LEARNING OBJECTIVES

After studying Chapter 16, you will be able to:

**LO 1** Explain why companies develop control systems for employees. p. 550

**LO 2** Summarize how to design a basic bureaucratic control system. p. 551

**LO 3** Describe the purposes for using budgets as a control device. p. 559

**LO 4** Define basic types of financial statements and financial ratios used as controls. p. 564

**LO 5** List procedures for implementing effective control systems. p. 569

**LO 6** Identify ways in which organizations use market control mechanisms. p. 574

**LO 7** Discuss the use of clan control in an empowered organization. p. 577

CHAPTER OUTLINE

**Bureaucratic Control Systems**
- The Control Cycle
- Approaches to Bureaucratic Control
- Management Audits
- Budgetary Controls
- Financial Controls
- The Downside of Bureaucratic Control
- Designing Effective Control Systems

**The Other Controls: Markets and Clans**
- Market Control
- Clan Control: The Role of Empowerment and Culture

More than at any time in the past, companies will not be able to hold themselves together with the traditional methods of control: hierarchy, systems, budgets, and the like ... The bonding glue will increasingly become ideological.

— Collins and Porras

Use your good judgment in all situations. There will be no additional rules.

— Nordstrom’s employee manual
HOW DOES ROGER BERKOWITZ MAINTAIN CONTROL AT LEGAL SEA FOODS?

Go ahead—order whatever your heart desires. Is it the baked Boston scrod, the classic fish and chips, or a lobster roll with fries and slaw? It doesn’t matter. At Legal Sea Foods, your favorite dish will be fresh and delicious. It will also taste the same every time, whether you’re dining in Philadelphia, Atlanta, or terminal B at Boston’s Logan Airport.

Legal Sea Foods traces its origins to the fish market George Berkowitz opened in 1950 next to his father’s grocery story in Cambridge, Massachusetts. By 1968, next door to the fish market he also had launched a little seafood restaurant where patrons sitting at picnic tables enjoyed freshly prepared seafood served on paper plates. The Berkowitzes are fanatical about quality: “If it isn’t Fresh, it isn’t Legal!” says the Legal Sea Foods slogan, and that sentiment is echoed more than half a century later by president and CEO Roger Berkowitz, George’s son.

Owing its success in part to its attention to tightly controlling factors in its operations, the Legal Sea Foods name is synonymous with quality. The company has grown by word of mouth to become an East Coast regional favorite. With more than 30 restaurants from Boston to Boca Raton, Florida, Legal Sea Foods generates more than $200 million in annual revenues. No wonder travel author Patricia Schultz recommended Legal Sea Foods in her best-selling guide 1,000 Things to See Before You Die.
The controls in place at Legal Sea Foods have helped the Boston-based restaurant group write a business success story. Another control-based success was Dell in its early years, when it gained market share as it perfected an individualized but rapid system for getting desktop and laptop PCs into the hands of consumers and business users. But more recently, Dell has stumbled. Consumers have been more interested in low prices from discounters than in Dell’s customization. Efforts to save money by outsourcing customer service led to widespread complaints about poor quality. Then the federal government announced that it was investigating financial irregularities in its reporting systems. When Dell said it would restate its earnings, the NASDAQ stock market nearly removed the company from its listing. How can a company that once was so successful run into so many problems, and how can a restaurant success story like Legal Sea Foods occur in an industry loaded with competitors and subject to numerous variables? These examples are two sides of one coin: control—a means or mechanism for regulating the behavior of organization members. Left on their own, people may act in ways that they perceive to be beneficial to them individually but that may work to the detriment of the organization as a whole. Even well-intentioned people may not know whether they are directing their efforts toward the activities that are most important. Thus, control is one of the fundamental forces that keep the organization together and heading in the right direction.

Control is defined as any process that directs the activities of individuals toward the achievement of organizational goals. It is how effective managers make sure that activities are going as planned. Some managers don’t want to admit it (see Table 16.1), but control problems—the lack of controls or the wrong kinds of controls—frequently cause irreparable damage to organizations. Ineffective control systems result in problems ranging from employee theft to peeling tire tread problems. Research in Motion was publicly embarrassed when failure to fully test a “noncritical system routine” for updating its computer servers caused the e-mail service on its BlackBerry devices to crash for hours throughout North America. Employees simply wasting time cost U.S. employers billions of dollars each year!

Control has been called one of the Siamese twins of management. The other twin is planning. Some means of control are necessary because once managers form plans and strategies, they must ensure that the plans are carried out. They must make sure that other people are doing what needs to be done and not doing inappropriate things. If plans are not carried out properly, management must take steps to correct the problem. This process is the primary control function of management. By ensuring creativity, enhancing quality, and reducing cost, managers must figure out ways to control the activities in their organizations.

Not surprisingly, effective planning facilitates control, and control facilitates planning. Planning lays out a framework for the future and, in this sense, provides a

**TABLE 16.1**

Symptoms of an Out-of-Control Company

<table>
<thead>
<tr>
<th>Control</th>
</tr>
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<tbody>
<tr>
<td>Any process that directs the activities of individuals toward the achievement of organizational goals.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>LO I</th>
</tr>
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<tbody>
<tr>
<td>Control is essential for the attainment of any management objective.</td>
</tr>
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</table>

| • Lax top management—senior managers do not emphasize or value the need for controls, or they set a bad example. |
| • Absence of policies—the firm’s expectations are not established in writing. |
| • Lack of agreed-upon standards—organization members are unclear about what needs to be achieved. |
| • “Shoot the messenger” management—employees feel their careers would be at risk if they reported bad news. |
| • Lack of periodic reviews—managers do not assess performance on a regular, timely basis. |
| • Bad information systems—key data are not measured and reported in a timely and easily accessible way. |
| • Lack of ethics in the culture—organization members have not internalized a commitment to integrity. |
Bureaucratic control is the use of rules, regulations, and formal authority to guide performance. It includes such items as budgets, statistical reports, and performance appraisals to regulate behavior and results. Market control involves the use of pricing mechanisms to regulate activities in organizations as though they were economic transactions. Business units may be treated as profit centers and trade resources (services or goods) with one another via such mechanisms. Managers who run these units may be evaluated on the basis of profit and loss. Clan control, unlike the first two types, does not assume that the interests of the organization and individuals naturally diverge. Instead, clan control is based on the idea that employees may share the values, expectations, and goals of the organization and act in accordance with them. When members of an organization have common values and goals—and trust one another—formal controls may be less necessary. Clan control is based on many of the interpersonal processes described in the organization culture section of Chapter 2, in Chapter 12 on leadership, and in Chapter 14 on groups and teams (e.g., group norms and cohesiveness).

Table 16.2 summarizes the main features of bureaucratic, market, and clan controls. We use this framework as a foundation for our discussions throughout the chapter.

### Bureaucratic Control Systems

**bureaucratic control**  
The use of rules, regulations, and authority to guide performance.

**market control**  
Control based on the use of pricing mechanisms and economic information to regulate activities within organizations.

**clan control**  
Control based on the norms, values, shared goals, and trust among group members.

<table>
<thead>
<tr>
<th>System Control</th>
<th>Features and Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bureaucratic control</td>
<td>Uses formal rules, standards, hierarchy, and legitimate authority. Works best where tasks are certain and workers are independent.</td>
</tr>
<tr>
<td>Market control</td>
<td>Uses prices, competition, profit centers, and exchange relationships. Works best where tangible output can be identified and market can be established between parties.</td>
</tr>
<tr>
<td>Clan control</td>
<td>Involves culture, shared values, beliefs, expectations, and trust. Works best where there is &quot;no one best way&quot; to do a job and employees are empowered to make decisions.</td>
</tr>
</tbody>
</table>

**TABLE 16.2**  
Characteristics of Controls

Government Motors? General Motors former Chairman and CEO Rick Wagoner is shown here talking about the company’s restructuring plans during a news conference in February 2009. He later resigned under pressure from the White House, as Fritz Henderson took over as the new CEO. Two months later a historic restructuring plan was implemented that would give the majority ownership of the ailing automaker to the federal government to help them fight off bankruptcy. What type of control is exemplified by this action?
Step 1: Setting Performance Standards  Every organization has goals: profitability, innovation, satisfaction of customers and employees, and so on. A standard is the level of expected performance for a given goal. Standards are targets that establish desired performance levels, motivate performance, and serve as benchmarks against which to assess actual performance. Standards can be set for any activity—financial activities, operating activities, legal compliance, charitable contributions, and so on.

We have discussed setting performance standards in other parts of the text. For example, employee goal setting for motivation is built around the concept of specific, measurable performance standards. Such standards should be challenging and should aim for improvement over past performance. Typically, performance standards are derived from job requirements, such as increasing market share by 10 percent, reducing costs 20 percent, and answering customer complaints within 24 hours. But performance standards don’t apply just to people in isolation—they frequently reflect the integration of both human and system performance. HealthPartners, a Bloomington, Minnesota, nonprofit organization that operates clinics and a hospital and offers health insurance plans, sets ambitious standards for patient care. To achieve a goal of reducing diabetes complications by 30 percent, HealthPartners measured existing practices and results, and then set up a standard protocol for exams and treatments, including the requirement that any abnormal results receive an immediate response.

