

# Managerial Accounting and the Business Environment

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## A LOOK AT THE PROLOGUE

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

## 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.

The last two decades have been a period of tremendous turmoil and change in the business environment including the explosive growth of the Internet. Competition in many industries has become worldwide in scope, and the pace of innovation in products and services has accelerated. This has been good news for consumers, since intensified competition has generally led to lower prices, higher quality, and more choices. However, the last two decades have been a period of wrenching change for many businesses and their employees. Many managers have learned that cherished ways of doing business do not work anymore and that major changes must be made in the way organizations are managed and work gets done. These changes are so great that some observers view them as a second industrial revolution. And to add even more dynamism, the Internet has been changing the fundamental ways of doing business in more and more industries since the mid 1990s.

These changes are having a profound effect on the practice of management accounting—as we will see throughout the rest of the text. First, however, it is necessary to have an appreciation of the ways in which organizations are transforming themselves to become more competitive. Since the early 1980s, many companies have gone through several waves of improvement programs, starting with just-in-time (JIT) and passing on to total quality management (TQM), process reengineering, and various other management programs—including in some companies the theory of constraints (TOC). When properly implemented, these improvement programs can enhance quality, reduce cost, increase output, eliminate delays in responding to customers, and ultimately increase profits. They have not, however, always been wisely implemented, and considerable controversy exists concerning the ultimate value of each of these programs. Nevertheless, the current business environment cannot be properly understood without some appreciation of what each of these approaches attempts to accomplish. Each is worthy of extended study, but we will discuss them only in the broadest terms. The details are best handled in operations management courses.

## JUST-IN-TIME (JIT)

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Traditionally, managers in manufacturing companies have sought to minimize the unit costs of products on the theory that in the long run only the lowest cost producer will survive and prosper. This strategy led managers to maximize production to spread the fixed 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 job was to keep everyone busy—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 severe criticism in recent years. Critics point to excessive inventories as the most visible symptom of outdated management practices. Why do excessive inventories result from the desire to maximize production and to keep everyone busy and why are they a problem?

In a traditional manufacturing company, work is *pushed* through the system. Enough materials are released to workstations to keep everyone busy, and when a workstation completes its tasks, the partially completed goods 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.

In addition, companies typically maintained large amounts of inventories as a form of insurance so that operations could proceed smoothly even if unanticipated disruptions occurred. Suppliers might be late with deliveries, so companies maintained inventories of key supplies. A workstation might be unable to operate due to a breakdown or other reason, so companies maintained inventories of partially completed goods. And customers

might suddenly place big unexpected orders, so companies maintained large inventories of finished goods.

While these inventories provide some insurance against unforeseen events, they have a cost. According to experts, 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 products 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 operating 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, and Toyota pioneered the *JIT approach*.

## The JIT Approach

In contrast to the traditional approach, companies that use the **just-in-time (JIT)** approach purchase materials and produce units only as needed to meet actual customer demand. The theory is that producing things doesn't do the company any good unless someone buys them and that excess inventories create a multitude of operating problems. In a JIT system, inventories are reduced to an absolute minimum. Under ideal conditions, a company operating a just-in-time 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 have been shipped immediately to customers. As this sequence suggests, "just-in-time" means that raw materials are received 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.

Although few companies have been able to reach this ideal, many companies have been able to reduce inventories to a fraction of their previous levels. The results have been a substantial reduction in ordering and warehousing costs and much more effective operations.

The change from a traditional to a JIT approach is more profound than it may appear to be. 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 to make. 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. It also requires fundamental changes in managerial accounting practices, as we will see in later chapters.

## Zero Defects and JIT

Defective units create big problems in a JIT environment. If a completed order contains a defective unit, the company must ship the order with less than the promised quantity or it must restart the whole production process to make just one unit. At minimum, this creates a delay in shipping the order and may generate a ripple effect that delays other orders. For this and other reasons, defects cannot be tolerated in a JIT system. Companies that are deeply involved in JIT tend to become zealously committed to a goal of *zero defects*. Even though it may be next to impossible to attain the zero defect goal, companies have found that they can come very close. For example, **Motorola**, **Allied Signal**, and many

other companies now measure defects in terms of the number of defects per *million* units of product.

In a traditional company, parts and materials are inspected for defects when they are received from suppliers, and quality inspectors inspect units as they progress along the production line. In a JIT 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 punches an alarm button that stops the production flow line and sets off flashing lights. Supervisors and other workers go immediately to the workstation to determine the cause of the defect and correct it before any further defective units are produced. This procedure ensures that problems are quickly identified and corrected, but it does require that defects are rare—otherwise the production process would be constantly interrupted.

## IN BUSINESS

### Adopters of the JIT Approach

Many companies—large and small—have employed JIT with great success. Among the major companies using JIT are **Bose, Goodyear, Westinghouse, General Motors, Hughes Aircraft, Ford Motor Company, Black and Decker, Chrysler, Borg-Warner, John Deere, Xerox, Tektronix, and Intel.**

### Benefits of a JIT System

The main benefits of JIT are:

1. Funds that have been tied up in inventories can be used elsewhere.
2. Areas previously used to store inventories are made available for other, more productive uses.
3. The time required to fill an order is reduced, resulting in quicker response to customers and consequentially greater potential sales.
4. Defect rates are reduced, resulting in less waste and greater customer satisfaction.

As a result of benefits such as those cited above, more companies are embracing JIT each year. Most companies find, however, that simply reducing inventories is not enough. To remain competitive in an ever-changing and ever-more-competitive business environment, companies must strive for *continuous improvement*.

## IN BUSINESS

### PCs Just in Time

**Dell Computer Corporation** has finely tuned its just-in-time (JIT) system so that an order for a customized personal computer that comes in over the Internet at 9 A.M. can be on a delivery truck to the customer by 9 P.M. the following day. In addition, Dell's low-cost production system allows it to underprice its rivals by 10% to 15%. This combination has made Dell the envy of the personal computer industry and has enabled the company to grow at five times the industry rate.

How does the company's JIT system deliver lower costs? "While machines from **Compaq** and **IBM** can languish on dealer shelves for two months, Dell doesn't start ordering components and assembling computers until an order is booked. That may sound like no biggie, but the price of PC parts can fall rapidly in just a few months. By ordering right before assembly, Dell figures its parts, on average, are 60 days newer than those in an IBM or Compaq machine sold at the same time. That can translate into a 6% profit advantage in components alone."

