

Managerial Accounting and the Business Environment

<< A LOOK AT THE PROLOGUE

Today's managers know that their world is constantly changing and becoming more complex. Before we get down to the basics, this Prologue will introduce you to a few of the revolutionary changes that today's managers face.

A LOOK AHEAD >>

Chapter 1 describes the work performed by managers, stresses the need for managerial accounting information, contrasts managerial and financial accounting, and defines many of the cost terms that will be used throughout the textbook. You will begin to build your base there.

PROLOGUE OUTLINE

Globalization

Strategy

Organizational Structure

- Decentralization
- The Functional View of Organizations

Process Management

- Lean Production
- The Theory of Constraints (TOC)
- Six Sigma

The Importance of Ethics in Business

- Code of Conduct for Management Accountants
- Company Codes of Conduct
- Codes of Conduct on the International Level

Corporate Governance

- The Sarbanes-Oxley Act of 2002

Enterprise Risk Management

- Identifying and Controlling Business Risks

Corporate Social Responsibility

The Certified Management Accountant (CMA)

Throughout this book you will study how management accounting functions within organizations. However, before embarking on the study of management accounting, you need to develop an appreciation for the larger business environment within which it operates. The Prologue is divided into nine sections: (1) globalization, (2) strategy, (3) organizational structure, (4) process management, (5) the importance of ethics in business, (6) corporate governance, (7) enterprise risk management, (8) corporate social responsibility, and (9) the Certified Management Accountant (CMA). Other business classes provide greater detail on many of these topics. Nonetheless, a broad discussion of these topics is useful for placing management accounting in its proper context.

GLOBALIZATION

The world has become much more intertwined over the last 20 years. Reductions in tariffs, quotas, and other barriers to free trade; improvements in global transportation systems; explosive expansion in Internet usage; and increasing sophistication in international markets have created a truly global marketplace. Exhibit P-1 illustrates this tremendous growth in international trade from the standpoint of the United States and some of its key trading partners. Panel A of the exhibit shows the dollar value of imports (stated in billions of dollars) into the United States from six countries; Panel B shows the dollar value of exports from the United States to those same six countries. As you can see, the increase in import and export activity from 1995 to 2007 was huge. In particular, trade with China expanded enormously as did trade with Mexico and Canada, which participate in the North American Free Trade Agreement (NAFTA).

In a global marketplace, a company that has been very successful in its local market may suddenly find itself facing competition from halfway around the globe. For example, in the 1980s American automobile manufacturers began losing market share to Japanese competitors who offered American consumers higher quality cars at lower prices. For consumers, heightened international competition promises a greater variety of goods and services, at higher quality and lower prices. However, heightened international competition threatens companies that may have been quite profitable in their own local markets.

Although globalization leads to greater competition, it also means greater access to new markets, customers, and workers. For example, the emerging markets of China, India, Russia, and Brazil contain more than 2.5 billion potential customers and workers.¹ Many companies such as **FedEx**, **McDonald's**, and **Nike** are actively seeking to grow their sales by investing in emerging markets. In addition, the movement of jobs from the United States and Western Europe to other parts of the world has been notable in recent years. For example, one study estimates that by the end of the decade more than 825,000 financial services and high-tech jobs will transfer from Western Europe to less expensive labor markets such as India, China, Africa, Eastern Europe, and Latin America.²

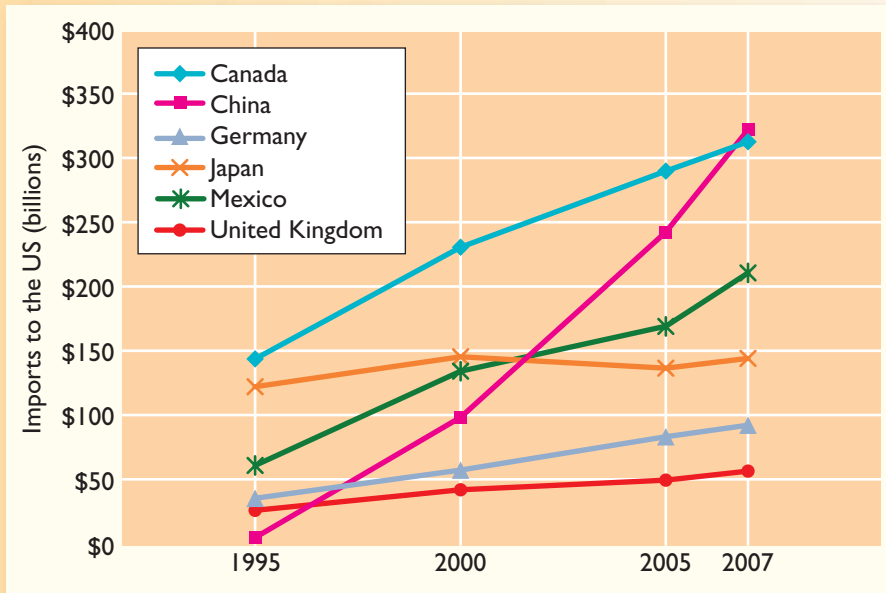
The Internet fuels globalization by providing companies with greater access to geographically dispersed customers, employees, and suppliers. While the number of Internet users continues to grow, as of 2008, more than 78% of the world's population was still not connected to the Internet. This suggests that the Internet's impact on global business has yet to fully develop.

¹*The Economist: Pocket World in Figures 2004*, Profile Books Ltd., London, U.K.

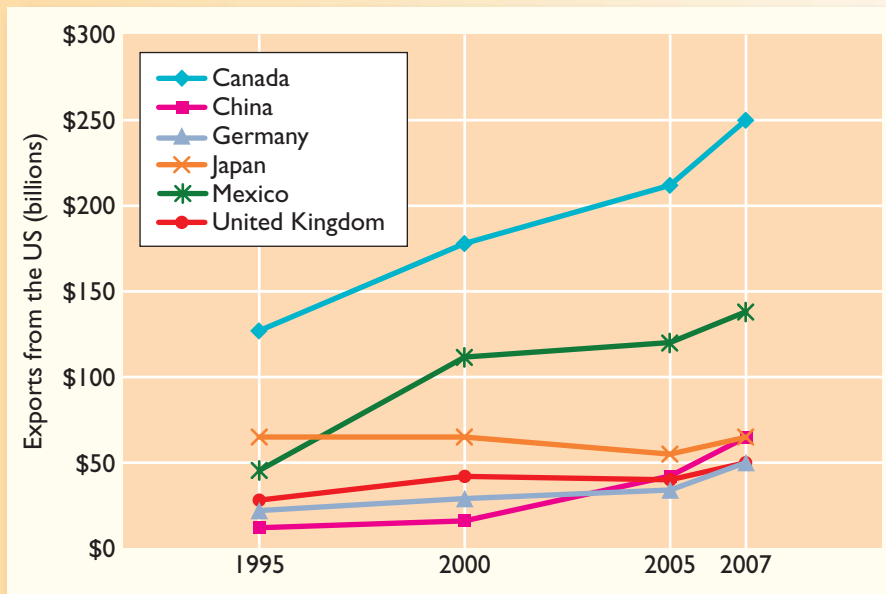
²"Job Exports: Europe's Turn," *BusinessWeek*, April 19, 2004, p. 50.

EXHIBIT P-1 United States Global Trade Activity (in billions of U.S. dollars)

Panel A: Imports to the United States (billions of dollars)



Panel B: Exports from the United States (billions of dollars)



Source: U.S. Census Bureau, Foreign Trade Division, Data Dissemination Branch, Washington, D.C. 20233. www.census.gov/foreign-trade/balance.

IN BUSINESS

The Implications of Globalization



International competition goes hand-in-hand with globalization. China's entrance into the global marketplace has highlighted this stark reality for many U.S. companies. For example, from 2000 to 2003, China's wooden bedroom furniture exports to the United States increased by more than 233% to a total of \$1.2 billion. During this same time, the number of workers employed by U.S. furniture manufacturers dropped by about a third, or a total of 35,000 workers.

However, globalization means more than international competition. It brings opportunities for companies to enter new markets. **FedEx** has pushed hard to be an important player in the emerging Asian cargo market. FedEx makes 622 weekly flights to and from Asian markets, including service to 224 Chinese cities. FedEx currently has 39% of the U.S.–China express market and it plans to pursue continuous growth in that region of the world.

Sources: Ted Fishman, "How China Will Change Your Business," *Inc.* magazine, March 2005, pp. 70–84; Matthew Boyle, "Why FedEx Is Flying High," *Fortune*, November 1, 2004, pp. 145–150.

STRATEGY

Even more than in the past, companies that now face global competition must have a viable *strategy* for succeeding in the marketplace. A **strategy** is a "game plan" that enables a company to attract customers by distinguishing itself from competitors. The focal point of a company's strategy should be its target customers. A company can only succeed if it creates a reason for customers to choose it over a competitor. These reasons, or what are more formally called *customer value propositions*, are the essence of strategy.

