$ 10.54	AC44	EX-107			
16 Friday, January 15, 2015	Pepperoni	33.5	\$ 15.24	\$ 10.25	AC96	EX-109			
17 Friday, January 15, 2015	Parmesan cheese	14.26	\$ 8.05	\$ 4.00	AC96	EX-104			
18 Saturday, January 16, 2015	Parmesan cheese	72.15	\$ 8.50	\$ 4.00	AC103	EX-109			
19 Monday, January 18, 2015	Parmesan cheese	41.5	\$ 24.15	\$ 15.35	AC45	EX-107			
20 Monday, January 18, 2015	Romaine lettuce	90.65	\$ 15.06	\$ 14.04	AC45	EX-109			
21 Wednesday, January 20, 2015	Tomatoes	27.15	\$ 12.08	\$ 10.32	AC67	EX-104			
22 Thursday, January 21, 2015	Peppers	67.25	\$ 15.16	\$ 10.54	AC96	EX-109			
23 Thursday, January 21, 2015	Mozzarella cheese	79.26	\$ 12.18	\$ 9.56	AC44	EX-104			
24 Saturday, January 23, 2015	Black olives	46.52	\$ 15.24	\$ 11.54	AC32	EX-104			
25 Sunday, January 24, 2015	Mozzarella cheese	52.5	\$ 15.26	\$ 11.12	AC84	EX-109			
26 Tuesday, January 26, 2015	Romaine lettuce	39.5	\$ 12.55	\$ 9.54	AC103	EX-104			
27 Wednesday, January 27, 2015	Parmesan cheese	66.5	\$ 15.98	\$ 9.56	AC4	EX-104			
28 Thursday, January 28, 2015	Peppers	58.26	\$ 15.87	\$ 9.50	AC174	EX-104			
29 Thursday, January 28, 2015	Mozzarella cheese	40.15	\$ 33.54	\$ 22.12	AC45	EX-104			
30 Friday, January 29, 2015	Tomatoes	71.56	\$ 33.56	\$ 22.05	AC4	EX-104			
31 Friday, January 29, 2015	Peppers	18.25	\$ 15.00	\$ 10.25	AC174	EX-104			

FIGURE 3.13

Sales Information Sample

9	AVX 45_Solution (Compatibility Mode) - Microsoft Soci									
Fro	Hone Inset Page Layout Formulas Data Review View Hone Inset Page Layout Formulas Data Review View From From<									
M6 • (* /*)										
2	A	8	C	D	E	F	G	Н		J
1	OrderDate	ProductName	Quantity	Unit Price	Total Sales	Unit Cost	Total Cost	Profit	Customer	SalesRep
2	04-Jan-15	Mozzarella cheese	41	24	984	18	738	246	The Station	Debbie Fernandez
3	04-Jan-15	Romaine lettuce	90	15	1,350	14	1,260	90	The Station	Roberta Cross
4	05-Jan-15	Red onions	27	12	324	8	216	108	Bert's Bistro	Loraine Schultz
5	06-Jan 15	Romaine lettuce	67	15	1,005	14	938	67	Smoke House	Roberta Cross
6	07-Jan-15	Black olives	79	12	.948	6	474	474	Flagstaff House	Loraine Schultz
7	07-Jan-15	Romaine lettuce	46	15	690	14	644	46	Two Bitts	Loraine Schultz
8	07-Jan-15	Romaine lettuce	52	15	780	14	728	52	Pierce Arrow	Roberta Cross
9	08-Jan-15	Red onions	39	12	468	8	312	156	Mamm'a Pasta Palace	Loraine Schultz
10	09-Jan-15	Romaine lettuce	66	15	.990	14	924	66	The Dandelion	Loraine Schultz
11	10-Jan-15	Romaine lettuce	58	15	870	.14	812	58	Carmens	Loraine Schultz
12	10-Jan-15	Pineapple	40	33	1,320	28	1,120	200	The Station	Loraine Schultz
13	11-Jan-15	Pineapple	71	33	2,343	28	1,988	355	The Dandelion	Loraine Schultz
14	14-Jan-15	Romaine lettuce	18	15	270	14	252	18	Carmens	Loraine Schultz
15	14-Jan-15	Romaine lettuce	28	15	420	14	392	28	Flagstaff House	Debbie Fernandez
16	15-Jan-15	Pepperoni	33	53	1,749	35	1,155	594	Smoke House	Roberta Cross
17	15-Jan-15	Parmesan cheese	14	8	112	4	56	56	Smoke House	Loraine Schultz
18	16-Jan-15	Parmesan cheese	72	8	576	4	288	288	Mamm'a Pasta Palace	Roberta Cross
19	18-Jan-15	Parmesan cheese	10	8	80	4	40	40	Mamm'a Pasta Palace	Loraine Schultz
20	18-Jan-15	Romaine lettuce	42	15	630	14	588	42	Smoke House	Roberta Cross
21	20-Jan-15	Tomatoes	48	9	432	7	336	96	Two Bitts	Loraine Schultz
22	21-Jan-15	Peppers	29	21	609	12	348	261	The Dandelion	Roberta Cross
23	21-Jan-15	Mozzarella cheese	10	24	240	18	180	60	Mamm'a Pasta Palace	Debbie Fernandez
24	23-Jan-15	Black olives	98	12	1,176	6	588	588	Two Bitts	Roberta Cross
25	24-Jan-15	Mozzarella cheese	45	24	1,080	18	810	270	Carmens	Loraine Schultz
26	26-Jan-15	Romaine lettuce	58	15	870	14	812	58	Two Bitts	Loraine Schultz
27	27-Jan-15	Parmesan cheese	66	8	528	4	264	264	Flagstaff House	Loraine Schultz
28	28-Jan-15	Peppers	85	21	1,785	12	1.020	765	Pierce Arrow	Loraine Schultz
29	28-Jan-15	Mozzarella cheese	12	24	288	18	216	72	The Dandelion	Debbie Fernandez
30	29-Jan-15	Tomatoes	40	9	360	7	280	80	Pierce Arrow	Roberta Cross
	00 les 45	Deserve			405	40	00	45	Distant Baratti	Dub ette Orenne