Performance standards can be set with respect to (1) quantity, (2) quality, (3) time used, and (4) cost. For example, production activities include volume of output...
(quantity), defects (quality), on-time availability of finished goods (time use), and dollar expenditures for raw materials and direct labor (cost). Many important aspects of performance, such as customer service, can be measured by the same standards—adequate supply and availability of products, quality of service, speed of delivery, and so forth.

One word of caution: The downside of establishing performance targets and standards is that they may not be supported by other elements of the control system. Each piece of the system is important and depends on the others. Otherwise, the system can get terribly out of balance.

Step 2: Measuring Performance  The second step in the control process is to measure performance levels. For example, managers can count units produced, days absent, papers filed, samples distributed, and dollars earned. Performance data commonly are obtained from three sources: written reports, oral reports, and personal observations.

Written reports include computer printouts and on-screen reports. Thanks to computers’ data-gathering and analysis capabilities and decreasing costs, both large and small companies can gather huge amounts of performance data.

One common example of oral reports occurs when a salesperson contacts his or her immediate manager at the close of each business day to report the accomplishments, problems, or customers’ reactions during the day. The manager can ask questions to gain additional information or clear up any misunderstandings. When necessary, tentative corrective actions can be worked out during the discussion.

Personal observation involves going to the area where activities take place and watching what is occurring. The manager can directly observe work methods, employees’ nonverbal signals, and the general operation. Personal observation gives a detailed picture of what is going on, but it also has some disadvantages. It does not provide accurate quantitative data; the information usually is general and subjective. Also, employees can misunderstand the purpose of personal observation as mistrust or lack of confidence. Still, many managers believe in the value of firsthand observation. As you learned in earlier chapters, personal contact can increase leadership visibility and upward communication. It also provides valuable information about performance to supplement written and oral reports.

Regardless of the performance measure used, the information must be provided to managers on a timely basis. For example, consumer-goods companies such as General Foods carefully track new-product sales in selected local markets first, so they can make any necessary adjustments well before a national rollout. Information that is not available is of little or no use to managers.

Step 3: Comparing Performance with the Standard  The third step in the control process is comparing performance with the standard. In this process, the manager evaluates the performance. For some activities, relatively small deviations from the standard are acceptable, while in others a slight deviation may be serious. In many manufacturing processes, a significant deviation in either direction (e.g., drilling a hole that is too small or too large) is unacceptable. In other cases,
Step 4: Taking Action to Correct Problems and Reinforce Successes

The last step in the control process is to take appropriate action when there are significant deviations. This step ensures that operations are adjusted to achieve the planned results—or to continue exceeding the planned results—if the manager determines it is possible. In cases in which significant variances are discovered, the manager usually takes immediate and vigorous action.

An alternative approach is for the corrective action to be taken, not by higher-ups, but by the operator at the point of the problem. In computer-controlled production
technology, two basic types of control are feasible: specialist control and operator control. With specialist control, operators of computer-numerical-control (CNC) machines must notify engineering specialists of malfunctions. With this traditional division of labor, the specialist takes corrective action. With operator control, multi-skilled operators can rectify their own problems as they occur. Not only is this second strategy more efficient because deviations are controlled closer to their source, but it is also more satisfying because operators benefit by having a more enriched job. At Microscan System, which makes bar-code scanners, every employee is responsible for ensuring the quality of his or her work, resulting in efficient operations. Engineers are responsible for preventing and correcting problems in product and process design, and production workers are responsible for preventing and correcting defects in the processes they carry out.\(^1\)

When corrective action is needed to solve a systemic problem, such as major delays in work flow, often a team approach is most effective. A corrective action is more likely to have greater acceptance in the organization if it is based on a common effort and takes into account multiple points of view. As we discussed in Chapter 14, teams often bring a greater diversity of resources, ideas, and perspectives to problem solving. Knowledgeable team members can often prevent managers from implementing simplistic solutions that don’t address the underlying causes of a problem. They are more likely to take into account the effects of any solution on other parts of the organization, preventing new problems from arising later. And they may well develop solutions that managers might not have considered on their own. As a result, any corrective action that is finally adopted will probably be more effective. An important added benefit of bringing employees together to develop corrective actions is that it helps managers build and reinforce an organizationwide culture of high standards.

The selection of the corrective action depends on the nature of the problem. The corrective action may involve a shift in marketing strategy (if, say, the problem is lower-than-expected sales), a disciplinary action, a new way to check the accuracy of manufactured parts, or a major modification to a process or system. Sometimes managers learn they can get better results if they adjust their own practices. Yum Brands, whose franchise restaurants include KFC, Taco Bell, Pizza Hut, and Long John Silver’s, conducts regular surveys to learn whether employees feel strong commitment to their jobs. These data are shared with managers to help them measure their performance as leaders and motivators. Jonathan McDaniel, a Houston KFC manager, once learned that his employees were unhappy with their work hours. He began asking them ahead of time whether they wanted particular days off each month—information that helped him create better schedules and end a cause of employee dissatisfaction.\(^1\)

**Approaches to Bureaucratic Control**

The three approaches to bureaucratic control are feedforward, concurrent, and feedback. Feedforward control takes place before operations begin and includes policies, procedures, and rules designed to ensure that planned activities are carried out properly. Examples include inspection of raw materials and proper selection and training of employees. Concurrent control takes place while plans are being carried out. It includes directing, monitoring, and fine-tuning activities as they occur. Feedback control focuses on the use of information about results to correct deviations from the acceptable standard after they arise.

**Feedforward Control** Feedforward control (sometimes called preliminary control) is future oriented; its aim is to prevent problems before they arise. Instead of waiting for results and comparing them with goals, a manager can exert control by limiting activities in advance. For example, companies have policies defining the scope within which decisions are made. A company may dictate that managers must adhere to clear ethical and legal guidelines when making decisions. Formal rules and procedures also prescribe people’s actions before they occur. For example, legal experts advise...
Part Five Controlling: Learning and Changing

Companies to establish policies forbidding disclosure of proprietary information or making clear that employees are not speaking for the company when they post messages on blogs, microblogging sites such as Twitter, or social-networking sites such as Facebook. Human resource policies defining what forms of body art are acceptable to display at work can avoid awkward case-by-case conversations about a tattoo that offends coworkers or piercings that are incompatible with the company’s image.\textsuperscript{15}

Recently, more managers have grown concerned about the organizational pitfalls of workplace romances, and some have sought a solution in feedforward controls. As wonderful as it is to find love, problems can arise if romantic activities between a supervisor and subordinate create a conflict of interest or charges of sexual harassment. Other employees might interpret the relationship wrongly—that the company sanctions personal relationships as a path to advancement. In addition, romantic ups-and-downs can spill over into the workplace and affect everyone’s mood and motivation. Controls aimed at preventing such problems in an organization include training in appropriate behavior (including how to avoid sexual harassment) and even requiring executives and their romantic interests to sign “love contracts” in which they indicate that the relationship is voluntary and welcome. A copy of the contract goes into the company’s personnel files in case the attachment disintegrates and an unhappy employee wants to blame the company for having allowed it in the first place.\textsuperscript{16}

**Concurrent Control** Concurrent control, which takes place while plans are carried out, is the heart of any control system. On a manufacturing floor, all efforts are directed toward producing the correct quantity and quality of the right products in the specified amount of time. In an airline terminal, the baggage must get to the right airplanes before flights depart. In factories, materials must be available when and where needed, and breakdowns in the production process must be repaired immediately. Concurrent control also is in effect when supervisors watch employees to ensure they work efficiently and avoid mistakes.

Advances in information technology have created powerful concurrent controls. Computerized systems give managers immediate access to data from the most remote corners of their companies. For example, managers can update budgets instantly based on a continuous flow of performance data. In production facilities, monitoring systems that track errors per hour, machine speeds, and other measures allow managers to correct small production problems before they become disasters. Point-of-sale terminals in store checkout lines send sales data back to a retailer’s headquarters to show which products are selling in which locations.

For James Skinner, CEO of McDonald’s, paying attention to what is happening in the restaurants is critical. Launches of new menu items such as McCafé premium coffee drinks, breakfast burritos, and McGriddle sandwiches have been hits with McDonald’s customers looking for value in their food purchases. Skinner and his staff check sales monthly in all stores to assess what is selling well throughout the global chain and to make adjustments. Monitoring these details as they occur has allowed McDonald’s to grow even during the recent recession.\textsuperscript{17}

**Feedback Control** Feedback control is involved when performance data have been gathered and analyzed and the results have been returned to someone (or something) in the process to make corrections. When supervisors monitor behavior, they are exercising concurrent control. When they point out and correct improper performance, they are using feedback as a means of control.