Customer value propositions tend to fall into three broad categories—*customer intimacy*, *operational excellence*, and *product leadership*. Companies that adopt a *customer intimacy* strategy are in essence saying to their target customers, "You should choose us because we understand and respond to your individual needs better than our competitors." **Ritz-Carlton**, **Nordstrom**, and **Starbucks** rely primarily on a customer intimacy value proposition for their success. Companies that pursue the second customer value proposition, *operational excellence*, are saying to their target customers, "You should choose us because we can deliver products and services faster, more conveniently, and at a lower price than our competitors." **Southwest Airlines**, **Wal-Mart**, and **The Vanguard Group** are examples of companies that succeed first and foremost because of their operational excellence. Companies pursuing the third customer value proposition, *product leadership*, are saying to their target customers, "You should choose us because we offer higher quality products than our competitors." **BMW**, **Cisco Systems**, and **W.L. Gore** (the creator of GORE-TEX[®] fabrics) are examples of companies that succeed because of their product leadership. Although one company may offer its customers a combination of these three customer value propositions, one usually outweighs the others in terms of importance.³

Next we turn our attention to how businesses create organizational structures to help accomplish their strategic goals.

³These three customer value propositions were defined by Michael Treacy and Fred Wiersema in "Customer Intimacy and Other Value Disciplines," *Harvard Business Review* 71, no. 1, pp. 84–93.

Operational Excellence Comes to the Diamond Business

IN BUSINESS

An average engagement ring purchased from **Blue Nile**, an Internet diamond retailer, costs \$5,200 compared to \$9,500 if purchased from **Tiffany & Co.**, a bricks-and-mortar retailer. Why is there such a difference? There are three reasons. First, Blue Nile allows wholesalers to sell directly to customers using its website. In the brick-and-mortar scenario, diamonds change hands as many as seven times before being sold to a customer—passing through various cutters, wholesalers, brokers, and retailers, each of whom demands a profit. Second, Blue Nile carries very little inventory and incurs negligible overhead. Diamonds are shipped directly from wholesalers after they have been purchased by a customer—no retail outlets are necessary. Bricks-and-mortar retailers tie up large amounts of money paying for the inventory and employees on their showroom floors. Third, Blue Nile generates a high volume of transactions by selling to customers anywhere in the world; therefore, it can accept a lower profit margin per transaction than local retailers, who complete fewer transactions with customers within a limited geographic radius.

Perhaps you are wondering why customers are willing to trust an Internet retailer when buying an expensive item such as a diamond. The answer is that all of the diamonds sold through Blue Nile's website are independently certified by the Gemological Institute of America in four categories—carat count, type of cut, color, and clarity. In essence, Blue Nile has turned diamonds into a commodity and is using an operational excellence customer value proposition to generate annual sales of \$154 million.

Source: Victoria Murphy, "Romance Killer," *Forbes*, November 29, 2004, pp. 97–101.



ORGANIZATIONAL STRUCTURE

Our discussion of organizational structure is divided into two parts. First, we highlight the fact that presidents of all but the smallest companies cannot execute their strategies alone. They must seek the help of their employees by empowering them to make decisions—they must *decentralize*. Next, we describe the most common formal decentralized organizational structure in use today—the functional structure.

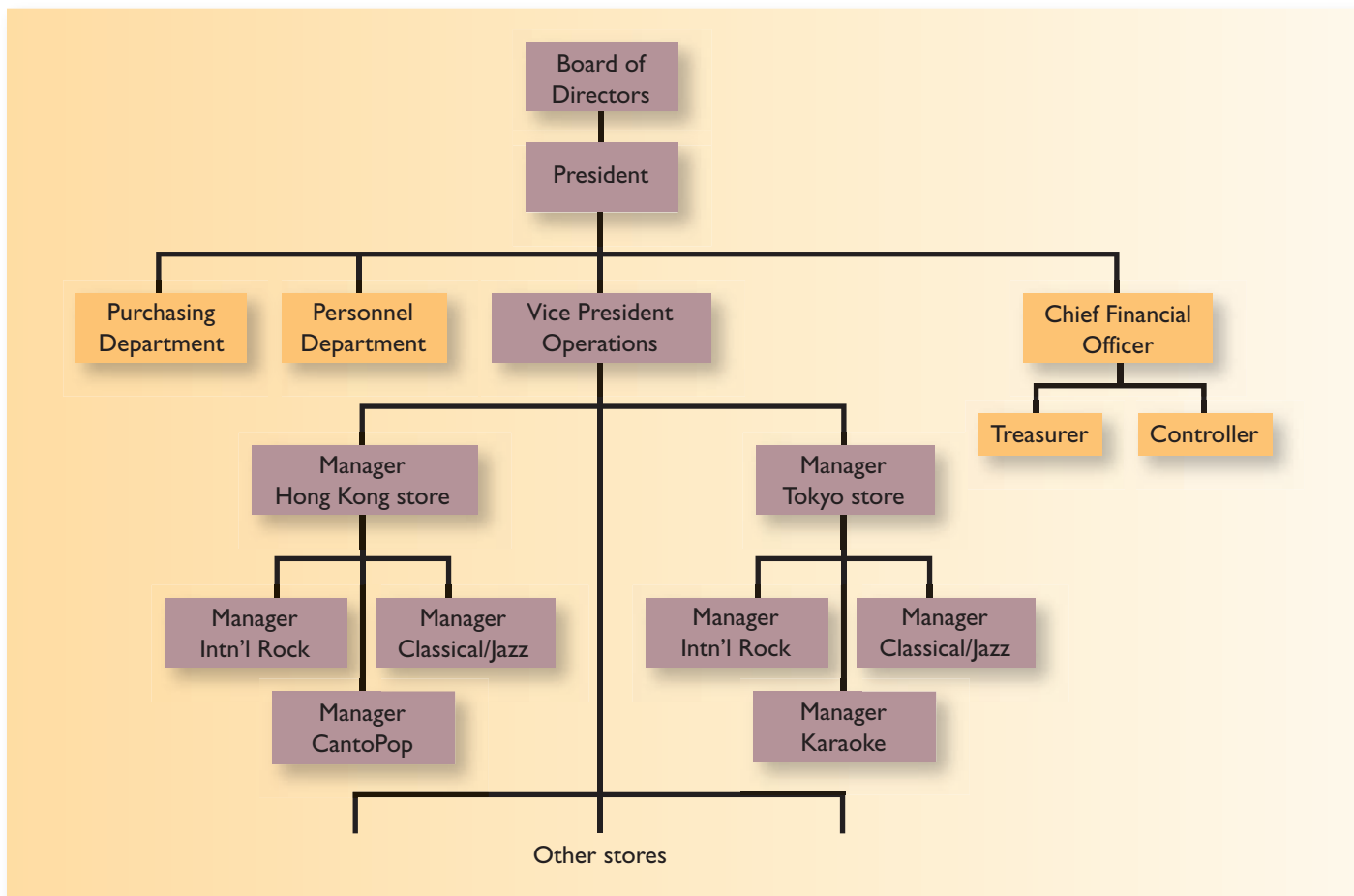
Decentralization

Decentralization is the delegation of decision-making authority throughout an organization by giving managers the authority to make decisions relating to their area of responsibility. Some organizations are more decentralized than others. For example, consider Good Vibrations, an international retailer of music CDs with shops in major cities scattered across the Pacific Rim. Because of Good Vibrations' geographic dispersion and the peculiarities of local markets, the company is highly decentralized.

Good Vibrations' president (often synonymous with the term *chief executive officer*, or *CEO*) sets the broad strategy for the company and makes major strategic decisions such as opening stores in new markets; however, much of the remaining decision-making authority is delegated to managers at various levels throughout the organization. Each of the company's numerous retail stores has a store manager as well as a separate manager for each music category such as international rock and classical/jazz. In addition, the company has support departments such as a central Purchasing Department and a Personnel Department.

The Functional View of Organizations

Exhibit P-2 shows Good Vibrations' organizational structure in the form of an **organization chart**. The purpose of an organization chart is to show how responsibility is

EXHIBIT P-2 Organization Chart, Good Vibrations, Inc.

divided among managers and to show formal lines of reporting and communication, or *chain of command*. Each box depicts an area of management responsibility, and the lines between the boxes show the lines of formal authority between managers. The chart tells us, for example, that the store managers are responsible to the operations vice president. In turn, the operations vice president is responsible to the company president, who in turn is responsible to the board of directors. Following the lines of authority and communication on the organization chart, we can see that the manager of the Hong Kong store would ordinarily report to the operations vice president rather than directly to the president of the company.

An organization chart also depicts *line* and *staff* positions in an organization. A person in a **line** position is *directly* involved in achieving the basic objectives of the organization. A person in a **staff** position, by contrast, is only *indirectly* involved in achieving those basic objectives. Staff positions provide assistance to line positions or other parts of the organization, but they do not have direct authority over line positions. Refer again to the organization chart in Exhibit P-2. Because the basic objective of Good Vibrations is to sell recorded music at a profit, those managers whose areas of responsibility are directly related to selling music occupy line positions. These positions, which are shown in a darker color in the exhibit, include the managers of the various music departments in each store, the store managers, the operations vice president, the president, and the board of directors.

By contrast, the managers of the central Purchasing Department and the Personnel Department occupy staff positions, because their departments support other departments rather than carry out the company's basic missions. The chief financial officer is a member of the top management team who also occupies a staff position. The **chief financial officer (CFO)** is responsible for providing timely and relevant data to support planning

and control activities and for preparing financial statements for external users. In the United States, a manager known as the **controller** often runs the accounting department and reports directly to the CFO. More than ever, the accountants who work under the CFO are focusing their efforts on supporting the needs of co-workers in line positions as one report concluded:

Growing numbers of management accountants spend the bulk of their time as internal consultants or business analysts within their companies. Technological advances have liberated them from the mechanical aspects of accounting. They spend less time preparing standardized reports and more time analyzing and interpreting information. Many have moved from the isolation of accounting departments to be physically positioned in the operating departments with which they work. Management accountants work on cross-functional teams, have extensive face-to-face communications with people throughout their organizations, and are actively involved in decision making. . . . They are trusted advisors.⁴

What Does it Take?