Source: Gary McWilliams, "Whirlwind on the Web," *Business Week*, April 7, 1997, p. 134.

## TOTAL QUALITY MANAGEMENT (TQM)

The most popular approach to continuous improvement is known as *total quality management*. There are two major characteristics of **total quality management (TQM)**: (1) a focus on serving customers and (2) systematic problem solving using teams made up of front-line workers. A variety of specific tools is available to aid teams in their problem solving. One of these tools, **benchmarking**, involves studying organizations that are among the best in the world at performing a particular task. For example, when **Xerox** wanted to improve its procedures for filling customer orders, it studied how the mail-order company **L. L. Bean** processes its customer orders.



### The Plan-Do-Check-Act Cycle

Perhaps the most important and pervasive TQM problem-solving tool is the *plan-do-check-act (PDCA) cycle*, which is also referred to as the Deming Wheel.<sup>1</sup> The **plan-do-check-act cycle** is a systematic, fact-based approach to continuous improvement. The basic elements of the PDCA cycle are illustrated in Exhibit P-1. The PDCA cycle applies the scientific method to problem solving. In the Plan phase, the problem-solving team analyzes data to identify possible causes for the problem and then proposes a solution. In the Do phase, an experiment is conducted. In the Check phase, the results of the experiment are analyzed. And in the Act phase, if the results of the experiment are favorable, the plan is implemented. If the results of the experiment are not favorable, the team goes back to the original data and starts all over again.

### An Example of TQM in Practice

**Sterling Chemicals, Inc.**, a producer of basic industrial chemicals, provides a good example of the use of TQM.<sup>2</sup> Among many other problems, the company had been plagued by pump failures. In one year, a particular type of pump had failed 22 times at an average cost of about \$10,000 per failure. The company first tried to solve the problem using a traditional, non-TQM approach. A committee of “experts”—in this case engineers and manufacturing supervisors—was appointed to solve the problem. A manager at Sterling Chemicals describes the results:

This team immediately concluded that each of the 22 pump failures . . . was due to a special or one-of-a-kind cause. There was some finger pointing by team members trying to assign blame. Maintenance engineers claimed that production personnel didn’t know how to operate the pumps, and production supervisors blamed maintenance people for poor repair work.

One year later, a TQM team was formed to tackle the same pump failure problem. The team consisted primarily of hourly workers with hands-on experience working with the pumps. The team brainstormed and came up with a list of 57 theories that could potentially explain the high pump-failure rate. Each of these theories was tested against the data and all but two were rejected. The team made recommendations to address both of these theories, and once the recommendations were implemented, there were no more pump failures.

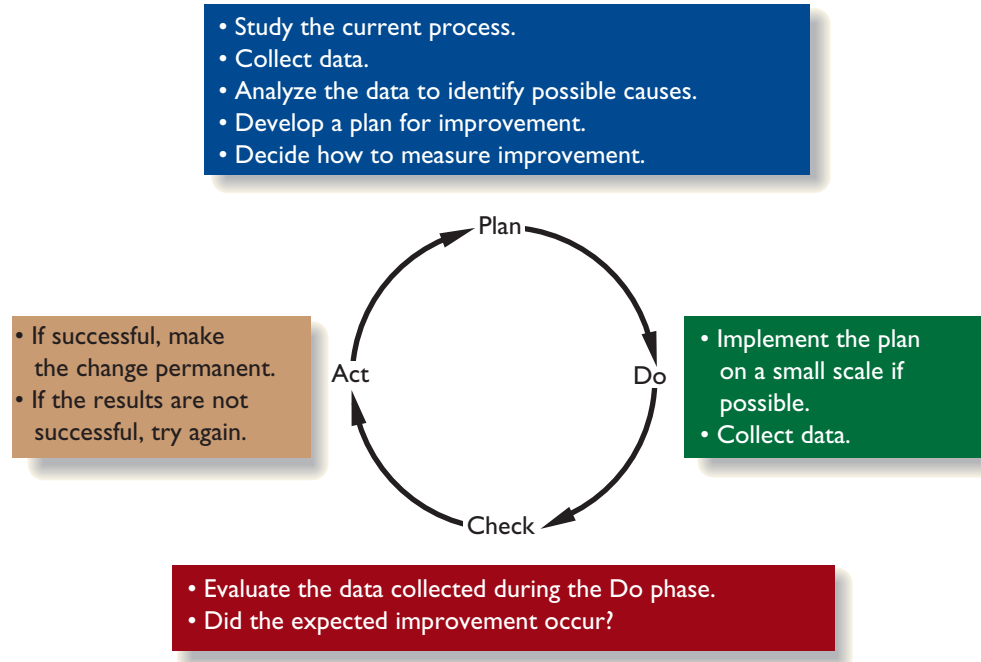
Notice how the plan-do-check-act cycle was used to solve this pump-failure problem. Instead of bickering over who was responsible for the problem, the team began by collecting data. They then hypothesized a number of possible causes for the problem, and

<sup>1</sup>Dr. W. Edwards Deming, a pioneer in TQM, introduced many of the elements of TQM to Japanese industry after World War II. TQM was further refined and developed at Japanese companies such as Toyota.

<sup>2</sup>Karen Hopper Wruck and Michael C. Jensen, “Science, Specific Knowledge, and Total Quality Management,” *Journal of Accounting and Economics* 18, pp. 247–287.

**EXHIBIT P-1**

## The Plan-Do-Check-Act Cycle



these hypotheses were checked against the data. Perhaps the most important feature of TQM is that “it improves productivity by encouraging the use of science in decision-making and discouraging counterproductive defensive behavior.”

**IN BUSINESS****TQM Is Widely Used**

Thousands of organizations have been involved in TQM and similar programs. Some of the more well-known companies are **American Express, AT&T, Cadillac Motor Car, Corning, Dun & Bradstreet, Ericsson of Sweden, FedEx, GTE Directories, Bank One, Florida Power and Light, General Electric, Hospital Corporation of America, IBM, Johnson & Johnson, KLM Royal Dutch Airlines, LTV, 3M, Milliken & Company, Motorola, Northern Telecom of Canada, Phillips of the Netherlands, Ritz Carlton Hotel, Texas Instruments, Westinghouse Electric, and Xerox.** As this list illustrates, TQM is international in scope and is not confined to manufacturing.