FIGURE 3.14

Accounting Information Sample

POs faster than ever, reducing the number of workers in warehousing by 40 positions, decreasing inventories from 50 million to 15 million, and providing a single point of contact for each vendor. In addition, 55 million a year has been saved in contract consolidation.⁴

Figure 3.15 shows how an ERP system takes data from across the enterprise, consolidates and correlates the data, and generates enterprisewide organizational reports. Original ERP implementations promised to capture all information onto one true "enterprise" system, with the ability to touch all the business processes within the organization. Unfortunately, ERP solutions have fallen short of these promises, and typical implementations have penetrated only 15 to 20 percent of the organization. The issue ERP intends to solve is that knowledge within a majority of organizations currently resides in silos that are maintained by a select few, without the ability to be shared across the organization, causing inconsistency across business operations.



OPENING CASE STUDY QUESTIONS

- Evaluate how Apple can gain business intelligence through the implementation of a customer relationship management system.
- 2. Create an argument against the following statement: "Apple should not invest any resources to build a supply chain management system."
- 3. Why would a company like Apple invest in BPR?

Chapter Three Case: Got Milk? It's Good for You— Unless It Is Contaminated!

Dong Lizhong, a farmer and migrant worker dairy farmer in China, bet that being a dairy farmer was his golden ticket out of a factory job. Unfortunately, a contamination crisis 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 China's third-largest dairy producer. Tragically, 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 and Nutritional Engineering at China Agricultural University.

The local milk-collection station in Dong Lizhong's village has discontinued purchasing milk. Farmers are continuing to milk their cows, but they now drink the milk themselves or "feed the cabbages"—pour the milk in their cabbage fields. Dong estimates that he has already lost \$1,461, or a quarter of his annual income last year, in expenses to feed corn and fresh grass to his 20 dairy cows. "Unless someone starts buying milk, we're going to see a lot of cows being slaughtered very soon," states Dong.

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 milk production facilities in other parts of China. Not surprisingly, most of the quality problems in milk have been 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 (ADY), 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 up 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 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 like Sanlu, which do their own testing and grading. It now appears that unscrupulous middlemen commonly add melamine into the raw milk to increase protein levels in their milk samples, so their milk will be graded higher. Ingesting melamine can 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. Baby-Care did extensive testing of possible 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 rather than take the risk," he says.

Going to Jail

A Chinese court sentenced two of the primary 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.

Going to Starbucks

Starbucks Corp. has launched a new brand of coffee grown by farmers in China and says it hopes to bring the blend to stores all over the world. The Seattle-based company, which has been closing stores in the U.S. to cut costs, says its new blend is made in China's southwestern province of Yunnan, bordering Vietnam, Laos, and Myanmar. "Our intention is to work with the officials and the farmers in Yunnan province to bring Chinese coffee not (only) to China, but Chinese coffee to the world," Martin Coles, president of Starbucks Coffee International, told the Associated Press. "Ultimately I'd love to see our coffees from China featured on the shelves of every one of our stores in 49 countries around the world," he said. A launch date for foreign distribution hasn't been announced and will depend on how soon farmers can grow enough beans to ensure local and overseas supply.

The company has been working for three years with farmers and officials in the province before the launch, and the coffee will initially combine Arabica beans from Latin America and the Asia-Pacific with local Yunnan beans. But Coles said they hope to develop a source of superpremium Arabica coffee from the province, expanding it to new brand offerings in China, and then internationally. The new blend will be called "South of the Clouds," the meaning of Yunnan in Chinese.⁵

Questions

- 1. Explain why the supply chain can dramatically impact a company's base performance.
- 2. List all of the products that could possibly be affected by a problem in the U.S. milk supply chain.
- 3. How can a CRM system help communicate issues in the supply chain?
- 4. How could BPR help uncover issues in a company's supply chain?
- 5. What are the pros and cons for Starbucks of outsourcing the growing of its coffee beans to Chinese farmers?