IN BUSINESS



A controller at **McDonald's** describes the characteristics needed by its most successful management accountants as follows:

It's a given that you know your accounting cold. You're expected to know the tax implications of proposed courses of action. You need to understand cost flows and information flows. You have to be very comfortable with technology and be an expert in the company's business and accounting software. You have to be a generalist. You need a working knowledge of what people do in marketing, engineering, human resources, and other departments. You need to understand how the processes, departments, and functions work together to run the business. You'll be expected to contribute ideas at planning meetings, so you have to see the big picture, keep a focus on the bottom line, and think strategically.

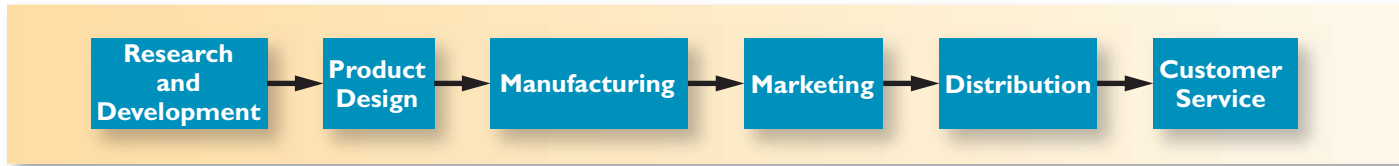
Source: Gary Siegel, James E. Sorensen, and Sandra B. Richtermeier, "Becoming a Business Partner: Part 2," *Strategic Finance*, October 2003, pp. 37–41. Used with permission from the Institute of Management Accountants (IMA), Montvale, NJ, USA, www.imanet.org.

PROCESS MANAGEMENT

As global competition intensifies, companies are realizing that they must complement the functional view of their operations with a cross-functional orientation that seeks to improve the *business processes* that deliver customer value. A **business process** is a series of steps that are followed in order to carry out some task in a business. It is quite common for the linked set of steps comprising a business process to span departmental boundaries. The term *value chain* is often used when we look at how the functional departments of an organization interact with one another to form business processes. A **value chain**, as shown in Exhibit P-3, consists of the major business functions that add value to a company's products and services. The customer's needs are most effectively met by coordinating the business processes that span these functions.

This section discusses three different approaches to managing and improving business processes—Lean Production, the Theory of Constraints (TOC), and Six Sigma. Although each is unique in certain respects, they all share the common theme of focusing on managing and improving business processes.

⁴Gary Siegel Organization, *Counting More, Counting Less: Transformations in the Management Accounting Profession, The 1999 Practice Analysis of Management Accounting*, Institute of Management Accountants, Montvale, NJ, August 1999, p. 3.

EXHIBIT P-3 Business Functions Making Up the Value Chain

Lean Production

Traditionally, managers in manufacturing companies have sought to maximize production so as to spread the costs of investments in equipment and other assets over as many units as possible. In addition, managers have traditionally felt that an important part of their jobs was to keep everyone busy on the theory that idleness wastes money. These traditional views, often aided and abetted by traditional management accounting practices, resulted in a number of practices that have come under criticism in recent years.

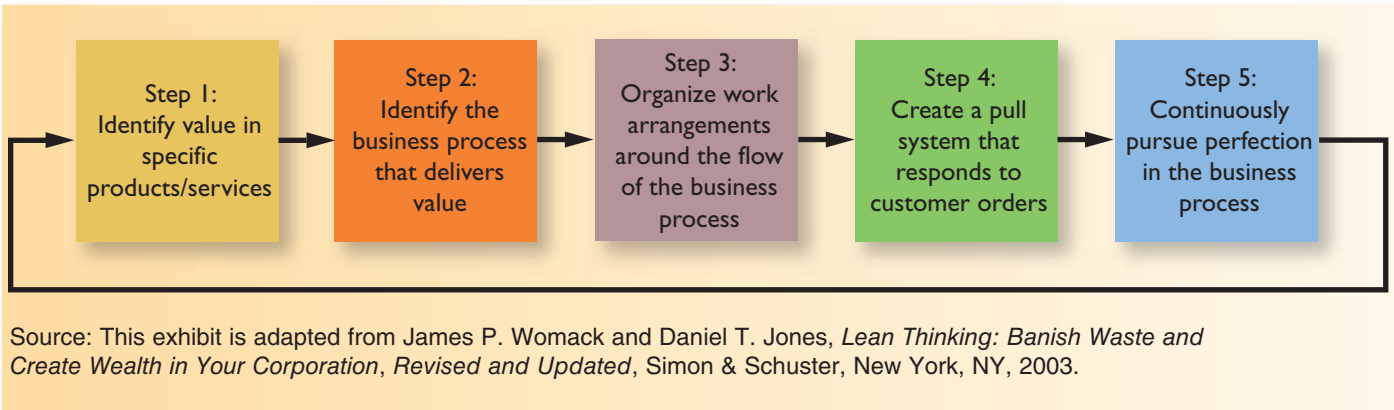
In a traditional manufacturing company, work is *pushed* through the system in order to produce as much as possible and to keep everyone busy—even if products cannot be immediately sold. This almost inevitably results in large inventories of *raw materials*, *work in process*, and *finished goods*. **Raw materials** are the materials that are used to make a product. **Work in process** inventories consist of units of product that are only partially complete and will require further work before they are ready for sale to a customer. **Finished goods** inventories consist of units of product that have been completed but have not yet been sold to customers.

The *push* process in traditional manufacturing starts by accumulating large amounts of raw material inventories from suppliers so that operations can proceed smoothly even if unanticipated disruptions occur. Next, enough materials are released to workstations to keep everyone busy. When a workstation completes its tasks, the partially completed goods (i.e., work in process) are “pushed” forward to the next workstation regardless of whether that workstation is ready to receive them. The result is that partially completed goods stack up, waiting for the next workstation to become available. They may not be completed for days, weeks, or even months. Additionally, when the units are finally completed, customers may or may not want them. If finished goods are produced faster than the market will absorb, the result is bloated finished goods inventories.

Although some may argue that maintaining large amounts of inventory has its benefits, it clearly has its costs. In addition to tying up money, maintaining inventories encourages inefficient and sloppy work, results in too many defects, and dramatically increases the amount of time required to complete a product. For example, when partially completed goods are stored for long periods of time before being processed by the next workstation, defects introduced by the preceding workstation go unnoticed. If a machine is out of calibration or incorrect procedures are being followed, many defective units will be produced before the problem is discovered. And when the defects are finally discovered, it may be very difficult to track down the source of the problem. In addition, units may be obsolete or out of fashion by the time they are finally completed.

Large inventories of partially completed goods create many other problems that are best discussed in more advanced courses. These problems are not obvious—if they were, companies would have long ago reduced their inventories. Managers at **Toyota** are credited with the insight that large inventories often create many more problems than they solve. Toyota pioneered what is known today as *Lean Production*.

The Lean Thinking Model The **lean thinking model** is a five-step management approach that organizes resources such as people and machines around the flow of business processes and that pulls units through these processes in response to customer orders. The result is lower inventories, fewer defects, less wasted effort, and quicker customer response times. Exhibit P-4 depicts the five stages of the lean thinking model.

EXHIBIT P-4 The Lean Thinking Model

The first step is to identify the value to customers in specific products and services. The second step is to identify the *business process* that delivers this value to customers.⁵ As discussed earlier, the linked set of steps comprising a business process typically span the departmental boundaries that are specified in an organization chart. The third step is to organize work arrangements around the flow of the business process. This is often accomplished by creating what is known as a *manufacturing cell*. The cellular approach takes employees and equipment from departments that were previously separated from one another and places them side-by-side in a work space called a *cell*. The equipment within the cell is aligned in a sequential manner that follows the steps of the business process. Each employee is trained to perform all the steps within his or her own manufacturing cell.

The fourth step in the lean thinking model is to create a pull system where production is not initiated until a customer has ordered a product. Inventories are reduced to a minimum by purchasing raw materials and producing units only as needed to meet customer demand. Under ideal conditions, a company operating a pull system would purchase only enough materials each day to meet that day's needs. Moreover, the company would have no goods still in process at the end of the day, and all goods completed during the day would be shipped immediately to customers. As this sequence suggests, work takes place "just-in-time" in the sense that raw materials are received by each manufacturing cell just in time to go into production, manufactured parts are completed just in time to be assembled into products, and products are completed just in time to be shipped to customers. This facet of the lean thinking model is often called **just-in-time** production, or **JIT** for short.

The change from *push* to *pull* production is more profound than it may appear. Among other things, producing only in response to a customer order means that workers will be idle whenever demand falls below the company's production capacity. This can be an extremely difficult cultural change for an organization. It challenges the core beliefs of many managers and raises anxieties in workers who have become accustomed to being kept busy all of the time.

The fifth step of the lean thinking model is to continuously pursue perfection in the business process. In a traditional company, parts and materials are inspected for defects when they are received from suppliers, and assembled units are inspected as they progress along the production line. In a Lean Production system, the company's suppliers are responsible for the quality of incoming parts and materials. And instead of using quality inspectors, the company's production workers are directly responsible for spotting defective units. A worker who discovers a defect immediately stops the flow of production. Supervisors and other workers go to the cell to determine the cause of the problem and correct it before any further defective units are produced. This procedure ensures that problems are quickly identified and corrected.