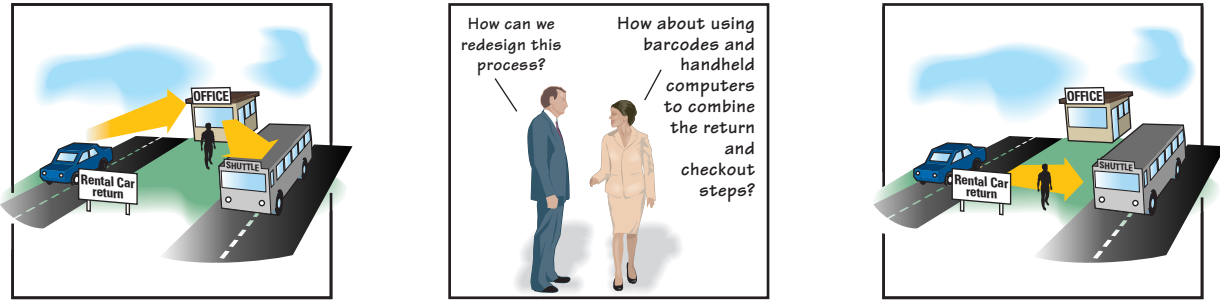
In sum, TQM provides tools and techniques for continuous improvement based on facts and analysis and, if properly implemented, it avoids counterproductive organizational infighting.

**PROCESS REENGINEERING**

*Process reengineering* is a more radical approach to improvement than TQM. Instead of tweaking the existing system by making a series of small incremental improvements, **process reengineering** diagrams a *business process* in detail, questions it, and then completely redesigns it to eliminate unnecessary steps, reduce opportunities for errors, and reduce costs. A **business process** is any series of steps that are followed to carry out some task in a business. For example, the steps followed to make a large pineapple and Canadian bacon pizza at **Godfather's Pizza** are a business process. The steps followed by your bank when you deposit a check are a business process. While process reengineering is similar in some respects to TQM, its proponents view it as a more sweeping approach to



### Process Reengineering Illustration: The Rental Car Return Process



change. One difference is that while TQM emphasizes a team approach involving people who work directly in the processes, process reengineering is more likely to be imposed from above and to use outside consultants.

Process reengineering focuses on *simplification* and *elimination of wasted effort*. A central idea of process reengineering is that *all activities that do not add value to a product or service should be eliminated*. Activities that do not add value to a product or service that customers are willing to pay for are known as **non-value-added activities**. For example, moving large batches of partially completed goods from one workstation to another is a non-value-added activity that can be eliminated by redesigning the factory layout to bring the workstations closer together.<sup>3</sup>

## Design by Computer

One of the most time-consuming and expensive business processes is the design stage in product development, which has traditionally relied on paper and drafting tools. **Dassault Systèmes** has met the challenge of reengineering this process and has created Catia, the top-selling CAD/CAM software application to do it. CAD/CAM allows engineers to design and develop products on a computer. This eliminates huge amounts of paperwork and slashes the time required to design and develop a new product. Catia is used by nearly every aircraft manufacturer and was used by **Boeing** to design the 777. **DaimlerChrysler** used Catia to design the new Jeep Grand Cherokee. By debugging the production line on-screen, the company saved months and eliminated \$800 million of costs.

Source: Howard Banks, "Virtually Perfect," *Forbes*, October 4, 1999, pp. 128–129.

## IN BUSINESS

## The Problem of Employee Morale

Employee resistance is a recurrent problem in process reengineering. The cause of much of this resistance is the fear that employees may lose their jobs. Employees reason that if process reengineering succeeds in eliminating non-value-added activities, there will be less work to do and management may be tempted to reduce the payroll. Process reengineering, if carried out insensitively and without regard to such fears, can undermine morale and will ultimately fail to improve the bottom line (i.e., profits). As with other improvement projects, employees must be convinced that the end result of the improvement will be more secure, rather than less secure, jobs. Real improvement can have this effect if management uses the improvement to generate more business rather than to cut the

<sup>3</sup>Activity-based costing and activity-based management, both of which are discussed in a later chapter, can be helpful in identifying areas in the company that could benefit from process reengineering.

workforce. If by improving processes the company is able to produce a better product at lower cost, the company will have the competitive strength to prosper. And a prosperous company is a much more secure employer than a company that is in trouble.

## 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. 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 O'Hare hub, so its constraint is loading gates. **Vail Resorts** has only a limited amount of land to develop as home sites and commercial lots at its ski areas, so its constraint is land.

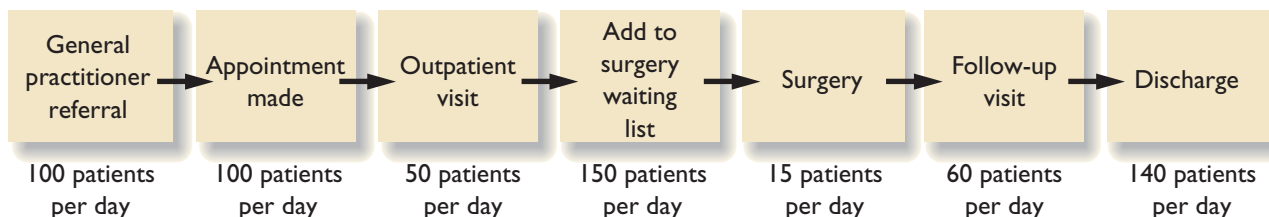


The **theory of constraints (TOC)** focuses on effectively managing the constraint as a key to success. As an example, long waiting periods for surgery are a chronic problem in the **National Health Service (NHS)**, the government-funded provider of health care in the United Kingdom. The diagram in Exhibit P-2 illustrates a simplified version of the steps followed by a patient who is identified for surgery and eventually treated. The number of patients that can be processed through each step in a day is indicated in the exhibit. For example, up to 100 referrals from general practitioners can be processed 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 that 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 the 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 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.

Continuing with this analogy, the procedure to follow to strengthen the chain is clear. First, identify the weakest link, which is the constraint. 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, waiting lists become unacceptably long. Third, concentrate improvement efforts on strengthening the weakest link. Find 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 continuous improvement. The TOC approach is a perfect complement to other improvement tools such as TQM and process reengineering—it focuses improvement efforts where they are likely to be most effective.

**EXHIBIT P-2** Processing Surgery Patients at an NHS Facility (simplified)\*



\*This diagram originally appeared in the February 1999 issue of the U.K. magazine *Health Management*.