Timing is an important aspect of feedback control. Long time lags often occur between performance and feedback, such as when actual spending is compared with the quarterly budget, instead of weekly or monthly, or when some aspect of performance is compared with the projection made a year earlier. Yet, if feedback on performance is not timely, managers cannot quickly identify and eliminate the problem and prevent more serious harm.\textsuperscript{18}
Some feedback processes are under real-time (concurrent) control, such as a computer-controlled robot on an assembly line. Such units have sensors that continually determine whether they are in the correct position to perform their functions. If they are not, a built-in control device makes immediate corrections.

In other situations, feedback processes require more time. Some companies that value innovation are applying social network analysis, which uses data from surveys to create diagrams showing which employees collaborate with which colleagues. Employees who are at a hub of information sharing are the organization’s “innovation catalysts”—people who actively participate in information sharing. Managers can use the social network analysis to reward innovation catalysts, give them important assignments, and, in areas where not enough collaboration is occurring, train and motivate employees to share knowledge.  

The Role of Six Sigma  

One of the most important quality-control tools to emerge is Six Sigma, which we first discussed in Chapter 9. It is a particularly robust and powerful application of feedback control. Six Sigma is designed to reduce defects in all organization processes—not just product defects but anything that may result in customer dissatisfaction, such as inadequate service, delayed delivery, and excessively high prices due to high costs or inefficiency. The system was developed at Motorola in the late 1980s, when the company found it was being beaten consistently in the competitive marketplace by foreign firms that were able to produce higher-quality products at a lower cost. Since then, the technique has been widely adopted and even improved on by many companies, such as GE, Allied Signal, Ford, and Xerox.

Sigma is the Greek letter used in statistics to designate the estimated standard deviation, or variation in a process. It indicates how often defects in a process are likely to occur. The lower the sigma number, the higher the level of variation or defects; the higher the sigma number, the lower the level of variation or defects. For example, as you can see in Table 16.3, a two-sigma-level process has more than 300,000 defects per million opportunities (DPMO)—not a very well-controlled process. A three-sigma-level process has 66,807 DPMO, which is roughly a 93 percent level of accuracy. Many organizations operate at this level, which on its face does not sound too bad, until we consider its implications—for example, 7 items of airline baggage lost for every 100 processed. The additional costs to organizations of such inaccuracy are enormous. As you can see in the table, even at just above a 99 percent defect-free rate, or 6,210 DPMO, the accuracy level is often unacceptable—the statistical equivalent of about 50 dropped newborn babies a day.  

At a six-sigma level, a process is producing fewer than 3.4 defects per million, which means it is operating at a 99.99966 percent level of accuracy. Six Sigma companies have not only close to zero product or service defects but also substantially lower production costs and cycle times and much higher levels of customer satisfaction. The methodology isn’t just for the factory floor, either. Accountants have used Six Sigma to improve the quality of their audits investigating risks faced by their clients.  

<table>
<thead>
<tr>
<th>Sigma Level</th>
<th>DPMO</th>
<th>Is Four Sigma Good Enough?</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2\sigma$</td>
<td>308,537</td>
<td>Consider these everyday examples of four sigma quality . . .</td>
</tr>
<tr>
<td>$3\sigma$</td>
<td>66,807</td>
<td>• 20,000 lost articles of mail per hour</td>
</tr>
<tr>
<td>$4\sigma$</td>
<td>6,210</td>
<td>• Unsafe drinking water 15 minutes per day</td>
</tr>
<tr>
<td>$5\sigma$</td>
<td>233</td>
<td>• 5,000 incorrect surgical operations per week</td>
</tr>
<tr>
<td>$6\sigma$</td>
<td>3.4</td>
<td>• 200,000 wrong prescriptions each year</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>• No electricity for 7 hours each month</td>
</tr>
</tbody>
</table>

The Six Sigma approach is based on an intense statistical analysis of business processes that contribute to customer satisfaction. For example, a business process could be assembling a product or delivering products to customers. For the given process, the effort begins by defining the outputs and information that flow through each stage of the process and then measuring performance at each stage. A variety of tools are available for analyzing the results. These might include looking for all the root causes of any problem. Suppose some customers are dissatisfied with a company’s customer service. Asking “why?” over and over could reveal that customers are dissatisfied because phone calls go unanswered, which happens because support staff cannot keep up with the call volume, which happens because the department is understaffed, which is the result of frozen hiring levels, the result of budget cuts. Any solution will have to address the budget restrictions, either by increasing the budget or by finding a way that a small department can satisfy customers. After the problems are analyzed, process improvements are identified and implemented, and the new process is evaluated again. This cycle continues until the desired quality level is achieved. In this way, the Six Sigma process leads to continuous improvement in an organization’s operations.

Six Sigma has come under some criticism for not always delivering business results. One likely reason Six Sigma doesn’t always improve the bottom line is that it focuses only on how to eliminate defects in a process, not whether the process is the best one for the organization. So, for example, at 3M, a drive to improve efficiency through Six Sigma has been blamed for slowing the flow of innovative ideas. At Home Depot, Six Sigma has been credited with improving such processes as customer checkout and deciding where to place products in stores, but some say the effort took store workers away from customers. One way managers can apply the strengths of Six Sigma and minimize the drawbacks is by setting different goals and control processes for the company’s mature products than for its areas of innovation.

The Columbus Metropolitan Library used Six Sigma to the benefit of its workers, customers, and its overall processes. Because the library is a not-for-profit organization, its profits were not the issue. Instead, working within a limited—in fact, frozen—budget was the challenge. As the budget began to squeeze staff and services more tightly, the library’s top managers had to figure out how to do more, perform better, and achieve results with fewer resources. To accomplish this, they turned to the Lean Six Sigma (LSS) approach, which combines Six Sigma quality improvement methods with efforts to eliminate waste—in time, complex processes, and materials. They settled on areas needing improvement, formed teams, and began to identify and define the specific problems the library was facing.

Some of the improvement projects were broad in scope, and others were quite narrow. For example, one of the narrower projects involved reviewing how long a customer had to wait to speak to a staff member after dialing the library’s information line. The line is a crucial link to the public, handling nearly 400,000 calls a year. Despite its importance, customers sometimes had to wait as much as five minutes to speak with someone—creating general dissatisfaction with the library. At first glance, it seemed that more staff would be needed to alleviate the problem. But when the project team dug deeper and applied statistical analysis through the Six Sigma approach, they discovered that the wait time was really caused by the length of the recorded menu and the way staff was trained to handle it. With reprogramming of the menu and retraining of the current staff, more than 80 percent of calls to the information line are now answered in less than 15 seconds.

The library has also undertaken projects involving community relations and development, requests for printed documents, human resources, and finance. “Of course, true system-wide quality improvement will require more than a handful of successful projects,” writes library executive Shaunessy Everett. “Change is risky, it’s scary, and it takes time.” But the Columbus Metropolitan Library is now a true devotee of the Six Sigma approach.
Management Audits

Over the years, management audits have developed as a means of evaluating the effectiveness and efficiency of various systems within an organization, from social responsibility programs to accounting control. Management audits may be external or internal. Managers conduct external audits of other companies and internal audits of their own companies. Some of the same tools and approaches are used for both types of audit.24

External Audits  An external audit occurs when one organization evaluates another organization. Typically an external body such as a CPA firm conducts financial audits of an organization (accounting audits are discussed later). But any company can conduct external audits of competitors or other companies for its own strategic decision-making purposes. This type of analysis (1) investigates other organizations for possible merger or acquisition, (2) determines the soundness of a company that will be used as a major supplier, or (3) discovers the strengths and weaknesses of a competitor to maintain or better exploit the competitive advantage of the investigating organization. Publicly available data usually are used for these evaluations.25

External audits provide essential feedback control when they identify legal and ethical lapses that could harm the organization and its reputation. They also are useful for preliminary control because they can prevent problems from occurring. If a company seeking to acquire other businesses gathers adequate, accurate information about possible candidates, it is more likely to acquire the most appropriate companies and avoid unsound acquisitions.