⁵The Lean Production literature uses the term *value stream* rather than *business process*.

Tesco, a grocery retailer in Britain, used lean thinking to improve its replenishment process for cola products. Tesco and **Britvic** (its cola supplier) traced the cola delivery process from “the checkout counter of the grocery store through Tesco’s regional distribution center (RDC), Britvic’s RDC, the warehouse at the Britvic bottling plant, the filling lines for cola destined for Tesco, and the warehouse of Britvic’s can supplier.” Each step of the process revealed enormous waste. Tesco implemented numerous changes such as electronically linking its point-of-sale data from its grocery stores to its RDC. This change let customers pace the replenishment process and it helped increase store delivery frequency to every few hours around the clock. Britvic also began delivering cola to Tesco’s RDC in wheeled dollies that could be rolled directly into delivery trucks and then to point-of-sale locations in grocery stores.

These changes reduced the total product “touches” from 150 to 50, thereby cutting labor costs. The elapsed time from the supplier’s filling line to the customer’s cola purchase dropped from 20 days to 5 days. The number of inventory stocking locations declined from five to two, and the supplier’s distribution center was eliminated.

Source: Ghostwriter, “Teaching the Big Box New Tricks,” *Fortune*, November 14, 2005, pp. 208B–208F.

The lean thinking model can also be used to improve the business processes that link companies together. The term **supply chain management** is commonly used to refer to the coordination of business processes across companies to better serve end consumers. For example **Procter & Gamble** and **Costco** coordinate their business processes to ensure that Procter & Gamble’s products, such as Bounty, Tide, and Crest, are on Costco’s shelves when customers want them. Both Procter & Gamble and Costco realize that their mutual success depends on working together to ensure Procter & Gamble’s products are available to Costco’s customers.

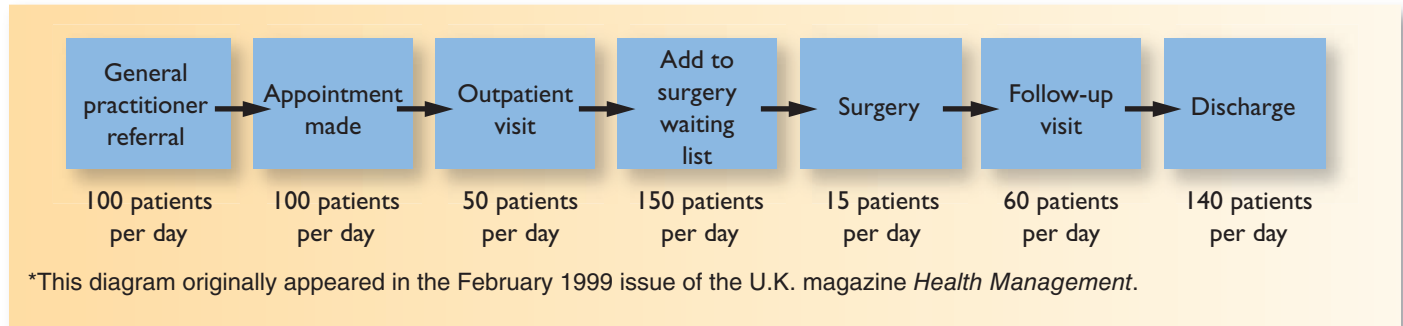


The Theory of Constraints (TOC)

A **constraint** is anything that prevents you from getting more of what you want. Every individual and every organization faces at least one constraint, so it is not difficult to find examples of constraints. You may not have enough time to study thoroughly for every subject *and* to go out with your friends on the weekend, so time is your constraint. **United Airlines** has only a limited number of loading gates available at its busy Chicago O’Hare hub, so its constraint is loading gates. **Vail Resorts** has only a limited amount of land to develop as homesites and commercial lots at its ski areas, so its constraint is land.

The **Theory of Constraints (TOC)** is based on the insight that effectively managing the constraint is a key to success. As an example, long waiting periods for surgery are a chronic problem in the **National Health Service (NHS)**, the government-funded provider of health care in the United Kingdom. The diagram in Exhibit P-5 illustrates a simplified version of the steps followed by a surgery patient. The number of patients who can be processed through each step in a day is indicated in the exhibit. For example, appointments for outpatient visits can be made for as many as 100 referrals from general practitioners in a day.

The constraint, or *bottleneck*, in the system is determined by the step that has the smallest capacity—in this case surgery. The total number of patients processed through the entire system cannot exceed 15 per day—the maximum number of patients who can be treated in surgery. No matter how hard managers, doctors, and nurses try to improve the processing rate elsewhere in the system, they will never succeed in driving down wait lists until the capacity of surgery is increased. In fact, improvements elsewhere in the system—particularly before the constraint—are likely to result in even longer waiting times and more frustrated patients and health care providers. Thus, to be effective, improvement efforts must be focused on the constraint. A business process, such as the

EXHIBIT P-5 Processing Surgery Patients at an NHS Facility (simplified)*

process for serving surgery patients, is like a chain. If you want to increase the strength of a chain, what is the most effective way to do this? Should you concentrate your efforts on strengthening the strongest link, all the links, or the weakest link? Clearly, focusing your effort on the weakest link will bring the biggest benefit.

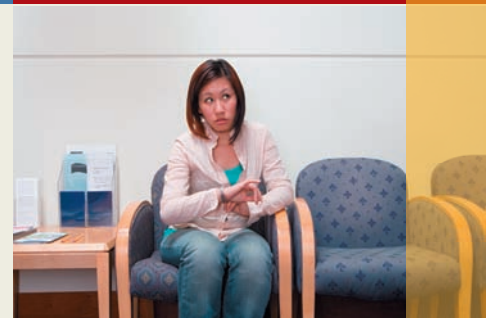
The procedure to follow to strengthen the chain is clear. First, identify the weakest link, which is the constraint. In the case of the NHS, the constraint is surgery. Second, do not place a greater strain on the system than the weakest link can handle—if you do, the chain will break. In the case of the NHS, more referrals than surgery can accommodate lead to unacceptably long waiting lists. Third, concentrate improvement efforts on strengthening the weakest link. In the case of the NHS, this means finding ways to increase the number of surgeries that can be performed in a day. Fourth, if the improvement efforts are successful, eventually the weakest link will improve to the point where it is no longer the weakest link. At that point, the new weakest link (i.e., the new constraint) must be identified, and improvement efforts must be shifted over to that link. This simple sequential process provides a powerful strategy for optimizing business processes.

Watch Where You Cut Costs

At one hospital, the emergency room became so backlogged that its doors were closed to the public and patients were turned away for over 36 hours in the course of a single month. It turned out, after investigation, that the constraint was not the emergency room itself; it was the housekeeping staff. To cut costs, managers at the hospital had laid off housekeeping workers. This created a bottleneck in the emergency room because rooms were not being cleaned as quickly as the emergency room staff could process new patients. Thus, laying off some of the lowest paid workers at the hospital had the effect of forcing the hospital to idle some of its most highly paid staff and most expensive equipment!

Source: Tracey Burton-Houle, "AGI Continues to Steadily Make Advances with the Adaptation of TOC into Healthcare," www.goldratt.com/toctquarterly/august2002.htm.

IN BUSINESS



Six Sigma

Six Sigma is a process improvement method that relies on customer feedback and fact-based data gathering and analysis techniques to drive process improvement. **Motorola** and **General Electric** are closely identified with the Six Sigma movement. Technically, the term Six Sigma refers to a process that generates no more than 3.4 defects per million opportunities. Because this rate of defects is so low, Six Sigma is sometimes associated with the term *zero defects*.

The most common framework used to guide Six Sigma process improvement efforts is known as DMAIC (pronounced: du-may-ik), which stands for Define, Measure, Analyze,

EXHIBIT P-6

The Six Sigma DMAIC Framework

Stage	Goals
Define	Establish the scope and purpose of the project. Diagram the flow of the current process. Establish the customer's requirements for the process.
Measure	Gather baseline performance data related to the existing process. Narrow the scope of the project to the most important problems.
Analyze	Identify the root cause(s) of the problems identified in the Measure stage.
Improve	Develop, evaluate, and implement solutions to the problems.
Control	Ensure that problems remain fixed. Seek to improve the new methods over time.

Source: Peter C. Brewer and Nancy A. Bagranoff, "Near Zero-Defect Accounting with Six Sigma," *Journal of Corporate Accounting and Finance*, January–February 2004, pp. 67–72.

Improve, and Control. As summarized in Exhibit P-6, the Define stage of the process focuses on defining the scope and purpose of the project, the flow of the current process, and the customer's requirements. The Measure stage is used to gather baseline performance data concerning the existing process and to narrow the scope of the project to the most important problems. The Analyze stage focuses on identifying the root causes of the problems that were identified during the Measure stage. The Analyze stage often reveals that the process includes many *activities that do not add value to the product or service*. Activities that customers are not willing to pay for because they add no value are known as **non-value-added activities** and such activities should be eliminated wherever possible. During the Improve stage potential solutions are developed, evaluated, and implemented to eliminate non-value-added activities and any other problems uncovered in the Analyze stage. Finally, the objective in the Control stage is to ensure that the problems remain fixed and that the new methods are improved over time.