## The Constraint Is the Key

The Lessines plant of **Baxter International** makes medical products such as sterile bags. Management of the plant is acutely aware of the necessity to actively manage its constraints. For example, when materials are the constraint, management may go to a secondary vendor and purchase materials at a higher cost than normal. When a machine is the constraint, a weekend shift is often added on the machine. If a particular machine is chronically the constraint and management has exhausted the possibilities of using it more effectively, then additional capacity is purchased. For example, when the constraint was the plastic extruding machines, a new extruding machine was ordered. However, even before the machine arrived, management had determined that the constraint would shift to the blenders once the new extruding capacity was added. Therefore, a new blender was already being planned. By thinking ahead and focusing on the constraints, management is able to increase the plant's real capacity at the lowest possible cost.

Source: Eric Noreen, Debra Smith, and James Mackey, *The Theory of Constraints and Its Implications for Management Accounting* (Montvale, NJ: The IMA Foundation for Applied Research, Inc., 1995), p. 67.

## IN BUSINESS

1. Which of the following statements is false? (You may select more than one answer.)
  - a. The plan-do-check-act cycle is an important total quality management problem-solving tool.
  - b. Total quality management focuses on completely redesigning the processes that have been targeted for improvement.
  - c. Just-in-time manufacturing relies on customer demand to trigger the production process.
  - d. Just-in-time manufacturing is designed to reduce inventories.
2. The goals of the theory of constraints include which of the following? (You may select more than one answer.)
  - a. Identifying the constraint and focusing improvement efforts on it.
  - b. Increasing capacity of nonconstraining departments.
  - c. Maximizing the quantity of production within all departments.
  - d. Accumulating inventory in all departments.

**CONCEPT  
CHECK** 

## INTERNATIONAL COMPETITION

Over the last several decades, reductions in tariffs, quotas, and other barriers to free trade; improvements in global transportation systems; and increasing sophistication in international markets have led to worldwide competition in many industries. These factors work together to reduce the costs of conducting international trade and make it possible for foreign companies to compete on a more equal footing with local firms. These changes have been most dramatic within the European Union (EU) and the North American Free Trade Association (NAFTA) free trade zones.

Managers cannot afford to be complacent. A company that is currently very successful in its local market may suddenly find itself facing competition from halfway around the globe. It is likely that this threat will become even more potent as business migrates to the Internet. As a matter of survival, even firms that are presently doing very well in their home markets must become world-class competitors. On the bright side, the freer international movement of goods and services presents tremendous export opportunities for those companies that can transform themselves into world-class competitors. And from the standpoint of consumers, heightened competition promises an even greater variety of goods, at higher quality and lower prices.

What are the implications for managerial accounting of increased global competition? It would be very difficult for a company to become world-class if it plans, directs, and controls its operations and makes decisions using a second-class management accounting system. An excellent management accounting system will not by itself guarantee success, but a poor management accounting system can stymie the best efforts of people to make the organization truly competitive.

Throughout this text we will highlight the differences between obsolete management accounting systems that get in the way of success and well-designed management accounting systems that can enhance a firm's performance. It is noteworthy that elements of well-designed management accounting systems have originated in many countries. More and more, managerial accounting has become a discipline that is worldwide in scope.

## IN BUSINESS

### Global Forces

Traditionally, management accounting practices have differed significantly from one country to another. For example, Spain, Italy, and Greece have relied on less formal management accounting systems than other European countries. According to Professor Norman B. Macintosh, "In Greece and Italy the predominance of close-knit, private, family firms motivated by secrecy, tax avoidance, and largesse for family members along with lack of market competition (price fixing?) mitigated the development of MACS [management accounting and control systems]. Spain also followed this pattern and relied more on personal relationships and oral inquiries than on hard data for control." At the same time, other Western European countries such as Germany, France, and the Netherlands developed relatively sophisticated formal management accounting systems emphasizing efficient operations. In the case of France, these were codified in law. In England, management accounting practice was influenced by economists, who emphasized the use of accounting data in decision making. The Nordic countries tended to import management accounting ideas from both Germany and England.

A number of factors have been acting in recent years to make management accounting practices more similar within Europe and around the world. These forces include: intensified global competition, which makes it more difficult to continue sloppy practices; standardized information system software sold throughout the world by vendors such as **SAP**, **PeopleSoft**, **Oracle**, and **Baan**; the increasing significance and authority of multinational corporations; the global consultancy industry; the diffusion of information throughout academia; and the global use of market-leading textbooks.

Sources: Markus Granlund and Kari Lukka, "It's a Small World of Management Accounting Practices," *Journal of Management Accounting Research* 10, 1998, pp. 153–171; and Norman B. Macintosh, "Management Accounting in Europe: A View from Canada," *Management Accounting Research* 9, 1998, pp. 495–500.

## E-COMMERCE

Widespread use of the Internet is a fairly new phenomenon, and the impact it will eventually have on business is far from settled. For a few brief months, it looked like dot.com start-ups would take over the business world—their stock market valuations reached astonishing heights. But, of course, the bubble burst and few of the start-ups are now in business. With the benefit of hindsight, it is now clear that the managers of the dot.com start-ups would have benefited from the use of many of the tools covered in this book, including cost concepts (Chapter 1), cost estimation (Chapter 5), cost-volume-profit analysis (Chapter 6), activity-based costing (Chapter 3), budgeting (Chapter 7), decision making (Chapter 11), and capital budgeting (Chapter 12). While applying these tools to a new company with little operational history would be difficult, it needs to be done. And the investors who plowed billions into dot.com start-ups only to see the money vanish would have been wise to pay attention to the tools covered in the chapters on the statement of cash flows (Chapter 13) and financial statement analysis (Chapter 14).

At the time of this writing, it is still not clear if a successful business model will emerge for Internet-based companies. It is generally believed that **Amazon.com** and **eBay** may have the best chances of building sustainable e-commerce businesses, but even Amazon.com has its detractors who believe it will never break even on a cash flow basis. If a successful e-commerce business model does emerge, it will be based on attracting enough profitable customers to cover the fixed expenses of the company as discussed in Chapter 6.



Established brick-and-mortar companies like **General Electric**, **Wells Fargo**, **American Airlines**, and **Wal-Mart** will undoubtedly continue to expand into cyberspace—both for business-to-business transactions and for retailing. The Internet has important advantages over more conventional marketplaces for some kinds of transactions such as mortgage banking. The financial institution does not have to tie up staff filling out forms—that can be done directly by the consumer over the Internet. And data and funds can be sent back and forth electronically—no **UPS** delivery truck needs to drop by the consumer's home to deliver a check. However, it is unlikely that a successful blockbuster business will ever be built around the concept of selling low-value, low-margin, and bulky items like groceries over the Internet.