Internal Audits  An organization may assign a group to conduct an internal audit to assess (1) what the company has done for itself and (2) what it has done for its customers or other recipients of its goods or services. The company can be evaluated on a number of factors, including financial stability, production efficiency, sales effectiveness, human resources development, earnings growth, energy use, public relations, civic responsibility, and other criteria of organizational effectiveness. The audit reviews the company’s past, present, and future, including any risks the organization should be prepared to face.26 A recent study found that the stock prices of companies with highly rated audit committees tended to rise faster than shares of companies with lower-rated internal auditors. It is likely that the higher-rated audit committees do a better job of finding and eliminating undesirable practices.27

To perform a management audit, auditors compile a list of desired qualifications and weight each qualification. Among the most common undesirable practices uncovered by a management audit are the performance of unnecessary work, duplication of work, poor inventory control, uneconomical use of equipment and machines, procedures that are more costly than necessary, and wasted resources. At Capital One Financial Corporation, the human resource (HR) department performed an audit of facilities usage. Over several months, staff members walked through headquarters, noting which desks were occupied. The audit determined that more than 4 out of 10 desks were unused each day, and another 3 out of 10 were unused at least part of the day. Employees were away at meetings, visiting clients, or working flexible schedules. The HR staff developed a plan for Capital One to operate more efficiently in one-third of its space. Now most employees keep their work items in a cart, which they take to a desk when they need one. The change saves the company $3 million a year.28

Budgetary Controls

Budgetary control is one of the most widely recognized and commonly used methods of managerial control. It ties together feedforward control, concurrent control, and feedback control, depending on the point at which it is applied. Budgetary control is the process of finding out what’s being done and comparing the results with the corresponding budget data to verify accomplishments or remedy differences. Budgetary control commonly is called budgeting.
Fundamental Budgetary Considerations In private industry, budgetary control begins with an estimate of sales and expected income. Table 16.4 shows a budget with a forecast of expected sales (the sales budget) on the top row, followed by several categories of estimated expenses for the first three months of the year. In the bottom row, the profit estimate is determined by subtracting each month’s budgeted expenses from the sales in that month’s sales budget. Columns next to each month’s budget provide space to enter the actual accomplishments so that managers can readily compare expected amounts and actual results.

Although this discussion of budgeting focuses on the flow of money into and out of the organization, budgeting information is not confined to finances. The entire enterprise and any of its units can create budgets for their activities, using units other than dollars, if appropriate. For example, many organizations use production budgets forecasting physical units produced and shipped, and labor can be budgeted in skill levels or hours of work required.

A primary consideration of budgeting is the length of the budget period. All budgets are prepared for a specific time period. Many budgets cover one, three, or six months or one year. The length of time selected depends on the primary purpose of the budgeting. The period chosen should include the enterprise’s complete normal cycle of activity. For example, seasonal variations should be included for production and for sales. The budget period commonly coincides with other control devices, such as managerial reports, balance sheets, and statements of profit and loss. In addition, the extent to which reasonable forecasts can be made should be considered in selecting the length of the budget period.

Budgetary control proceeds through several stages. Establishing expectancies starts with the broad plan for the company and the estimate of sales, and it ends with budget approval and publication. Next, the budgetary operations stage deals with finding out what is being accomplished and comparing the results with expectancies. The last stage, as in any control process, involves responding appropriately with some combination of reinforcing successes and correcting problems.

Although practices differ widely, a member of top management often serves as the chief coordinator for formulating and using the budget. Usually the chief financial officer (CFO) has these duties. He or she needs to be less concerned with the details than with resolving conflicting interests, recommending adjustments when needed, and giving official sanction to the budgetary procedures. In a small company, budgeting responsibility generally rests with the owner. To understand why budgeting is a critical responsibility even in small start-ups, and to receive some practical advice on using budgets, read the “From the Pages of BusinessWeek” feature.

**TABLE 16.4 A Sales-Expense Budget**

<table>
<thead>
<tr>
<th></th>
<th>January</th>
<th>February</th>
<th>March</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
<td>Actual</td>
<td>Estimate</td>
</tr>
<tr>
<td>Sales</td>
<td>$1,200,000</td>
<td>$1,350,000</td>
<td>$1,400,000</td>
</tr>
<tr>
<td>Expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General overhead</td>
<td>310,000</td>
<td>310,000</td>
<td>310,000</td>
</tr>
<tr>
<td>Selling</td>
<td>242,000</td>
<td>275,000</td>
<td>288,000</td>
</tr>
<tr>
<td>Producing</td>
<td>327,000</td>
<td>430,500</td>
<td>456,800</td>
</tr>
<tr>
<td>Research</td>
<td>118,400</td>
<td>118,400</td>
<td>115,000</td>
</tr>
<tr>
<td>Office</td>
<td>90,000</td>
<td>91,200</td>
<td>91,500</td>
</tr>
<tr>
<td>Advertising</td>
<td>32,500</td>
<td>27,000</td>
<td>25,800</td>
</tr>
<tr>
<td>Estimated gross profit</td>
<td>80,100</td>
<td>97,900</td>
<td>112,900</td>
</tr>
</tbody>
</table>
Better Business through Budgeting

Creating a budget can help a start-up entrepreneur set goals and evaluate the viability of a business idea. It can also help established small-business owners gauge the financial health of their companies and measure progress. No business should be without a working budget, yet many small companies do operate without formal budgets, or they seldom consult the budgets they draw up, says Wendy Alexander, director of small business for Capital One Financial. Here are edited excerpts of Alexander’s interview with columnist Karen E. Klein.

Q: Why does a would-be entrepreneur or a small-business owner need to devote the time to creating a working budget?
A: For a start-up CEO, a well-planned budget is crucial to assess whether an idea is realistic, from a business and financial perspective. Once a company is in motion, it’s a tool that tells you whether or not your financials are on track. If you experience unexpected windfalls or expenses, your budget acts as an early-warning system to alert you to those things. And, of course, a budget is key to getting loans, bringing on new partners, and attracting investors. With a budget, you’ll have a history of performance that allows you to show what you planned to do with your company and what you have achieved.

Q: Don’t most companies have budgets?
A: Most, but not all. A substantial number of the micro-businesses we counsel do not have working budgets. The reality is, most small-business owners found their companies because they love whatever it is they are producing or providing as a service. Managing the finances is secondary to most of them. So, if they feel like the financial matters are more or less under control, they don’t bother to create a formal budget. Also, small-business owners are always strapped for time, and the last thing they want to spend a lot of time on are financial details. What’s key is to make the commitment to do a budget, and then make it as simple—but also as effective—as possible.

Q: How do you define a budget, and what elements should it include?
A: Very simply, it involves identifying the income that the company is bringing in and the expenses that are going out. Every company should track its income, expenses, and profits and project those numbers about a year out, or even a couple of years out. Doing that shows how the company is expected to do in the future, and as time passes, those expectations can be compared to how the company actually does. That comparison shows the entrepreneur how the company is performing and whether or not goals are being met.

Q: How do small-business owners make realistic projections about what their financial performance will be over time?
A: If they are already in business, they should have a lot of historical data they can look at and go from there. A new business owner will need to do some research. Start by pulling together all your anticipated sources of income. Then think about whether the business is seasonal, what additional income sources might come along in the near future, and what your marketing plan is likely to generate in terms of increased income. Next, you do the same thing for your fixed costs and variable expenses, thinking about each major line item and what it is expected to cost. Once you’ve pulled the pieces of the puzzle together, you need to plug in the numbers.

Q: How do you come up with those?
A: You research prices and what things are likely to cost. If you can, you research the sales of other people in the same market you’re in. Something to remember is that it always pays to be a little conservative with your numbers. It’s always great to have some contingency funds. So don’t constrict your business from taking advantage of good opportunities, but do build a financial cushion into your budget.
Types of Budgets  There are many types of budgets. Some of the more common types are as follows:

- **Sales budget.** Usually data for the sales budget include forecasts of sales by month, sales area, and product.
- **Production budget.** The production budget commonly is expressed in physical units. Required information for preparing this budget includes types and capacities of machines, economic quantities to produce, and availability of materials.
- **Cost budget.** The cost budget is used for areas of the organization that incur expenses but no revenue, such as human resources and other support departments. Cost budgets may also be included in the production budget. Costs may be fixed, or independent of the immediate level of activity (such as rent) or variable, rising or falling with the level of activity (such as raw materials).
- **Cash budget.** The cash budget is essential to every business. It should be prepared after all other budget estimates are completed. The cash budget shows the anticipated receipts and expenditures, the amount of working capital available, the extent to which outside financing may be required, and the periods and amounts of cash available.
- **Capital budget.** The capital budget is used for the cost of fixed assets like plant and equipment. Such costs are usually treated, not as regular expenses, but as investments because of their long-term nature and importance to the organization’s productivity.
- **Master budget.** The master budget includes all the major activities of the business. It brings together and coordinates all the activities of the other budgets and can be thought of as a “budget of budgets.”

Traditionally, budgets were often imposed *top-down*, with senior management setting specific targets for the entire organization at the beginning of the budget.
process. In today’s more complex organizations, the budget process is much more likely to be bottom-up, with top management setting the general direction, but with lower-level and middle-level managers actually developing the budgets and submitting them for approval. When the budgets are consolidated, senior managers can then determine whether the budget objectives of the organization are being met. The budget will then be either approved or sent back down the organization for additional refinement.

Accounting records must be inspected periodically to ensure they were properly prepared and are correct. Accounting audits, which are designed to verify accounting reports and statements, are essential to the control process. This audit is performed by members of an outside firm of public accountants. Knowing that accounting records are accurate, true, and in keeping with generally accepted accounting practices (GAAP) creates confidence that a reliable base exists for sound overall controlling purposes.