Managers must be very careful when attempting to translate Six Sigma improvements into financial benefits. There are only two ways to increase profits—decrease costs or increase sales. Cutting costs may seem easy—lay off workers who are no longer needed because of improvements such as eliminating non-value-added activities. However, if this approach is taken, employees quickly get the message that process improvements lead to job losses and they will understandably resist further improvement efforts. If improvement is to continue, employees must be convinced that the end result of improvement will be more secure rather than less secure jobs. This can only happen if management uses tools such as Six Sigma to increase sales rather than to cut the workforce.

THE IMPORTANCE OF ETHICS IN BUSINESS

A series of major financial scandals involving **Enron**, **Tyco International**, **HealthSouth**, **Adelphia Communications**, **WorldCom**, **Global Crossing**, **Rite Aid**, and other companies have raised deep concerns about ethics in business. The managers and companies involved in these scandals have suffered mightily—from huge fines to jail terms and financial collapse. And the recognition that ethical behavior is absolutely essential for the functioning of our economy has led to numerous regulatory changes—some of which we will discuss in a later section on corporate governance. But why is ethical behavior so important? This is not a matter of just being "nice." Ethical behavior is the lubricant that keeps the economy running. Without that lubricant, the economy would operate much less efficiently—less would be available to consumers, quality would be lower, and prices would be higher.

Take a very simple example. Suppose that dishonest farmers, distributors, and grocers knowingly tried to sell wormy apples as good apples and that grocers refused to take back wormy apples. What would you do as a consumer of apples? Go to another grocer? But what if all grocers acted this way? What would you do then? You would probably either stop buying apples or you would spend a lot of time inspecting apples before buying them. So would everyone else. Now notice what has happened. Because farmers, distributors, and grocers could not be trusted, sales of apples would plummet and those who did buy apples would waste a lot of time inspecting them minutely. Everyone loses. Farmers, distributors, and grocers make less money; consumers enjoy fewer apples; and consumers waste time looking for worms. In other words, without fundamental trust in the integrity of businesses, the economy would operate much less efficiently. James Surowiecki summed up this point as follows:

[F]lourishing economies require a healthy level of trust in the reliability and fairness of everyday transactions. If you assumed every potential deal was a rip-off or that the products you were buying were probably going to be lemons, then very little business would get done. More important, the costs of the transactions that did take place would be exorbitant because you'd have to do enormous work to investigate each deal and you'd have to rely on the threat of legal action to enforce every contract. For an economy to prosper, what's needed is not a Pollyannaish faith that everyone else has your best interests at heart—"caveat emptor" [buyer beware] remains an important truth—but a basic confidence in the promises and commitments that people make about their products and services.⁶

No Trust—No Enron

IN BUSINESS

Jonathan Karpoff reports on a particularly important, but often overlooked, aspect of the **Enron** debacle:

As we know, some of Enron's reported profits in the late 1990s were pure accounting fiction. But the firm also had legitimate businesses and actual assets. Enron's most important businesses involved buying and selling electricity and other forms of energy. [Using Enron as an intermediary, utilities that needed power bought energy from producers with surplus generating capacity.] Now when an electric utility contracts to buy electricity, the managers of the utility want to make darned sure that the seller will deliver the electrons exactly as agreed, at the contracted price. There is no room for fudging on this because the consequences of not having the electricity when consumers switch on their lights are dire. . . .

This means that the firms with whom Enron was trading electricity . . . had to trust Enron. And trust Enron they did, to the tune of billions of dollars of trades every year. But in October 2001, when Enron announced that its previous financial statements overstated the firm's profits, it undermined such trust. As everyone recognizes, the announcement caused investors to lower their valuations of the firm. Less understood, however, was the more important impact of the announcement; by revealing some of its reported earnings to be a house of cards, Enron sabotaged its reputation. The effect was to undermine even its legitimate and (previously) profitable operations that relied on its trustworthiness.

This is why Enron melted down so fast. Its core businesses relied on the firm's reputation. When that reputation was wounded, energy traders took their business elsewhere. . . .

Energy traders lost their faith in Enron, but what if no other company could be trusted to deliver on its commitments to provide electricity as contracted? In that case, energy traders would have nowhere to turn. As a direct result, energy producers with surplus generating capacity would be unable to

⁶James Surowiecki, "A Virtuous Cycle," *Forbes*, December 23, 2002, pp. 248–256. Reprinted by Permission of Forbes Magazine ©2006 Forbes Inc.

(continued)

sell their surplus power. As a consequence, their existing customers would have to pay higher prices. And utilities that did not have sufficient capacity to meet demand on their own would have to build more capacity, which would also mean higher prices for their consumers. So a general lack of trust in companies such as Enron would ultimately result in overinvestment in energy-generating capacity and higher energy prices for consumers.

Source: Jonathan M. Karpoff, "Regulation vs. Reputation in Preventing Corporate Fraud," *UW Business*, Spring 2002, pp. 28–30.

Thus, for the good of everyone—including profit-making companies—it is vitally important that business be conducted within an ethical framework that builds and sustains trust.

The Institute of Management Accountants (IMA) of the United States has adopted an ethical code called the *Statement of Ethical Professional Practice* that describes in some detail the ethical responsibilities of management accountants. Even though the standards were specifically developed for management accountants, they have much broader application.

Code of Conduct for Management Accountants

The IMA's Statement of Ethical Professional Practice consists of two parts that are presented in full in Exhibit P-7. The first part provides general guidelines for ethical behavior. In a nutshell, a management accountant has ethical responsibilities in four broad areas: first, to maintain a high level of professional competence; second, to treat sensitive matters with confidentiality; third, to maintain personal integrity; and fourth, to disclose information in a credible fashion. The second part of the standards specifies what should be done if an individual finds evidence of ethical misconduct. We recommend that you stop at this point and read all of Exhibit P-7.

The ethical standards provide sound, practical advice for management accountants and managers. Most of the rules in the ethical standards are motivated by a very practical consideration—if these rules were not generally followed in business, then the economy and all of us would suffer. Consider the following specific examples of the consequences of not abiding by the standards:

- Suppose employees could not be trusted with confidential information. Then top managers would be reluctant to distribute such information within the company and, as a result, decisions would be based on incomplete information and operations would deteriorate.
- Suppose employees accepted bribes from suppliers. Then contracts would tend to go to suppliers who pay the highest bribes rather than to the most competent suppliers. Would you like to fly in aircraft whose wings were made by the subcontractor who paid the highest bribe? Would you fly as often? What would happen to the airline industry if its safety record deteriorated due to shoddy workmanship on contracted parts and assemblies?
- Suppose the presidents of companies routinely lied in their annual reports and financial statements. If investors could not rely on the basic integrity of a company's financial statements, they would have little basis for making informed decisions. Suspecting the worst, rational investors would pay less for securities issued by companies and might not be willing to invest at all. As a consequence, companies would have less money for productive investments—leading to slower economic growth, fewer goods and services, and higher prices.

Members of IMA shall behave ethically. A commitment to ethical professional practice includes: overarching principles that express our values, and standards that guide our conduct.

PRINCIPLES

IMA's overarching ethical principles include: Honesty, Fairness, Objectivity, and Responsibility. Members shall act in accordance with these principles and shall encourage others within their organizations to adhere to them.

STANDARDS

A member's failure to comply with the following standards may result in disciplinary action.

I. COMPETENCE

Each member has a responsibility to:

1. Maintain an appropriate level of professional expertise by continually developing knowledge and skills.
2. Perform professional duties in accordance with relevant laws, regulations, and technical standards.
3. Provide decision support information and recommendations that are accurate, clear, concise, and timely.
4. Recognize and communicate professional limitations or other constraints that would preclude responsible judgment or successful performance of an activity.

II. CONFIDENTIALITY

Each member has a responsibility to:

1. Keep information confidential except when disclosure is authorized or legally required.
2. Inform all relevant parties regarding appropriate use of confidential information. Monitor subordinates' activities to ensure compliance.
3. Refrain from using confidential information for unethical or illegal advantage.

III. INTEGRITY

Each member has a responsibility to:

1. Mitigate actual conflicts of interest. Regularly communicate with business associates to avoid apparent conflicts of interest. Advise all parties of any potential conflicts.
2. Refrain from engaging in any conduct that would prejudice carrying out duties ethically.
3. Abstain from engaging in or supporting any activity that might discredit the profession.

IV. CREDIBILITY

Each member has a responsibility to:

1. Communicate information fairly and objectively.
2. Disclose all relevant information that could reasonably be expected to influence an intended user's understanding of the reports, analyses, or recommendations.
3. Disclose delays or deficiencies in information, timeliness, processing, or internal controls in conformance with organization policy and/or applicable law.

RESOLUTION OF ETHICAL CONFLICT

In applying the Standards of Ethical Professional Practice, you may encounter problems identifying unethical behavior or resolving an ethical conflict. When faced with ethical issues, you should follow your organization's established policies on the resolution of such conflict. If these policies do not resolve the ethical conflict, you should consider the following courses of action:

1. Discuss the issue with your immediate supervisor except when it appears that the supervisor is involved. In that case, present the issue to the next level. If you cannot achieve a satisfactory resolution, submit the issue to the next management level. If your immediate superior is the chief executive officer or equivalent, the acceptable reviewing authority may be a group such as the audit committee, executive committee, board of directors, board of trustees, or owners. Contact with levels above the immediate superior should be initiated only with your superior's knowledge, assuming he or she is not involved. Communication of such problems to authorities or individuals not employed or engaged by the organization is not considered appropriate, unless you believe there is a clear violation of the law.
2. Clarify relevant ethical issues by initiating a confidential discussion with an IMA Ethics Counselor or other impartial advisor to obtain a better understanding of possible courses of action.
3. Consult your own attorney as to legal obligations and rights concerning the ethical conflict.