## ORGANIZATIONAL STRUCTURE

Since organizations are made up of people, management must accomplish its objectives by working through people. Presidents of companies with more than a few employees cannot possibly execute all of their company's strategies alone; they must rely on other people. This is done by creating an organizational structure that permits *decentralization* of management responsibilities.

### Decentralization

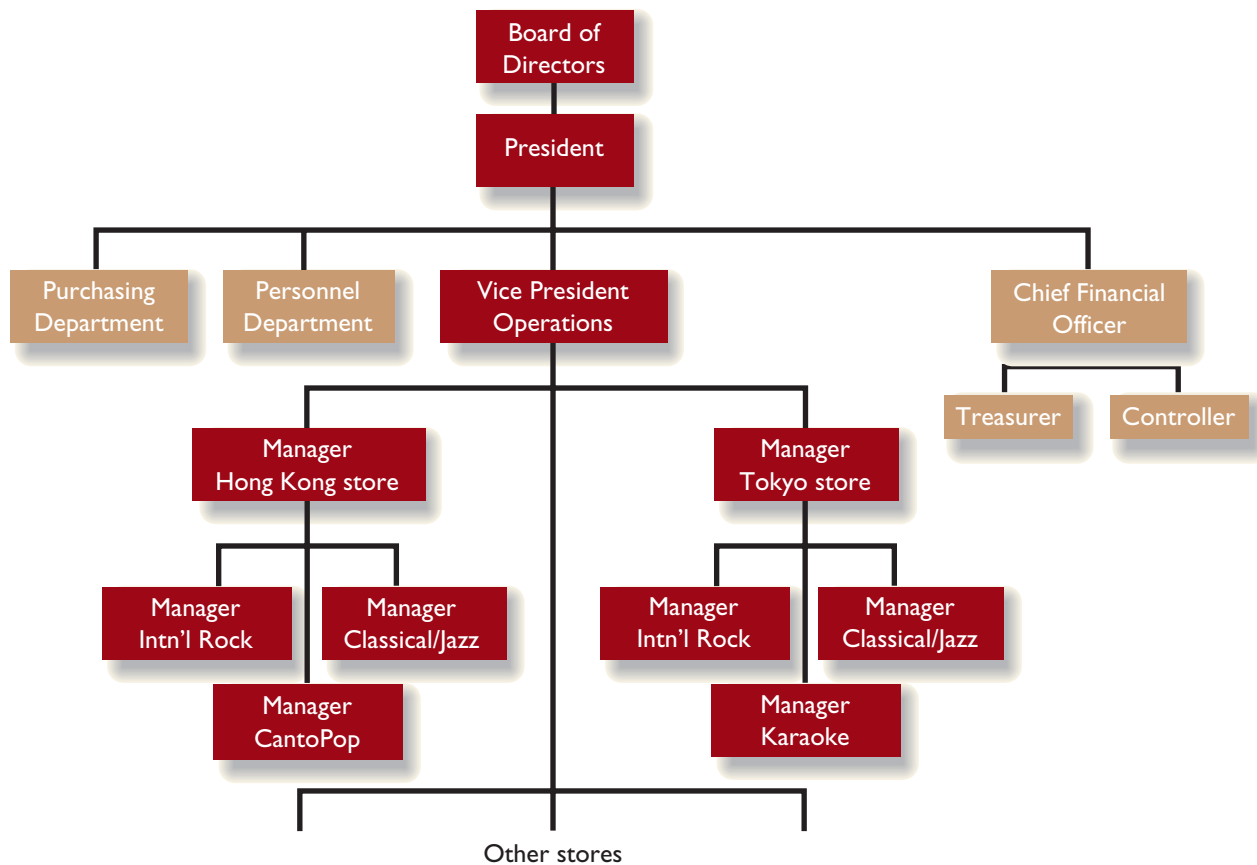
**Decentralization** is the delegation of decision-making authority throughout an organization by providing managers at various operating levels with the authority to make decisions relating to their area of responsibility. Some organizations are more decentralized than others. For example, consider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



Good Vibrations, Inc.'s president (also called chief executive officer, or CEO) sets the broad strategy for the company and makes major strategic decisions such as opening stores in new markets, but much of the remaining decision-making authority is delegated to managers on 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 section 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 organizational structure of the company is depicted in Exhibit P-3.

The arrangement of boxes shown in Exhibit P-3 is called an **organization chart**. The purpose of an organization chart is to show how responsibility has been 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 latter 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.

*Informal* relationships and channels of communication often develop outside the formal reporting relationships on the organization chart as a result of personal contacts between managers. The informal structure does not appear on the organization chart, but it is often vital to effective operations.

**EXHIBIT P-3** Organization Chart, Good Vibrations, Inc.


## Line and Staff Relationships

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 *support* or 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-3. Since the basic objective of Good Vibrations, Inc., is to sell recorded music at a profit, those managers whose areas of responsibility are directly related to the sales effort 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, and members of top management.

By contrast, the manager of the central Purchasing Department occupies a staff position, since the only function of the Purchasing Department is to support and serve the line departments by doing their purchasing for them.

## The Chief Financial Officer

In the United States the manager of the accounting department is often known as the *controller*. The controller in turn reports to the *Chief Financial Officer*, who usually comes from an accounting background. The **Chief Financial Officer (CFO)** is 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. An effective CFO is considered a key member of the top management team whose

advice is sought in all major decisions. The CFO is a highly paid professional who has command over the technical details of accounting and finance, who can provide leadership to other professionals in his or her department, who can analyze new and evolving situations, who can communicate technical data to others in a simple and clear manner, and who is able to work well with top managers from other disciplines.

It should be noted that few of the people who are trained as accountants and who work under the Chief Financial Officer in either the treasurer's office or the controller's office think of themselves as accountants. If asked, they are likely to identify themselves as working in finance. Management accounting is not about debits and credits or recording journal entries, although some knowledge of that is necessary. Management accounting is about helping managers to pursue the organization's goals. A recent report states that:

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.<sup>4</sup>

## Beyond the Numbers

Judy C. Lewent is the Chief Financial Officer (CFO) of **Merck**, a major pharmaceutical company. She is in charge of 750 people and is intimately involved in the company's most important strategic decisions. Cynthia Beach, vice president of global investment research at **Goldman Sachs & Co.**, says this about Lewent: "From my standpoint, Merck is one of the best-managed [pharmaceutical] companies, and Judy is a key reason why." Merck's chairman, CEO, and president Raymond Gilmartin adds this about Lewent: "Many CFOs take as their prime directive the timely, accurate delivery of detailed financial data and analysis to top management. While the importance of these services cannot be overestimated, with Judy they are simply one of the many ways she contributes to the business. [Lewent and her organization] make decisions about which developmental-product projects to fund and how to structure our product franchises, acquisition possibilities, and licensing arrangements."