Activity-Based Costing  Traditional methods of cost accounting may be inappropriate in today’s business environment because they are based on outdated methods of rigid hierarchical organization. Instead of assuming that organizations are bureaucratic “machines” that can be separated into component functions such as human resources, purchasing, and maintenance, companies such as Hewlett-Packard and GE have used activity-based costing (ABC) to allocate costs across business processes.

ABC starts with the assumption that organizations are collections of people performing many different but related activities to satisfy customer needs. The ABC system is designed to identify those streams of activity and then to allocate costs across particular business processes. The basic procedure is outlined in Figure 16.2 and works as follows: First, employees are asked to break down what they do each day in order to define their basic activities. For example, employees in Dana Corporation’s material control department engage in a number of activities that range from processing sales orders and sourcing parts to requesting engineering changes and solving problems. These activities form the basis for ABC. Second, managers look at total expenses computed by traditional accounting—fixed costs, supplies, salaries, fringe benefits, and so on—and spread total amounts over the activities according to the amount of time spent on each activity. At Dana, customer service employees spend nearly 25 percent of their time processing sales orders and only about 3 percent scheduling parts. Thus, 25 percent of the total cost ($144,846) goes to order processing, and 3 percent

<table>
<thead>
<tr>
<th>Activity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process sales order</td>
<td>$144,846</td>
</tr>
<tr>
<td>Source parts</td>
<td>$136,320</td>
</tr>
<tr>
<td>Expedite supplier orders</td>
<td>$72,143</td>
</tr>
<tr>
<td>Expedite internal processing</td>
<td>$49,945</td>
</tr>
<tr>
<td>Receive supplier quality</td>
<td>$47,599</td>
</tr>
<tr>
<td>Reissue purchase orders</td>
<td>$45,235</td>
</tr>
<tr>
<td>Expedite customer orders</td>
<td>$27,747</td>
</tr>
<tr>
<td>Schedule intracompany sales</td>
<td>$17,768</td>
</tr>
<tr>
<td>Request engineering change</td>
<td>$16,704</td>
</tr>
<tr>
<td>Resolve problems</td>
<td>$16,648</td>
</tr>
<tr>
<td>Schedule parts</td>
<td>$15,390</td>
</tr>
</tbody>
</table>

| Total                      | $590,345  |

Old-style accounting identifies costs according to the category of expense. The new math tells you that your real costs are what you pay for the different tasks your employees perform. Find that out and you will manage better.

**FIGURE 16.2** How Dana Discovers What Its True Costs Are

SOURCE: Courtesy Dana Corporation.
($15,390) goes to scheduling parts. As can be seen in Figure 16.2, both the traditional
and ABC systems reach the same bottom line. However, because the ABC method
allocates costs across business processes, it provides a more accurate picture of how
costs should be charged to products and services. 39

This heightened accuracy can give managers a more realistic picture of how the
organization is actually allocating its resources. It can highlight where wasted activi-
ties are occurring or whether activities cost too much relative to the benefits provided.
Managers can then take action to correct the problem. For example, Dana’s most
expensive activity is sales-order processing. Its managers might try to find ways to
lower that cost, freeing up resources for other tasks. By providing this type of infor-
mination, ABC has become a valuable method for streamlining business processes.

Financial Controls

In addition to budgets, businesses commonly use other statements for financial con-
trol. Two financial statements that help control overall organizational performance
are the balance sheet and the profit and loss statement.

The Balance Sheet The balance sheet shows the financial picture of a company
at a given time. This statement itemizes three elements: (1) assets, (2) liabilities, and
(3) stockholders’ equity. Assets are the values of the various items the corporation
owns. Liabilities are the amounts the corporation owes to various creditors. Stock-
holders’ equity is the amount accruing to the corporation’s owners. The relationship
among these three elements is as follows:

\[
\text{Assets} = \text{Liabilities} + \text{Stockholders’ equity}
\]

Table 16.5 shows an example of a balance sheet. During the year, the company
grew because it enlarged its building and acquired more machinery and equipment by
means of long-term debt in the form of a first mortgage. Additional stock was sold to
help finance the expansion. At the same time, accounts receivable were increased, and
work in process was reduced. Observe that Total assets ($3,053,367) = Total liabili-
ties ($677,204 + $618,600) + Stockholders’ equity ($700,000 + $981,943 + $75,620).

Summarizing balance sheet items over a long period of time uncovers important
trends and gives a manager further insight into overall performance and areas in which
adjustments need to be made. For example, at some point, the company might decide
that it would be prudent to slow down its expansion plans.

The Profit and Loss Statement The profit and loss statement is an itemized
financial statement of the income and expenses of a company’s operations. Table 16.6
shows a comparative statement of profit and loss for two consecutive years. In this
illustration, the operating revenue of the enterprise has increased. Expense also has
increased, but at a lower rate, resulting in a higher net income. Some managers draw
up tentative profit and loss statements and use them as goals. Then performance is
measured against these goals or standards. From comparative statements of this type,
a manager can identify trouble areas and correct them.

Controlling by profit and loss is most commonly used for the entire enterprise
and, in the case of a diversified corporation, its divisions. However, if controlling is by
departments, as in a decentralized organization in which department managers have
control over both revenue and expense, a profit and loss statement is used for each
department. Each department’s output is measured, and a cost, including overhead,
is charged to each department’s operation. Expected net income is the standard for
measuring a department’s performance.

Financial Ratios An effective approach for checking on the overall performance
of an enterprise is to use key financial ratios. Ratios help indicate possible strengths
### Comparative Balance Sheet for the Years Ending December 31

<table>
<thead>
<tr>
<th>Assets</th>
<th>This Year</th>
<th>Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current assets:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$161,870</td>
<td>$119,200</td>
</tr>
<tr>
<td>U.S. Treasury bills</td>
<td>250,400</td>
<td>30,760</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>825,595</td>
<td>458,762</td>
</tr>
<tr>
<td><strong>Inventories:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work in process and finished products</td>
<td>429,250</td>
<td>770,800</td>
</tr>
<tr>
<td>Raw materials and supplies</td>
<td>251,340</td>
<td>231,010</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>$1,918,455</td>
<td>$1,610,532</td>
</tr>
<tr>
<td><strong>Other assets:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land</td>
<td>157,570</td>
<td>155,250</td>
</tr>
<tr>
<td>Building</td>
<td>740,135</td>
<td>91,784</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>172,688</td>
<td>63,673</td>
</tr>
<tr>
<td>Furniture and fixtures</td>
<td>132,494</td>
<td>57,110</td>
</tr>
<tr>
<td><strong>Total other assets before depreciation</strong></td>
<td>$1,202,887</td>
<td>$367,817</td>
</tr>
<tr>
<td>Less: Accumulated depreciation and amortization</td>
<td>67,975</td>
<td>63,786</td>
</tr>
<tr>
<td><strong>Total other assets</strong></td>
<td>$1,134,912</td>
<td>$304,031</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$3,053,367</td>
<td>$1,914,563</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities and stockholders’ equity</th>
<th>This Year</th>
<th>Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current liabilities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$287,564</td>
<td>$441,685</td>
</tr>
<tr>
<td>Payrolls and withholdings from employees</td>
<td>44,055</td>
<td>49,580</td>
</tr>
<tr>
<td>Commissions and sundry accruals</td>
<td>83,260</td>
<td>41,362</td>
</tr>
<tr>
<td>Federal taxes on income</td>
<td>176,340</td>
<td>50,770</td>
</tr>
<tr>
<td>Current installment on long-term debt</td>
<td>85,985</td>
<td>38,624</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td>$667,204</td>
<td>$622,021</td>
</tr>
<tr>
<td><strong>Long-term liabilities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-year, 9 percent loan, payable in each of the years 2002–2015</td>
<td>210,000</td>
<td>225,000</td>
</tr>
<tr>
<td>5 percent first mortgage</td>
<td>408,600</td>
<td></td>
</tr>
<tr>
<td>Registered 9 percent notes payable</td>
<td></td>
<td>275,000</td>
</tr>
<tr>
<td><strong>Total long-term liabilities</strong></td>
<td>618,600</td>
<td>500,000</td>
</tr>
<tr>
<td><strong>Stockholders’ equity:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common stock: authorized 1,000,000 shares, outstanding last year 492,000 shares, outstanding this year 700,000 shares at $1 par value</td>
<td>700,000</td>
<td>492,000</td>
</tr>
<tr>
<td>Capital surplus</td>
<td>981,943</td>
<td>248,836</td>
</tr>
<tr>
<td>Earned surplus</td>
<td>75,620</td>
<td>51,706</td>
</tr>
<tr>
<td><strong>Total stockholders’ equity</strong></td>
<td>1,757,563</td>
<td>792,542</td>
</tr>
<tr>
<td><strong>Total liabilities and stockholders’ equity</strong></td>
<td>$3,053,367</td>
<td>$1,914,563</td>
</tr>
</tbody>
</table>
Part Five Controlling: Learning and Changing

and weaknesses in a company’s operations. Key ratios are calculated from selected items on the profit and loss statement and the balance sheet. We will briefly discuss three categories of financial ratios: liquidity, leverage, and profitability:

- **Liquidity ratios.** Liquidity ratios indicate a company’s ability to pay short-term debts. The most common liquidity ratio is current assets to current liabilities, called the **current ratio** or net working capital ratio. This ratio indicates the extent to which current assets can decline and still be adequate to pay current liabilities. Some analysts set a ratio of 2 to 1, or 2.00, as the desirable minimum. For example, referring back to Table 16.5, the liquidity ratio there is about 2.86 ($1,918,455/$667,204). The company’s current assets are more than capable of supporting its current liabilities.