EXHIBIT P-7
IMA Statement of Ethical
Professional Practice

As these examples suggest, if ethical standards were not generally adhered to, everyone would suffer—businesses as well as consumers. Essentially, abandoning ethical standards would lead to a lower standard of living with lower-quality goods and services, less to choose from, and higher prices. In short, following ethical rules such as those in the Statement of Ethical Professional Practice is absolutely essential for the smooth functioning of an advanced market economy.

Company Codes of Conduct

Many companies have adopted formal ethical codes of conduct. These codes are generally broad-based statements of a company's responsibilities to its employees, its customers, its suppliers, and the communities in which the company operates. Codes rarely spell out specific do's and don'ts or suggest proper behavior in a specific situation. Instead, they give broad guidelines. For example, Exhibit P-8 shows **Johnson & Johnson's** code of ethical conduct, which it refers to as a Credo. Johnson & Johnson created its Credo in 1943 and today it is translated into 36 languages. Johnson & Johnson surveys its employees every two to three years to obtain their impressions of how well the company adheres to its ethical principles. If the survey reveals shortcomings, corrective actions are taken.⁷

IN BUSINESS

Who is to Blame?

Don Keough, a retired **Coca-Cola** executive, recalls that, "In my time, CFOs [Chief Financial Officers] were basically tough, smart, and mean. Bringing good news wasn't their function. They were the truth-tellers." But that had changed by the late 1990s in some companies. Instead of being truth-tellers, CFOs became corporate spokesmen, guiding stock analysts in their quarterly earnings estimates—and then making sure those earnings estimates were beaten using whatever means necessary, including accounting tricks and in some cases outright fraud. But does the buck stop there?

A survey of 179 CFOs published in May 2004 showed that only 38% of those surveyed believed that pressure to use aggressive accounting techniques to improve results had lessened relative to three years earlier. And 20% of those surveyed said the pressure had increased over the past three years. Where did the respondents say the pressure was coming from? Personal greed, weak boards of directors, and overbearing Chief Executive Officers (CEOs) topped the list. Who is to blame? Perhaps that question is less important than focusing on what is needed—greater personal integrity and less emphasis on meeting quarterly earnings estimates.

Sources: Jeremy Kahn, "The Chief Freaked Out Officer," *Fortune*, December 9, 2002, pp. 197–202; and Don Durfee, "After the Scandals: It's Better (and Worse) than You Think," *CFO*, May 2004, p. 29.

It bears emphasizing that establishing a code of ethical conduct, such as Johnson & Johnson's Credo, is meaningless if employees, and in particular top managers, do not adhere to it when making decisions. If top managers continue to say, in effect, that they will only be satisfied with bottom-line results and will accept no excuses, they are building a culture that implicitly coerces employees to engage in unethical behavior to get ahead. This type of unethical culture is contagious. In fact, one survey showed that "[t]hose who engage in unethical behavior often justify their actions with one or more of the following reasons: (1) the organization expects unethical behavior, (2) everyone else is unethical, and/or (3) behaving unethically is the only way to get ahead."⁸

⁷www.jnj.com/our_company/our_credo

⁸Michael K. McCuddy, Karl E. Reichardt, and David Schroeder, "Ethical Pressures: Fact or Fiction?" *Management Accounting* 74, no. 10, pp. 57–61.

Johnson & Johnson Credo

We believe our first responsibility is to the doctors, nurses and patients, to mothers and fathers and all others who use our products and services. In meeting their needs everything we do must be of high quality. We must constantly strive to reduce our costs in order to maintain reasonable prices. Customers' orders must be serviced promptly and accurately. Our suppliers and distributors must have an opportunity to make a fair profit.

We are responsible to our employees, the men and women who work with us throughout the world. Everyone must be considered as an individual. We must respect their dignity and recognize their merit. They must have a sense of security in their jobs. Compensation must be fair and adequate, and working conditions clean, orderly and safe. We must be mindful of ways to help our employees fulfill their family responsibilities. Employees must feel free to make suggestions and complaints. There must be equal opportunity for employment, development and advancement for those qualified. We must provide competent management, and their actions must be just and ethical.

We are responsible to the communities in which we live and work and to the world community as well. We must be good citizens—support good works and charities and bear our fair share of taxes. We must encourage civic improvements and better health and education. We must maintain in good order the property we are privileged to use, protecting the environment and natural resources.

Our final responsibility is to our stockholders. Business must make a sound profit. We must experiment with new ideas. Research must be carried on, innovative programs developed and mistakes paid for. New equipment must be purchased, new facilities provided and new products launched. Reserves must be created to provide for adverse times. When we operate according to these principles, the stockholders should realize a fair return.

EXHIBIT P-8

The Johnson & Johnson Credo

Where Would You Like to Work?**IN BUSINESS**

Nearly all executives claim that their companies maintain high ethical standards; however, not all executives walk the talk. Employees usually know when top executives are saying one thing and doing another and they also know that these attitudes spill over into other areas. Working in companies where top managers pay little attention to their own ethical rules can be extremely unpleasant. Several thousand employees in many different organizations were asked if they would recommend their company to prospective employees. Overall, 66% said that they would. Among those employees who believed that their top management strives to live by the company's stated ethical standards, the number of recommenders jumped to 81%. But among those who believed top management did not follow the company's stated ethical standards, the number was just 21%.

Source: Jeffrey L. Seglin, "Good for Goodness' Sake," *CFO*, October 2002, pp. 75–78.

Codes of Conduct on the International Level

The Code of Ethics for Professional Accountants, issued by the International Federation of Accountants (IFAC), governs the activities of all professional accountants throughout the world, regardless of whether they are practicing as independent CPAs, employed in government service, or employed as internal accountants.⁹

In addition to outlining ethical requirements in matters dealing with integrity and objectivity, resolution of ethical conflicts, competence, and confidentiality, the IFAC's code also outlines the accountant's ethical responsibilities in other matters such as those relating to taxes, independence, fees and commissions, advertising and solicitation,

⁹A copy of this code can be obtained on the International Federation of Accountants' website www.ifac.org.

the handling of monies, and cross-border activities. Where cross-border activities are involved, the IFAC ethical requirements must be followed if they are stricter than the ethical requirements of the country in which the work is being performed.

CORPORATE GOVERNANCE

Effective *corporate governance* enhances stockholders' confidence that a company is being run in their best interests rather than in the interests of top managers. **Corporate governance** is the system by which a company is directed and controlled. If properly implemented, the corporate governance system should provide incentives for the board of directors and top management to pursue objectives that are in the interests of the company's owners and it should provide for effective monitoring of performance.¹⁰

Unfortunately, history has repeatedly shown that unscrupulous top managers, if unchecked, can exploit their power to defraud stockholders. This unpleasant reality became all too clear in 2001 when the fall of **Enron** kicked off a wave of corporate scandals. These scandals were characterized by financial reporting fraud and misuse of corporate funds at the very highest levels—including CEOs and CFOs. While this was disturbing in itself, it also indicated that the institutions intended to prevent such abuses weren't working, thus raising fundamental questions about the adequacy of the existing corporate governance system. In an attempt to respond to these concerns, the U.S. Congress passed the most important reform of corporate governance in many decades—*The Sarbanes-Oxley Act of 2002*.

IN BUSINESS

Spilled Milk at Parmalat

Corporate scandals have not been limited to the United States. In 2003, **Parmalat**, a publicly traded dairy company in Italy, went bankrupt. The CEO, Calisto Tanzi, admitted to manipulating the books for more than a decade so that he could skim off \$640 million to cover losses at various of his family businesses. But the story doesn't stop there. Parmalat's balance sheet contained \$13 billion in nonexistent assets, including a \$5 billion **Bank of America** account that didn't exist. All in all, Parmalat was the biggest financial fraud in European history.

Source: Gail Edmondson, David Fairlamb, and Nanette Byrnes, "The Milk Just Keeps On Spilling," *BusinessWeek*, January 26, 2004, pp. 54–58.

The Sarbanes-Oxley Act of 2002

The **Sarbanes-Oxley Act of 2002** was intended to protect the interests of those who invest in publicly traded companies by improving the reliability and accuracy of corporate financial reports and disclosures. We would like to highlight six key aspects of the legislation.¹¹

First, the Act requires that both the CEO and CFO certify in writing that their company's financial statements and accompanying disclosures fairly represent the results of operations—with possible jail time if a CEO or CFO certifies results that they know are false. This creates very powerful incentives for the CEO and CFO to ensure that the financial statements contain no misrepresentations.

¹⁰This definition of corporate governance was adapted from the 2004 report titled *OECD Principles of Corporate Governance* published by the Organization for Economic Co-Operation and Development.

¹¹A summary of the Sarbanes-Oxley Act of 2002 can be obtained from the American Institute of Certified Public Accountants (AICPA) website <http://thecaq.aicpa.org/Resources/Sarbanes+Oxley>.

Second, the Act established the Public Company Accounting Oversight Board to provide additional oversight over the audit profession. The Act authorizes the Board to conduct investigations, to take disciplinary actions against audit firms, and to enact various standards and rules concerning the preparation of audit reports.

Third, the Act places the power to hire, compensate, and terminate the public accounting firm that audits a company's financial reports in the hands of the audit committee of the board of directors. Previously, management often had the power to hire and fire its auditors. Furthermore, the Act specifies that all members of the audit committee must be independent, meaning that they do not have an affiliation with the company they are overseeing, nor do they receive any consulting or advisory compensation from the company.