Source: Russ Banham, "Merck Grows from the Inside Out, Powered by the CFO's Joint Ventures," *CFO*, October 2000, pp. 69–70.

## IN BUSINESS



## PROFESSIONAL ETHICS

A series of major financial scandals involving **Enron**, **Tyco**, **Adelphia**, **WorldCom**, **Global Crossing**, **Arthur Andersen**, **Rite Aid**, and others has raised deep concerns about the state of ethics in business. The managers and companies involved in these scandals have suffered mightily—from huge fines to jail terms to financial collapse. And the recognition that ethical behavior is absolutely essential for the functioning of our economy has led to

<sup>4</sup>Gary 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.

numerous regulatory changes and calls for new legislation. 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. As James Surowiecki writes:

[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, since 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 Pollyanish 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.<sup>5</sup>

Take a very simple example. Suppose that unethical 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? Go to another grocer? But what if all grocers acted in 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 do buy apples would waste a lot of time inspecting them minutely. Everyone loses. Farmers, distributors, and groceries make less money, consumers enjoy fewer apples, and consumers waste time looking for worms.

The same phenomenon exists for other markets, as the accompanying In Business box illustrates.

<sup>5</sup>James Surowiecki, “A Virtuous Cycle,” *Forbes*, December 23, 2002, pp. 248–256.

## IN BUSINESS

### No Trust—No Enron

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 sell their surplus power. As a consequence, their existing customers would have to pay higher prices. And utilities that do 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.

The Institute of Management Accountants (IMA) of the United States has developed a very useful ethical code called the *Standards of Ethical Conduct for Practitioners of Management Accounting and Financial Management*. Even though the standards were specifically developed for management accountants, they have much broader application.

## Code of Conduct for Management Accountants

The IMA's Standards of Ethical Conduct for Practitioners of Management Accounting and Financial Management is presented in full in Exhibit P–4. The standards have two parts. The first part provides general guidelines for ethical behavior. In a nutshell, the

Practitioners of management accounting and financial management have an obligation to the public, their profession, the organization they serve, and themselves, to maintain the highest standards of ethical conduct. In recognition of this obligation, the Institute of Management Accountants has promulgated the following standards of ethical conduct for practitioners of management accounting and financial management. Adherence to these standards, both domestically and internationally, is integral to achieving the Objectives of Management Accounting. Practitioners of management accounting and financial management shall not commit acts contrary to these standards nor shall they condone the commission of such acts by others within their organizations.

**Competence.** Practitioners of management accounting and financial management have a responsibility to:

- Maintain an appropriate level of professional competence by ongoing development of their knowledge and skills.
- Perform their professional duties in accordance with relevant laws, regulations, and technical standards.
- Prepare complete and clear reports and recommendations after appropriate analysis of relevant and reliable information.

**Confidentiality.** Practitioners of management accounting and financial management have a responsibility to:

- Refrain from disclosing confidential information acquired in the course of their work except when authorized, unless legally obligated to do so.
- Inform subordinates as appropriate regarding the confidentiality of information acquired in the course of their work and monitor their activities to assure the maintenance of that confidentiality.

*continued*

### EXHIBIT P–4

Standards of Ethical Conduct for Practitioners of Management Accounting and Financial Management

**EXHIBIT P-4**

(concluded)

- Refrain from using or appearing to use confidential information acquired in the course of their work for unethical or illegal advantage either personally or through third parties.

**Integrity.** Practitioners of management accounting and financial management have a responsibility to:

- Avoid actual or apparent conflicts of interest and advise all appropriate parties of any potential conflict.
- Refrain from engaging in any activity that would prejudice their ability to carry out their duties ethically.
- Refuse any gift, favor, or hospitality that would influence or would appear to influence their actions.
- Refrain from either actively or passively subverting the attainment of the organization's legitimate and ethical objectives.
- Recognize and communicate professional limitations or other constraints that would preclude responsible judgment or successful performance of an activity.
- Communicate unfavorable as well as favorable information and professional judgments or opinions.
- Refrain from engaging in or supporting any activity that would discredit the profession.

**Objectivity.** Practitioners of management accounting and financial management have a responsibility to:

- Communicate information fairly and objectively.
- Disclose fully all relevant information that could reasonably be expected to influence an intended user's understanding of the reports, comments, and recommendations presented.

**Resolution of Ethical Conflict.** In applying the standards of ethical conduct, practitioners of management accounting and financial management may encounter problems in identifying unethical behavior or in resolving an ethical conflict. When faced with significant ethical issues, practitioners of management accounting and financial management should follow the established policies of the organization bearing on the resolution of such conflict. If these policies do not resolve the ethical conflict, such practitioner should consider the following courses of action:

- Discuss such problems with the immediate superior except when it appears that the superior is involved, in which case the problem should be presented initially to the next higher managerial level. If a satisfactory resolution cannot be achieved when the problem is initially presented, submit the issues to the next higher managerial level.
- If the 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 the superior's knowledge, assuming the superior is not involved. Except where legally prescribed, communication of such problems to authorities or individuals not employed or engaged by the organization is not considered appropriate.
- Clarify relevant ethical issues by confidential discussion with an objective advisor (e.g., IMA Ethics Counseling Service) to obtain a better understanding of possible courses of action.
- Consult your own attorney as to legal obligations and rights concerning the ethical conflict.
- If the ethical conflict still exists after exhausting all levels of internal review, there may be no other recourse on significant matters than to resign from the organization and to submit an informative memorandum to an appropriate representative of the organization. After resignation, depending on the nature of the ethical conflict, it may also be appropriate to notify other parties.

\*Institute of Management Accountants, formerly National Association of Accountants, *Statements on Management Accounting: Objectives of Management Accounting*, Statement No. 1B, New York, NY, June 17, 1982, as revised in 1997.

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 be objective in all disclosures. 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 the standards in Exhibit P-4.

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 may 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.

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 Standards of Ethical Conduct for Practitioners of Management Accounting and Financial Management is absolutely essential for the smooth functioning of an advanced market economy.