- **Leverage ratios.** Leverage ratios show the relative amount of funds in the business supplied by creditors and shareholders. An important example is the **debt-equity ratio**, which indicates the company’s ability to meet its long-term financial obligations. If this ratio is less than 1.5, the amount of debt is not considered excessive. In Table 16.5, the debt-equity ratio is only 0.35 ($618,600/$1,757,563). The company has financed its expansion almost entirely by issuing stock rather than by incurring significant long-term debt.

- **Profitability ratios.** Profitability ratios indicate management’s ability to generate a financial return on sales or investment. For example, **return on investment (ROI)** is a ratio of profit to capital used, or a rate of return from capital (equity plus long-term debt). This ratio allows managers and shareholders to assess how well the firm is doing compared with other investments. For example, if the net income of the company in Table 16.5 were $300,000 this year, its return on capital would be 12.6 percent ($300,000/($1,757,563/$618,600)), normally a very reasonable rate of return.
Using Financial Ratios Although ratios provide both performance standards and indicators of what has occurred, exclusive reliance on financial ratios can have negative consequences. Because ratios usually are expressed in compressed time horizons (monthly, quarterly, or yearly), they often cause management myopia—managers focus on short-term earnings and profits at the expense of their longer-term strategic obligations. Control systems using long-term (e.g., three- to six-year) performance targets can reduce management myopia and focus attention further into the future.

A second negative outcome of ratios is that they relegate other important considerations to a secondary position. Research and development, management development, progressive human resource practices, and other considerations may receive insufficient attention. Therefore, the use of ratios should be supplemented with other control measures. Organizations can hold managers accountable for market share, number of patents granted, sales of new products, human resource development, and other performance indicators.

The Downside of Bureaucratic Control

So far you have learned about control from a mechanical viewpoint. But organizations are not strictly mechanical; they are composed of people. While control systems are used to constrain people’s behavior and make their future behavior predictable, people are not machines that automatically fall into line as the designers of control systems intend. In fact, control systems can lead to dysfunctional behavior. A control system cannot be effective without consideration of how people will react to it. For effective control of employee behavior, managers should consider three types of potential responses to control: rigid bureaucratic behavior, tactical behavior, and resistance.

Rigid Bureaucratic Behavior Often people act in ways that will help them look good on the control system’s measures. This tendency can be useful, because it focuses people on the behaviors management requires. But it can result in rigid, inflexible behavior geared toward doing only what the system requires. For example, in the earlier discussion of Six Sigma, we noted that that control process emphasizes efficiency over innovation. After 3M began using Six Sigma extensively, it slipped from its goal of having at least one-third of sales come from newly released products. When George Buckley took the CEO post, only one-fourth of sales were coming from new products, and Buckley began relying less extensively on efficiency controls. Buckley explained to a reporter, “Invention is by its very nature a disorderly process.” The control challenge, of course, is for 3M to be both efficient and creative.

Rigid bureaucratic behavior occurs when control systems prompt employees to stay out of trouble by following the rules. Unfortunately, such systems often lead to poor customer service and make the entire organization slow to act (recall the discussion of bureaucracy in Chapter 10). Some companies, including General Motors and UPS, enforce rules that employees must keep their desks neat. Of course, a chaotic workplace has its problems, but one survey found that people who said their desks were “very neat” spent more of their day looking for items than people who said their desks were “fairly messy.” By that measure, controlling neatness actually makes employees less efficient. Likewise, trying to control your own productivity by limiting phone calls and e-mail to certain times of day is beneficial only if you don’t have the kind of job where ignoring the phone or e-mail causes you to annoy customers or miss important problems.

We have all been victimized at some time by rigid bureaucratic behavior. Reflect for a moment on this now classic story of a “nightmare” at a hospital:

At midnight, a patient with eye pains enters an emergency room at a hospital. At the reception area, he is classified as a nonemergency case and referred to the hospital’s eye clinic. Trouble is, the eye clinic doesn’t open until the next morning. When he arrives at the clinic, the nurse asks for his referral slip, but the emergency room doctor had forgotten to give it to him. The
Stories such as these have, of course, given bureaucracy a bad name. Some managers will not even use the term bureaucratic control because of its potentially negative connotation. That is unfortunate because the control system itself is not the problem. The problems occur when the systems are no longer viewed as tools for running the business but instead as rules for dictating rigid behavior.

**Tactical Behavior** Control systems will be ineffective if employees engage in tactics aimed at “beating the system.” The most common type of tactical behavior is to manipulate information or report false performance data. People may produce two kinds of invalid data: about what has been done and about what can be done. False reporting about the past is less common, because it is easier to identify someone who misreports what happened than someone who gives an erroneous prediction or estimate of what might happen. Still, managers sometimes change their accounting systems to “smooth out” the numbers. Also, people may intentionally feed false information into a management information system to cover up errors or poor performance. Recently, several customs inspectors at Orlando Sanford International Airport said their supervisors had pressured them to speed up the processing of passengers by entering “generic” data instead of actually questioning the passengers. According to the inspectors, when the system flagged passengers for additional screening during busy periods, they were told to guess at the information, such as race and length of stay, rather than asking the passengers to provide the information. The justification for this behavior was that time pressure gave them no more than a minute to screen each passenger and keep the line moving, so that the public would be satisfied with their agency’s work.

More commonly, people falsify their predictions or requests for the future. When asked to give budgetary estimates, employees usually ask for larger amounts than they need. On the other hand, they sometimes submit unrealistically low estimates when they believe a low estimate will help them get a budget or a project approved. Budget-setting sessions can become tugs-of-war between subordinates trying to get slack in the budget and superiors attempting to minimize slack. Similar tactics are exhibited when managers negotiate unrealistically low performance standards so that subordinates will have little trouble meeting them; when salespeople project low forecasts so that they will look good by exceeding them; and when workers slow down the work pace while time-study analysts are setting work pace standards. In these and other cases, people are concerned only with their own performance figures rather than with the overall performance of their departments or companies.

**Resistance to Control** Often people strongly resist control systems. They do so for several reasons. First, comprehensive control systems increase the accuracy of performance data and make employees more accountable for their actions. Control systems uncover mistakes, threaten people’s job security and status, and decrease people’s autonomy.
Second, control systems can change expertise and power structures. For example, management information systems can make the costing, purchasing, and production decisions previously made by managers much quicker. Those individuals may fear a loss of expertise, power, and decision-making authority as a result.

Third, control systems can change the social structure of an organization. They can create competition and disrupt social groups and friendships. People may end up competing against those with whom they formerly had comfortable, cooperative relationships. Because people’s social needs are so important, they will resist control systems that reduce social need satisfaction.

Fourth, control systems may be seen as an invasion of privacy, lead to lawsuits, and cause low morale.

Designing Effective Control Systems

Effective control systems maximize potential benefits and minimize dysfunctional behaviors. To achieve this, management needs to design control systems that

1. Establish valid performance standards.
2. Provide adequate information to employees.
3. Ensure acceptability to employees.
4. Maintain open communication.
5. Use multiple approaches.

Establish Valid Performance Standards

An effective control system must be based on valid and accurate performance standards. The most effective standards, as discussed earlier, tend to be expressed in quantitative terms; they are objective rather than subjective. Also, the measures should not be capable of being easily sabotaged or faked. Moreover, the system must incorporate all important aspects of performance. For example, a company that just focused on sales volume without also looking at profitability might soon go out of business. As you learned earlier, unmeasured behaviors are neglected. Often, performance standards for delivering training and other HR programs emphasize trainee satisfaction as reported on surveys. But the Philadelphia Department of Licenses and Inspections instead verified that its training actually
improved employee performance. The department was notorious for its long lines and rude workers, so it turned for help to the Philadelphia Ritz-Carlton Hotel—part of a chain known for its superb customer service. The hotel’s area general manager provided training initially to 40 department workers in how to improve their service skills. As part of its posttraining measurement process, the department checked the wait times for license applicants, which dropped from 82 minutes to 14 minutes. The department is continuing its partnership program with Ritz-Carlton through additional employee training and attendance at each other’s management meetings.

But management also must defend against another problem: too many measures that create overcontrol and employee resistance. To make many controls tolerable, managers can devote attention to a few key areas while setting “satisfactory” performance standards in others. Or they can establish simple priorities. The purchasing agent may have to meet targets in the following sequence: quality, availability, cost, inventory level. Finally, managers can set tolerance ranges. For example, in financial budgeting optimistic, expected, and minimum levels sometimes are specified.