Fourth, the Act places important restrictions on audit firms. Historically, public accounting firms earned a large part of their profits by providing consulting services to the companies that they audited. This provided the appearance of a lack of independence because a client that was dissatisfied with an auditor's stance on an accounting issue might threaten to stop using the auditor as a consultant. To avoid this possible conflict of interests, the Act prohibits a public accounting firm from providing a wide variety of nonauditing services to an audit client.

Fifth, the Act requires that a company's annual report contain an *internal control report*. Internal controls are put in place by management to provide assurance to investors that financial disclosures are reliable. The report must state that it is management's responsibility to establish and maintain adequate internal controls and it must contain an assessment by management of the effectiveness of its internal control structure. The internal control report is accompanied by an opinion from the company's audit firm as to whether management has maintained effective internal control over its financial reporting process.

Finally, the Act establishes severe penalties of as many as 20 years in prison for altering or destroying any documents that may eventually be used in an official proceeding and as many as 10 years in prison for managers who retaliate against a so-called whistle-blower who goes outside the chain of command to report misconduct. Collectively, these six aspects of the Sarbanes-Oxley Act of 2002 should help reduce the incidence of fraudulent financial reporting.

Sarbanes-Oxley Takes its Toll on CFOs

IN BUSINESS

Bank of America's stock price rose 13% while Alvaro DeMolina was its Chief Financial Officer (CFO). Yet, after 18 months DeMolina resigned from his job because it was "suffocating" and "less fun." DeMolina is one of many CFOs who attribute their job dissatisfaction to The Sarbanes-Oxley Act of 2002 (SOX). A survey of 237 CFOs showed that 75% of them believe SOX significantly increased their workload and 49% feel that SOX makes their job less satisfying. The turnover rate among CFOs of \$1 billion companies increased from 7% in 2002 to 21% in 2005. Thanks to SOX, CFOs are spending too much time certifying stacks of documents and responding to tedious inquiries from the board of directors, and less time on the strategic and creative endeavors of managing internal operations.

Source: Telis Demos, "CFO: All Pain, No Gain," *Fortune*, February 5, 2007, pp. 18–19; Ghostwriter, "Sore About Sarbox," *BusinessWeek*, March 13, 2006, p. 13.

ENTERPRISE RISK MANAGEMENT

Businesses face risks every day. Some risks are foreseeable. For example, a company could reasonably be expected to foresee the possibility of a natural disaster or a fire destroying its centralized data storage facility. Companies respond to this type of risk by maintaining off-site backup data storage facilities. Other risks are unforeseeable. For

example, in 1982 **Johnson & Johnson** never could have imagined that a deranged killer would insert poison into bottles of Tylenol and then place these tainted bottles on retail shelves, ultimately killing seven people.¹² Johnson & Johnson—guided by the first line of its Credo (see page 17)—responded to this crisis by acting to reduce the risks faced by its customers and itself. First, it immediately recalled and destroyed 31 million bottles of Tylenol with a retail value of \$100 million to reduce the risk of additional fatalities. Second, it developed the tamper-resistant packaging that we take for granted today to reduce the risk that the same type of crime could be repeated in the future.

Every business strategy or decision involves risks. **Enterprise risk management** is a process used by a company to proactively identify and manage those risks.

Identifying and Controlling Business Risks

Companies should identify foreseeable risks before they occur rather than react to unfortunate events that have already happened. The left-hand column of Exhibit P-9 provides 12 examples of business risks. This list is not exhaustive, rather its purpose is to illustrate the diverse nature of business risks that companies face. Whether the risks relate to the

EXHIBIT P-9 Identifying and Controlling Business Risks

Examples of Business Risks	Examples of Controls to Reduce Business Risks
<ul style="list-style-type: none"> Intellectual assets being stolen from computer files 	<ul style="list-style-type: none"> Create firewalls that prohibit computer hackers from corrupting or stealing intellectual property
<ul style="list-style-type: none"> Products harming customers 	<ul style="list-style-type: none"> Develop a formal and rigorous new product testing program
<ul style="list-style-type: none"> Losing market share due to the unforeseen actions of competitors 	<ul style="list-style-type: none"> Develop an approach for legally gathering information about competitors' plans and practices
<ul style="list-style-type: none"> Poor weather conditions shutting down operations 	<ul style="list-style-type: none"> Develop contingency plans for overcoming weather-related disruptions
<ul style="list-style-type: none"> A website malfunctioning 	<ul style="list-style-type: none"> Thoroughly test the website before going "live" on the Internet
<ul style="list-style-type: none"> A supplier strike halting the flow of raw materials 	<ul style="list-style-type: none"> Establish a relationship with two companies capable of providing needed raw materials
<ul style="list-style-type: none"> A poorly designed incentive compensation system causing employees to make bad decisions 	<ul style="list-style-type: none"> Create a balanced set of performance measures that motivates the desired behavior
<ul style="list-style-type: none"> Financial statements inaccurately reporting the value of inventory 	<ul style="list-style-type: none"> Count the physical inventory on hand to make sure that it agrees with the accounting records
<ul style="list-style-type: none"> An employee stealing assets 	<ul style="list-style-type: none"> Segregate duties so that the same employee does not have physical custody of an asset and the responsibility of accounting for it
<ul style="list-style-type: none"> An employee accessing unauthorized information 	<ul style="list-style-type: none"> Create password-protected barriers that prohibit employees from obtaining information not needed to do their jobs
<ul style="list-style-type: none"> Inaccurate budget estimates causing excessive or insufficient production 	<ul style="list-style-type: none"> Implement a rigorous budget review process
<ul style="list-style-type: none"> Failing to comply with equal employment opportunity laws 	<ul style="list-style-type: none"> Create a report that tracks key metrics related to compliance with the laws

¹²Tamara Kaplan, "The Tylenol Crisis: How Effective Public Relations Saved Johnson & Johnson," in Glen Broom, Allen Center, and Scott Cutlip, *Effective Public Relations*, Prentice Hall, Upper Saddle River, NJ.

Managing Weather Risk

IN BUSINESS

The **National Oceanic and Atmospheric Administration** claims that the weather influences one-third of the U.S. gross domestic product. In 2004, the word *unseasonable* was used by more than 120 publicly traded companies to explain unfavorable financial performance. Indeed, it would be easy to conclude that the weather poses an uncontrollable risk to businesses, right? Wrong! Weather risk management is a growing industry with roughly 80 companies offering weather risk management services to clients.

For example, **Planalytics** is a weather consulting firm that helps **Wise Metal Group**, a manufacturer of aluminum can sheeting, to manage its natural gas purchases. Wise's \$3 million monthly gas bill fluctuates sharply depending on the weather. Planalytics' software helps Wise plan its gas purchases in advance of changing temperatures. Beyond influencing natural gas purchases, the weather can also delay the boats that deliver Wise's raw materials and it can affect Wise's sales to the extent that cooler weather conditions lead to a decline in canned beverage sales.

Source: Abraham Lustgarten, "Getting Ahead of the Weather," *Fortune*, February 7, 2005, pp. 87–94.

weather, computer hackers, complying with the law, employee theft, financial reporting, or strategic decision making, they all have one thing in common. If the risks are not managed effectively, they can infringe on a company's ability to meet its goals.

Once a company identifies its risks, it can respond to them in various ways such as accepting, avoiding, or reducing the risk. Perhaps the most common risk management tactic is to reduce risks by implementing specific controls. The right-hand column of Exhibit P–9 provides an example of a control that could be implemented to help reduce each of the risks mentioned in the left-hand column of the exhibit.

In conclusion, a sophisticated enterprise risk management system cannot guarantee that all risks are eliminated. Nonetheless, many companies understand that managing risks is a superior alternative to reacting, perhaps too late, to unfortunate events.

CORPORATE SOCIAL RESPONSIBILITY

Companies are responsible for producing financial results that satisfy stockholders. However, they also have a *corporate social responsibility* to serve other stakeholders—such as customers, employees, suppliers, communities, and environmental and human rights advocates—whose interests are tied to the company's performance. **Corporate social responsibility** (CSR) is a concept whereby organizations consider the needs of all stakeholders when making decisions. CSR extends beyond legal compliance to include voluntary actions that satisfy stakeholder expectations. Numerous companies, such as **Procter & Gamble, 3M, Eli Lilly and Company, Starbucks, Microsoft, Genentech, Johnson & Johnson, Baxter International, Abbott Laboratories, KPMG, National City Bank, Deloitte, Southwest Airlines, and Caterpillar**, prominently describe their corporate social performance on their websites.

Exhibit P–10 presents examples of corporate social responsibilities that are of interest to six stakeholder groups. Many companies are paying increasing attention to these types of broadly defined responsibilities for four reasons. First, socially responsible investors control more than \$2.3 trillion of investment capital. Companies that want access to this capital must excel in terms of their social performance. Second, a growing number of employees want to work for a company that recognizes and responds to its social responsibilities. If companies hope to recruit and retain these highly skilled employees, then they must offer fulfilling careers that serve the needs of broadly defined stakeholders. Third, many customers seek to purchase products and services from socially responsible companies. The Internet enables these customers to readily locate competing products, thereby making it even easier to avoid doing business with undesirable companies.

EXHIBIT P-10

Examples of Corporate Social Responsibilities

Companies should provide *customers* with:

- Safe, high-quality products that are fairly priced.
- Competent, courteous, and rapid delivery of products and services.
- Full disclosure of product-related risks.
- Easy-to-use information systems for shopping and tracking orders.