## Character's the Thing

Personal character has become critically important to CEOs when hiring a CFO. A huge proportion (about 84%) of CEOs ranked personal integrity as second in importance only to technical expertise. The growing emphasis on character is partly driven by external pressures. The Securities and Exchange Commission is becoming more aggressive in going after companies that cook their books, and powerful shareholders are increasingly likely to demand that CFOs be beyond reproach. Moreover, CEOs agree that character is integral to the job. George Fellows, the CEO of **Revlon**, says: “Personal integrity is the cost of entry to this position.” Frank Weise, the CEO of Toronto-based **Cott Corp.**, agrees: “When you hire a CFO, you want that person to reek of integrity.” Susan Landon, an executive recruiter with **LAI Worldwide**, adds: “In most executives, CEOs look for personal character; in a CFO, it is an absolute requirement.”

Source: Julie Carrick Dalton, “What CEOs Want,” *CFO*, July 1999, pp. 45–52.

## IN BUSINESS

### Capitalism and Greed

Capitalism is often associated with ruthless, self-centered behavior, but is that a bum rap? Researchers have run many variations of the following experiment. Two randomly selected players who do not know each other are placed in different rooms. The individuals cannot see or hear each other and are never introduced to each other. The first player is given \$100 and told to split the money with the second player in any way he or she chooses. The first player could propose a \$100/\$0 split, an \$80/\$20 split, or any other combination that adds up to \$100. However, under the rules of the experiment, the second player is allowed to refuse the offer and in that case, neither player gets anything. The game is played only once for each pair of players.

What would a greedy person do? A greedy and ruthless first player would reason that the second player would accept a very low offer of perhaps \$10 since \$10 is better than nothing. However, in repeated experiments of this sort, people cast as player one were usually far more generous than this and people cast as player two often rejected small offers, even though that left them with nothing. Even more interestingly, responses differed among cultures. When the experiment was run with farmers from Hamilton, Missouri, player one offered on average \$48—very close to a \$50/\$50 split. In contrast, the average offer by player one among the Quichua Indians in Peru was only \$25. The Quichua Indians subsist in a slash-and-burn agricultural society with little market trading, whereas farmers from Missouri live in a fully developed capitalist market economy. This experiment has been repeated in many communities around the world and the consistent result is that greed (i.e., a low average offer by player one) is associated with nonmarket, pre-capitalist societies. In general, the more developed the local economy, the closer the offer by player one is to a \$50/\$50 split.

It is not clear what is the cause and what is the effect. Do markets make people less greedy or is suppression of greed a prerequisite to a fully developed market economy? At any rate, ruthless greed seems to be much more a hallmark of people who live in undeveloped, precapitalist societies than of those who live in fully developed market economies.

Source: David Wessel, "Capital: The Civilizing Effect of the Market," *The Wall Street Journal*, January 24, 2002, p. A1.

### Company Codes of Conduct

"Those 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."<sup>6</sup>

To counter the first justification for unethical behavior, many companies have adopted formal ethics 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 dos and don'ts or suggest proper behavior in specific situations. Instead, they give broad guidelines.

Unfortunately, the single-minded emphasis placed on short-term profits in some companies may make it seem like the only way to get ahead is to act unethically. When top managers say, in effect, that they will only be satisfied with bottom-line results and will accept no excuses, they are asking for trouble.

<sup>6</sup>Michael K. McCuddy, Karl E. Reichardt, and David Schroeder, "Ethical Pressures: Fact or Fiction?" *Management Accounting*, April 1993, pp. 57–61.

## Undue Pressure Can Lead to Unethical Behavior

Top managers at **Sears, Roebuck & Company** created a situation in its automotive service business that led to unethical actions by its front-line employees.

Consumers and attorneys general in more than 40 states had accused the company of misleading customers and selling them unnecessary parts and services, from brake jobs to front-end alignments. It would be a mistake, however, to see this situation . . . in terms of any one individual's moral failings. Nor did management set out to defraud Sears customers . . .

In the face of declining revenues, shrinking market share, and an increasingly competitive market, . . . Sears management attempted to spur performance of its auto centers . . . The company increased minimum work quotas and introduced productivity incentives for mechanics. The automotive service advisers were given product-specific sales quotas—sell so many springs, shock absorbers, alignments, or brake jobs per shift—and paid a commission based on sales. According to advisers, failure to meet quotas could lead to a transfer or a reduction in work hours. Some employees spoke of the “pressure, pressure, pressure” to bring in sales.

This pressure-cooker atmosphere created conditions under which employees felt that the only way to satisfy top management was by selling customers products and services they didn't really need.

Shortly after the allegations against Sears became public, CEO Edward Brennan acknowledged management's responsibility for putting in place compensation and goal-setting systems that “created an environment in which mistakes did occur.”

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IN BUSINESS



## Codes of Conduct on the International Level

The *Guideline on Ethics for Professional Accountants*, issued in July 1990 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.<sup>7</sup> In addition to outlining ethical requirements in matters dealing with competence, objectivity, independence, and confidentiality, the IFAC's code also outlines the accountant's ethical responsibilities in matters relating to taxes, fees and commissions, advertising and solicitation, the handling of monies, and cross-border activities. Where cross-border activities are involved, the IFAC ethical requirements must be followed if these requirements are stricter than the ethical requirements of the country in which the work is being performed.<sup>8</sup>

In addition to professional and company codes of ethical conduct, accountants and managers in the United States are subject to the legal requirements of *The Foreign Corrupt Practices Act of 1977*. The Act requires that companies devise and maintain a system of internal controls sufficient to ensure that all transactions are properly executed and recorded. The Act specifically prohibits giving bribes, even if giving bribes is common practice in the country in which the company is doing business.

<sup>7</sup>A copy of this code can be obtained on the International Federation of Accountants' website at [www.ifac.org](http://www.ifac.org).

<sup>8</sup>*Guideline on Ethics for Professional Accountants* (New York: International Federation of Accountants, July 1990), p. 23.