Many companies’ budgets set cost targets only. This causes managers to control spending but also to neglect earnings. At Emerson Electric, profit and growth are key measures. If an unanticipated opportunity to increase market share arises, managers can spend what they need to go after it. The phrase “it’s not in the budget” is less likely to stifle people at Emerson than it is at most other companies.

This principle applies to nonfinancial aspects of performance as well. At many customer service call centers, control aims to maximize efficiency by focusing on the average amount of time each agent spends handling each phone call. But the business objectives of call centers should also include other measures such as cross-selling products or improving customer satisfaction and repeat business. Carlson Leisure Travel Services is one of a growing number of companies using new technology to analyze the content—not just the duration—of each call and capture information about the amount sold by call-center agents.

Business consultant Michael Hammer summarizes these points in terms of what he calls seven “deadly sins” of performance measurement to avoid:

1. **Vanity**—using measures that are sure to make managers and the organization look good. For example, a company might measure order fulfillment in terms of when the customers request to receive the products, rather than by the tougher and more meaningful measure of when the customers request to receive the products.

2. **Provincialism**—limiting measures to functional or departmental responsibilities, rather than the organization’s overall objectives. If a company’s transportation...
department measures only shipping costs, it won’t have an incentive to consider that shipping reliability (delivery on a given date) will affect performance at the company’s stores or distribution centers.

3. **Narcissism**—measuring from the employee’s, manager’s, or company’s point of view, rather than the customer’s. For example, a maker of computer systems measured on-time shipping of each component; if 90 percent of the system’s components arrived at the customer on time, it was 90 percent on time. But from the customer’s point of view, the system wasn’t on time at all, because the customer needed all the components to use the system.

4. **Laziness**—not expending the effort to analyze what is important to measure. An electric power company simply assumed customers cared about installation speed, but in fact, customers really cared more about receiving an accurate installation schedule.

5. **Pettiness**—measuring just one component of what affects business performance. An example would be clothing manufacturers that assume they should just consider manufacturing cost, rather than the overall costs of making exactly the right products available in stores when customers demand them.

6. **Inanity**—failing to consider the way standards will affect real-world human behavior and company performance. A fast-food restaurant targeted waste reduction and was surprised when restaurant managers began slowing down operations by directing their employees to hold off on cooking anything until orders were placed.

7. **Frivolity**—making excuses for poor performance rather than taking performance standards seriously. In some organizations, more effort goes to blaming others than to correcting problems.

According to Hammer, the basic correction to these “sins” is to carefully select standards that look at entire business processes, such as product development or order fulfillment, and identify which actions make those processes succeed. Then managers should measure performance against these standards precisely, accurately, and practically, making individuals responsible for their achievement and rewarding success.

**Provide Adequate Information**  Management must communicate to employees the importance and nature of the control system. Then people must receive feedback about their performance. Feedback motivates people and provides information that enables them to correct their own deviations from performance standards. Allowing people to initiate their own corrective action encourages self-control and reduces the need for outside supervision. *Open-book management*, described in Chapter 15, is a powerful use of this control principle.

Information should be as accessible as possible, particularly when people must make decisions quickly and frequently. For example, a national food company with its own truck fleet had a difficult problem. The company wanted drivers to go through customer sales records every night, insert new prices from headquarters every morning, and still make their rounds—an impossible set of demands. To solve this control problem, the company installed personal computers in more than 1,000 delivery trucks. Now drivers use their PCs for constant communication with headquarters. Each night drivers send information about the stores, and each morning headquarters sends prices and recommended stock mixes.

In general, a manager designing a control system should evaluate the information system in terms of the following questions:

1. Does it provide people with data relevant to the decisions they need to make?
2. Does it provide the right amount of information to decision makers throughout the organization?
3. Does it provide enough information to each part of the organization about how other, related parts of the organization are functioning?
Ritz-Carlton sets performance measures for maintaining its impressive reputation and ensures that employees see how they contribute. The measures are based on the key factors behind the company’s success: its mystique, employee engagement, customer engagement, product service excellence, community involvement, and financial performance. Financial performance is viewed as the result of achieving the other goals. For each success factor, cross-functional teams identify targets as detailed as the number of scuff marks on elevator doors or the percentage of satisfied employees at a location. The teams include frontline employees, so that early in the control process, employees already feel their input matters.

At each location, at the beginning of every shift, all employees gather for a meeting to discuss activities, issues, and Ritz-Carlton’s business philosophy. They compare recent performance against the company’s targets in each area. These conversations reinforce the key performance factors and help employees appreciate the importance of what they do.

Each business unit has up to three priorities to focus on, with each employee working to improve customer, employee, or financial results. Employees appreciate their role in giving each guest a special experience. When Joanne Hanna checked into a Ritz-Carlton after a grueling series of airport delays that caused her to miss several meetings, a hotel employee carried her bags and listened to her frustration. He suggested a spa visit or a masseuse, and when he learned she didn’t have time, he brought her a scented candle—and had the information entered into Ritz-Carlton’s database. Now, on every visit, Hanna finds a candle in her room, reminding her of one employee’s empathy.

Ensure Acceptability to Employees  Employees are less likely to resist a control system and exhibit dysfunctional behaviors if they accept the system. They are more likely to accept systems that have useful performance standards but are not over-controlling. Employees also will find systems more acceptable if they believe the standards are possible to achieve.

The control system should emphasize positive behavior rather than focusing on controlling negative behavior alone. McBride Electric, an electrical contracting company, uses an electronic monitoring system called DriveCam to encourage its drivers to behave responsibly in terms of safety and fuel consumption. A DriveCam video monitor in each truck records activity inside and outside the cab; it saves that recording only if the truck is involved in a specified “trigger event” such as braking hard or swerving. Management explained the system to the drivers, emphasizing that it would help the company improve profits (a relevant message in a company that practices open-book management) and would protect the workers if they were ever accused falsely of unsafe practices. Not only did McBride immediately begin seeing improvements in safety and vehicle wear and tear, but it was also able to make good on its promise to defend employees. An anonymous phone caller complained that poor driving by a McBride driver had caused him to wreck his car. The McBride manager who took the call explained that he would be able to review a video taken from the truck that day—and the caller quickly hung up. This approach exhibits the motivational quality of “procedural justice,” described in Chapter 13. It gave employees the feeling that they were being evaluated by a fair process and was therefore more likely to be accepted by them.

One of the best ways to establish reasonable standards and thus gain employee acceptance of the control system is to set standards participatively. As we discussed in Chapter 4, participation in decision making secures people’s understanding and cooperation and results in better decisions. Allowing employees to collaborate in control-system decisions that affect their jobs directly will help overcome resistance and foster acceptance of the system. In addition, employees on the “front line” are more likely to know which standards are most important and practical, and they can inform...
a manager’s judgment on these issues. Finally, if standards are established in collaboration with employees, managers will more easily obtain cooperation on solving the problem when deviations from standards occur.

**Maintain Open Communication** When deviations from standards occur, it is important that employees feel able to report the deviations so that the problem can be addressed. If employees come to feel that their managers want to hear only good news or, worse, if they fear reprisal for reporting bad news, even if it is not their fault, then any controls that are in place will be much less likely to be effective. Problems may go unreported or, even worse, may reach the point where they become much more expensive or difficult to solve. But if managers create an environment of openness and honesty, one in which employees feel comfortable sharing even negative information and are appreciated for doing so in a timely fashion, then the control system is much more likely to work effectively. In the “Management Close-Up: Taking Action” feature, for example, consider how communication comes into play in ensuring excellent service from the types of employees hired by Legal Sea Foods.

Nevertheless, managers may sometimes need to discipline employees who are failing to meet important standards. In such cases, an approach called *progressive discipline* is usually most effective. In this approach, clear standards are established, but failure to meet them is dealt with in a progressive or step-by-step process.

“*I’ve learned that mistakes can often be as good a teacher as success.*”
— Jack Welch, former CEO, General Electric

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**Legal Sea Foods** wins rave reviews from patrons, partly because of its dedication to high standards. The company views the use of control systems across all of its functions—supply chain, finance, information technology, and human resources—as the key to success.

In 2003 the company opened its $18 million Quality Control Center (QCC) in Boston, a 35,000-square-foot refrigerated space for testing and processing the 120 tons of fish and seafood that travel weekly through its doors. Legal Sea Foods buys seafood daily; every catch is tested for bacteria, and swordfish and tuna are tested for mercury as well. Not a government regulation, this testing is part of Legal Sea Foods’ own quality protocols. With fresh fish, turnaround time is critical. Once a catch is deemed forkworthy, it is packaged into vacuum-sealed portions. Product tested today at the QCC will ship the following day by truck or air to restaurants up and down the Eastern Seaboard.