Companies should provide *suppliers* with:

- Fair contract terms and prompt payments.
- Reasonable time to prepare orders.
- Hassle-free acceptance of timely and complete deliveries.
- Cooperative rather than unilateral actions.

Companies should provide *stockholders* with:

- Competent management.
- Easy access to complete and accurate financial information.
- Full disclosure of enterprise risks.
- Honest answers to knowledgeable questions.

Companies and their suppliers should provide *employees* with:

- Safe and humane working conditions.
- Nondiscriminatory treatment and the right to organize and file grievances.
- Fair compensation.
- Opportunities for training, promotion, and personal development.

Companies should provide *communities* with:

- Payment of fair taxes.
- Honest information about plans such as plant closings.
- Resources that support charities, schools, and civic activities.
- Reasonable access to media sources.

Companies should provide *environmental and human rights advocates* with:

- Greenhouse gas emissions data.
- Recycling and resource conservation data.
- Child labor transparency.
- Full disclosure of suppliers located in developing countries.

Fourth, nongovernment organizations (NGOs) and activists are more capable than ever of tarnishing a company's reputation by publicizing its environmental or human rights missteps. The Internet has enabled these environmental and human rights advocacy groups to better organize their resources, spread negative information, and take coordinated actions against offending companies.¹³

IN BUSINESS**Skill-Based Volunteerism Grows in Popularity**

Ernst & Young, a "Big 4" public accounting firm, paid one of its managers to spend 12 weeks in Buenos Aires providing free accounting services to a small publishing company. **UPS** paid one of its logistics supervisors to help coordinate the **Susan G. Komen Breast Cancer Foundation's** annual Race for the Cure event. Why are these companies paying their employees to work for other organizations? A survey of 1,800 people ages 13–25 revealed that 79% intend to seek employment with companies that care about contributing to society—underscoring the value of skill-based volunteerism as an employee recruiting and retention tool. Furthermore, enabling employees to apply their skills in diverse business contexts makes them more effective when they return to their regular jobs.

Source: Sarah E. Needleman, "The Latest Office Perk: Getting Paid to Volunteer," *The Wall Street Journal*, April 29, 2008, pp. D1 and D5.

¹³The insights from this paragraph and many of the examples in Exhibit P-10 were drawn from Ronald W. Clement, "The Lessons from Stakeholder Theory for U.S. Business Leaders," *Business Horizons*, May/June 2005, pp. 255–264; and Terry Leap and Misty L. Loughry, "The Stakeholder-Friendly Firm," *Business Horizons*, March/April 2004, pp. 27–32.

It is important to understand that a company’s social performance can impact its financial performance. For example, if a company’s poor social performance alienates customers, then its revenues and profits will suffer. This reality explains why companies use enterprise risk management, as previously described, to meet the needs of *all* stakeholders.

THE CERTIFIED MANAGEMENT ACCOUNTANT (CMA)

An individual who possesses the necessary qualifications and who passes a rigorous professional exam earns the right to be known as a *Certified Management Accountant (CMA)*. In addition to the prestige that accompanies a professional designation, CMAs are often given greater responsibilities and higher compensation than those who do not have such a designation. Information about becoming a CMA and the CMA program can be accessed on the Institute of Management Accountants’ (IMA) website www.imanet.org or by calling 1-800-638-4427.

To become a Certified Management Accountant, the following four steps must be completed:

1. File an Application for Admission and register for the CMA examination.
2. Pass all four parts of the CMA examination within a three-year period.
3. Satisfy the experience requirement of two continuous years of professional experience in management and/or financial accounting prior to or within seven years of passing the CMA examination.
4. Comply with the Statement of Ethical Professional Practice.

How’s the Pay?

IN BUSINESS

The Institute of Management Accountants has created the following table that allows an individual to estimate what his salary would be as a management accountant. (The table below applies specifically to men. A similar table exists for women.)

		Your Calculation	
Start with this base amount		\$70,449	\$70,449
If you are top-level management	ADD	\$25,484	
OR, if you are entry-level management	SUBTRACT	\$24,475	
Number of years in the field _____	TIMES	\$702	
If you have an advanced degree	ADD	\$11,473	
OR, if you have no degree	SUBTRACT	\$27,283	
If you hold the CMA	ADD	\$14,874	
OR, if you hold the CPA	ADD	\$12,320	
OR, if you hold both CMA and CPA	ADD	\$18,128	
Your estimated salary level			_____
			=====

For example, if you make it to top-level management in 10 years, have an advanced degree and a CMA, your estimated salary would be \$129,300 [$\$70,449 + \$25,484 + (10 \times \$702) + \$11,473 + \$14,874$].

Source: David L. Schroeder and Karl E. Reichardt, “IMA 2006 Salary Survey,” *Strategic Finance*, June 2007, pp. 22–38.

SUMMARY

Successful companies follow strategies that differentiate themselves from competitors. Strategies often focus on three customer value propositions—customer intimacy, operational excellence, and product leadership.

Most organizations rely on decentralization to some degree. Decentralization is formally depicted in an organization chart that shows who works for whom and which units perform line and staff functions.

Lean Production, the Theory of Constraints, and Six Sigma are three management approaches that focus on business processes. Lean Production organizes resources around business processes and pulls units through those processes in response to customer orders. The result is lower inventories, fewer defects, less wasted effort, and quicker customer response times. The Theory of Constraints emphasizes the importance of managing an organization's constraints. Because the constraint is whatever is holding back the organization, improvement efforts usually must be focused on the constraint to be effective. Six Sigma uses the DMAIC (Define, Measure, Analyze, Improve, and Control) framework to eliminate non-value-added activities and to improve processes.

Ethical behavior is the foundation of a successful market economy. If we cannot trust others to act ethically in their business dealings with us, we will be inclined to invest less, scrutinize purchases more, and generally waste time and money trying to protect ourselves from the unscrupulous—resulting in fewer goods available to consumers at higher prices and lower quality.

Unfortunately, trust in our corporate governance system has been undermined by numerous high-profile financial reporting scandals. The Sarbanes-Oxley Act of 2002 was passed with the objective of improving the reliability of the financial disclosures provided by publicly traded companies.

All organizations face risks that they should proactively identify and respond to by accepting, avoiding, or reducing the risk. They also have a corporate social responsibility to serve a wide variety of stakeholders including stockholders, customers, employees, suppliers, and communities.

GLOSSARY

At the end of each chapter, a list of key terms for review is given, along with the definition of each term. (These terms are printed in boldface where they are defined in the chapter.) Carefully study each term to be sure you understand its meaning. The list for the Prologue follows.

Business process A series of steps that are followed to carry out some task in a business. (p. 7)

Chief Financial Officer (CFO) The member of the top management team who is responsible for providing timely and relevant data to support planning and control activities and for preparing financial statements for external users. (p. 6)

Constraint Anything that prevents an organization or individual from getting more of what it wants. (p. 10)

Controller The member of the top management team who is responsible for providing relevant and timely data to managers and for preparing financial statements for external users. The controller reports to the CFO. (p. 7)

Corporate governance The system by which a company is directed and controlled. If properly implemented it should provide incentives for top management to pursue objectives that are in the interests of the company and it should effectively monitor performance. (p. 18)

Corporate social responsibility A concept whereby organizations consider the needs of all stakeholders when making decisions. It extends beyond legal compliance to include voluntary actions that satisfy stakeholder expectations. (p. 21)

Decentralization The delegation of decision-making authority throughout an organization by providing managers with the authority to make decisions relating to their area of responsibility. (p. 5)

Enterprise risk management A process used by a company to help identify the risks that it faces and to develop responses to those risks that enable the company to be reasonably assured of meeting its goals. (p. 20)

- Finished goods** Units of product that have been completed but have not yet been sold to customers. (p. 8)
- Just-in-time (JIT)** A production and inventory control system in which materials are purchased and units are produced only as needed to meet actual customer demand. (p. 9)
- Lean thinking model** A five-step management approach that organizes resources around the flow of business processes and that pulls units through these processes in response to customer orders. (p. 8)
- Line** A position in an organization that is directly related to the achievement of the organization's basic objectives. (p. 6)
- Non-value-added activities** Activities that consume resources but do not add value for which customers are willing to pay. (p. 12)
- Organization chart** A diagram of a company's organizational structure that depicts formal lines of reporting, communication, and responsibility between managers. (p. 5)
- Raw materials** Materials that are used to make a product. (p. 8)
- Sarbanes-Oxley Act of 2002** Legislation enacted to protect the interests of stockholders who invest in publicly traded companies by improving the reliability and accuracy of the disclosures provided to them. (p. 18)
- Six Sigma** A method that relies on customer feedback and objective data gathering and analysis techniques to drive process improvement. (p. 11)
- Staff** A position in an organization that is only indirectly related to the achievement of the organization's basic objectives. Such positions provide service or assistance to line positions or to other staff positions. (p. 6)
- Strategy** A "game plan" that enables a company to attract customers by distinguishing itself from competitors. (p. 4)
- Supply chain management** A management approach that coordinates business processes across companies to better serve end consumers. (p. 10)
- Theory of Constraints (TOC)** A management approach that emphasizes the importance of managing constraints. (p. 10)
- Value chain** The major business functions that add value to a company's products and services such as research and development, product design, manufacturing, marketing, distribution, and customer service. (p. 7)
- Work in process** Units of product that are only partially complete and will require further work before they are ready for sale to a customer. (p. 8)