## IN BUSINESS

### Are Women More Ethical than Men?

**CMA Canada**, the association of chartered management accountants in Canada, distributed questionnaires to Canadian business students that contained 28 questions involving ethical issues. For example, students were asked whether it would be acceptable or unacceptable to export a product that would be considered unsafe in Canada. The students responded on a six-point scale—with 1 being “acceptable” and 6 “unacceptable.” Note that the scores are the students’ perceptions of the acceptability of the action and not the “right” answer in any absolute sense. The average responses are revealing:

CMA Canada Business Student Survey (1 = considered by student to be acceptable; 6 = considered by student to be unacceptable)		
	Female	Male
Inflate an insurance claim? . . . . .	5.09	4.18
Return worn clothing? . . . . .	4.43	3.23
Purchase mismatched item for the incorrect price? . . . . .	3.27	2.22
Sell a frequent flyer ticket? . . . . .	3.39	2.69
Keep extra change given in error? . . . . .	4.03	3.30
Misrepresent age to obtain a senior discount? . . . . .	4.33	3.77
Misrepresent age to obtain a child discount? . . . . .	3.95	3.33
Charge higher prices in a poorer area? . . . . .	3.92	2.84
Use cheap foreign labor? . . . . .	2.72	2.02
Sell an unsafe product overseas? . . . . .	5.18	2.40
Charge a higher price after a tornado? . . . . .	3.94	3.26
Sell an illegal pharmaceutical product? . . . . .	4.64	3.99

Robert Dye, president and CEO of CMA Canada, emphasizes the importance of ethics in business: “Employees like to work for a company that they can trust. Customers like to deal with an ethically reliable business. Suppliers like to sell to firms with which they can have a real partnership. Communities are more likely to co-operate with organizations that deal honestly and fairly with them.” If the business community is to function effectively, all of the players need to act ethically.

Source: Excerpted from a study by J. Fisher, “Ethics Check,” appearing in *CMA Management* magazine (formerly *CMA Magazine*), April 1999, pp. 36–37, with permission of CMA Canada.

## THE CERTIFIED MANAGEMENT ACCOUNTANT (CMA)

A management accountant 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 at [www.imanet.org](http://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 Standards of Ethical Conduct for Practitioners of Management Accounting and Financial Management.

## How's the Pay?

The Institute of Management Accountants has made available the following table that allows an individual to estimate what his salary would be as a management accountant. (The table applies specifically to men. A similar table exists for women, who constitute about 31% of all IMA members.)

			Your Calculation
Start with this base amount		\$64,625	
If you are TOP-level management	ADD	\$22,970	
OR, If you are ENTRY-level management	SUBTRACT	\$20,725	
Number of years in the field _____	TIMES	\$521	
If you have an advanced degree	ADD	\$13,737	
If you hold the CMA	ADD	\$8,786	
If you hold the CPA	ADD	\$8,619	
Your estimated salary level			

For example, if you make it to the top management level in ten years and have an advanced degree and a CMA, your estimated annual salary would be \$115,328 (= \$64,625 + \$22,970 + 10 × \$521 + \$13,737 + \$8,786).

Source: Karl E. Reichardt and David Schroeder, "Members' Salaries Are Still Going Up," *Strategic Finance*, June 2003, pp. 27–40.

## SUMMARY

The business environment in recent years has been characterized by increasing competition and a relentless drive for continuous improvement. A number of approaches have been developed to assist organizations in meeting these challenges—including just-in-time (JIT), total quality management (TQM), process reengineering, and the theory of constraints (TOC).

JIT emphasizes the importance of reducing inventories to the barest minimum possible. This reduces working capital requirements, frees up space, reduces throughput time, reduces defects, and eliminates waste.

TQM involves focusing on the customer, and it employs systematic problem solving using teams made up of front-line workers. Specific TQM tools include benchmarking and the plan-do-check-act (PDCA) cycle. By emphasizing teamwork, a focus on the customer, and facts, TQM can avoid the organizational infighting that might otherwise block improvement.

Process reengineering involves completely redesigning a business process to eliminate non-value-added activities and to reduce opportunities for errors. Process reengineering relies more on outside specialists than TQM and is more likely to be imposed by top management.

The theory of constraints emphasizes the importance of managing the organization's constraints. Since the constraint is whatever is holding back the organization, improvement efforts usually must be focused on the constraint in order to be really effective.

Most organizations are decentralized to some degree. The organization chart depicts who works for whom in the organization and which units perform staff functions rather than line functions. Accountants perform a staff function—they support and provide assistance to others inside the organization.

Ethical standards serve a very important practical function in an advanced market economy. Without widespread adherence to ethical standards, living standards would fall. Ethics is the lubrication that keeps a market economy functioning smoothly. The Standards of Ethical Conduct for Practitioners of Management Accounting and Financial Management provide sound, practical guidelines for resolving ethics problems that might arise in an organization.

## GUIDANCE ANSWERS TO CONCEPT CHECKS



1. **Choice b.** Process reengineering, rather than total quality management, focuses on completely redesigning processes that have been targeted for improvement.
2. **Choice a.** The theory of constraints focuses on identifying and improving the constraint. The other three choices suggest managing nonconstraining departments in a manner that is not generally consistent with the goals of the theory of constraints.

## 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, since these terms are used repeatedly in the chapters that follow. The list for the Prologue follows.

**Benchmarking** A study of organizations that are among the best in the world at performing a particular task. (p. 5)

**Business process** A series of steps that are followed in order to carry out some task in a business. (p. 6)

**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. An effective CFO is a key member of the top management team whose advice is sought in all major decisions. (p. 12)

**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. (p. 12)

**Constraint** Anything that prevents an organization or individual from getting more of what it wants. (p. 8)

**Decentralization** The delegation of decision-making authority throughout an organization by providing managers at various operating levels with the authority to make key decisions relating to their area of responsibility. (p. 11)

**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. 3)

**Line** A position in an organization that is directly related to the achievement of the organization's basic objectives. (p. 12)

**Non-value-added activity** An activity that consumes resources or takes time but that does not add value for which customers are willing to pay. (p. 7)

**Organization chart** A visual diagram of a firm's organizational structure that depicts formal lines of reporting, communication, and responsibility between managers. (p. 11)

**Plan-do-check-act (PDCA) cycle** A systematic approach to continuous improvement that applies the scientific method to problem solving. (p. 5)

**Process reengineering** An approach to improvement that involves completely redesigning business processes in order to eliminate unnecessary steps, reduce errors, and reduce costs. (p. 6)

**Staff** A position in an organization that is only indirectly related to the achievement of the organization's basic objectives. Such positions are supportive in nature in that they provide service or assistance to line positions or to other staff positions. (p. 12)

**Theory of constraints (TOC)** A management approach that emphasizes the importance of managing constraints. (p. 8)

**Total quality management (TQM)** An approach to continuous improvement that focuses on customers and using teams of front-line workers to systematically identify and solve problems. (p. 5)