The quality story extends to hiring the right people and helping them grow. Believing the best dining experience comes when waitstaff connect with customers on an “emotional” level, Legal Sea Foods uses an assessment tool to gauge how well a candidate can create such moments with guests. A weeklong orientation for new hires begins with presentations on the company’s history, culture, and values and continues with interactive training. Hourly workers have a “learning coach” who mentors them and helps them develop new skills. Computer classes, instruction on seafood, and other learning opportunities are available on an ongoing basis to ensure that the staff understand Legal Sea Foods standards and can carry them out.44

- Legal Sea Foods CEO Roger Berkowitz regularly meets with waitstaff in his restaurants. How can the input of employees on the front line change operational protocols?
- Berkowitz says a good leader must think four to five years in the future. How could such thinking impact an organization’s operational controls?
example, the first time an employee’s sales performance has been worse than it should have been, the supervising manager may offer verbal counseling or coaching. If problems persist, the next step might be a written reprimand. This type of reasonable and considered approach signals to all employees that the manager is interested in improving their performance, not in punishing them.

**Use Multiple Approaches** Multiple controls are necessary. For example, banks need controls on risk so that they don’t lose a lot of money from defaulting borrowers, as well as profit controls including sales budgets that aim for growth in accounts and customers.

As you learned earlier in this chapter, control systems generally should include both financial and nonfinancial performance targets and incorporate aspects of preliminary, concurrent, and feedback control. In recent years, a growing number of companies have combined targets for managers into a balanced scorecard, a combination of four sets of performance measures: (1) financial, (2) customer satisfaction, (3) business processes (quality and efficiency), and (4) learning and growth. The goal is generally to broaden management’s horizon beyond short-term financial results so that the company’s long-term success is more likely. For example, Hyde Park Electronics had been using a variety of financial controls when it adopted a business scorecard that added metrics such as on-time delivery, employee satisfaction, and sales impact of marketing activities. Profits under the balanced scorecard reached record levels. The balanced scorecard also is adaptable to nonprofit settings. Ocean-Monmouth Legal Services, which provides legal services to poor people in New Jersey, uses a balanced scorecard to track progress in meeting strategic, operational, financial, and client satisfaction goals. The organization’s executive director, Harold E. Creacy, credits the approach with helping to cope with the rising costs and tight resources that so often plague nonprofits.

Effective control will also require managers and organizations to use many of the other techniques and practices of good management. For example, compensation systems will grant rewards for meeting standards and impose consequences if they are not met. And to gain employee acceptance, managers may also rely on many of the other communication and motivational tools that we discussed in earlier chapters, such as persuasion and positive reinforcement.

Although the concept of control has always been a central feature of organizations, the principles and philosophies underlying its use are changing. In the past, control was focused almost exclusively on bureaucratic (and market) mechanisms. Generations of managers were taught that they could maximize productivity by regulating what employees did on the job—through standard operating procedures, rules, regulations, and close supervision. To increase output on an assembly line, for example, managers in the past tried to identify the “one best way” to approach the work and then to monitor employees’ activities to make certain that they followed standard operating procedures. In short, they controlled work by dividing and simplifying tasks, a process we referred to in Chapter 1 as *scientific management*.

Although formal bureaucratic control systems are perhaps the most pervasive in organizations (and the most talked about in management textbooks), they are not always the most effective. *Market controls* and *clan controls* may both represent more flexible, though no less potent, approaches to regulating performance.

**Market Control**

In contrast to bureaucratic controls, market controls involve the use of economic forces—and the pricing mechanisms that accompany them—to regulate performance.
The system works like this: in cases where output from an individual, department, or business unit has value to other people, a price can be negotiated for its exchange. As a market for these transactions becomes established, two effects occur:

- Price becomes an indicator of the value of the good or service.
- Price competition has the effect of controlling productivity and performance.

The basic principles that underlie market controls can operate at the corporate level, the business unit (or department) level, and the individual level. Figure 16.3 shows a few different ways in which market controls are used in an organization.

**Market Controls at the Corporate Level**  In large, diversified companies, market controls often are used to regulate independent business units. Particularly in large conglomerate firms that act as holding companies, business units typically are treated as profit centers that compete with one another. Top executives may place very few bureaucratic controls on business unit managers but use profit and loss data for evaluating performance. While decision making and power are decentralized to the business units, market controls ensure that business unit performance is in line with corporate objectives.

Use of market control mechanisms in this way has been criticized by those who insist that economic measures do not reflect the complete value of an organization adequately. Employees often suffer as diversified companies are repeatedly bought and sold based on market controls.

**Market Controls at the Business Unit Level**  Market control also can be used within business units to regulate exchanges among departments and functions. Transfer pricing is one method that organizations use to try to reflect market forces for internal transactions. A *transfer price* is the charge by one unit in the organization for a good or service provided to another unit of the same organization. For example, in automobile manufacturing, a transfer price may be affixed to components

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**FIGURE 16.3**
Examples of Market Control
and subassemblies before they are shipped to subsequent business units for final assembly. Ideally, the transfer price reflects the price that the receiving business unit would have to pay for that product or service in the marketplace.

As organizations have more options to outsource goods and services to external partners, market controls such as transfer prices provide natural incentives to keep costs down and quality up. Managers stay in close touch with prices in the marketplace to make sure their own costs are in line, and they try to improve the service they provide to increase their department’s value to the organization. Consider the situation in which training and development activities can be done internally by the human resources department or outsourced to a consulting firm. If the human resources department cannot supply quality training at a reasonable price, there may be no reason for that department to exist inside the firm. Similarly, Penske Truck Leasing Company began outsourcing many of its finance processes to a company called Genpact, not only for lower prices but also for the expertise developed by that specialized firm to compete in the marketplace. Penske’s senior vice president of finance, Frank Cocuzza, says the department spends $20 million less per year than it did to perform the same functions in-house while it has improved its rate of collections and learned thousands of ways to make his own operation more efficient, modeled after Genpact’s lean practices. 48

Market Controls at the Individual Level Market controls also are used at the individual level. For example, in situations where organizations are trying to hire employees, the supply and demand for particular skills influence the wages employees can expect to receive and the rate organizations are likely to pay. Employees or job candidates who have more valuable skills tend to be paid a higher wage. Of course, wages don’t always reflect market rates—sometimes they are based (perhaps arbitrarily) on internal resource considerations—but the market rate is often the best indicator of an employee’s potential worth to a firm.

Market-based controls such as these are important in that they provide a natural incentive for employees to enhance their skills and offer them to potential firms. Even after individuals gain employment, market-based wages are important as controls in that persons with higher economic value may be promoted faster to higher positions in the organization.

Market controls often are used by boards of directors to manage CEOs of major corporations. Ironically, CEOs usually are seen as the ones controlling everyone else in the company, but the fact is that the CEO is accountable to the board of directors, and the board must devise ways to ensure that the CEO acts in its interest. Absent board control, CEOs may act in ways that make them look good personally (such as making the company bigger or more diversified) but that do not lead to higher profits for the firm. And as recent corporate scandals have shown, without board control CEOs may also artificially inflate the firm’s earnings, or not fully declare expenses, making the firm look much more successful than it really is.

Traditionally, boards have tried to control CEO performance mainly through the use of incentive plans, in addition to base salary. These typically include some type of bonus tied to short-term profit targets. In large U.S. companies, most CEO compensation is now at risk, meaning it depends mainly on the performance of the company. In addition to short-term incentives, boards use some type of long-term incentives linked to the firm’s share price, usually through stock options, which we discussed in Chapter 10. Also, balanced scorecards are intended to keep CEOs focused on the company’s longer-term health. And under the Sarbanes-Oxley Act, described in Chapter 5, board members are expected to exercise careful control over the company’s financial performance, including oversight of the CEO’s compensation package.
Clan Control: The Role of Empowerment and Culture

Increasingly, managers are discovering that control systems based solely on bureaucratic and market mechanisms are insufficient for directing today’s workforce. There are several reasons for this:

- **Employees’ jobs have changed.** The nature of work is evolving. Employees working with computers, for example, have more variability in their jobs, and much of their work is intellectual and therefore invisible. Because of this, there is no one best way to perform a task, and programming or standardizing jobs becomes extremely difficult. Close supervision is also unrealistic, because it is nearly impossible to supervise activities such as reasoning and problem solving.

- **The nature of management has changed.** The role of managers is evolving, too. Managers used to know more about the job than employees did. Today, it is typical for employees to know more about their jobs than anyone else does. We refer to this as the shift from touch labor to knowledge work. When real expertise in organizations exists at the very lowest levels, hierarchical control becomes impractical.  

- **The employment relationship has changed.** The social contract at work is being renegotiated. It used to be that employees were most concerned about issues such as pay, job security, and the hours of work. Today, however, more and more employees want to be more fully engaged in their work, taking part in decision making, devising solutions to unique problems, and receiving assignments that are challenging and involving. They want to use their brains.

For these three reasons, the concept of *empowerment* not only has become more popular in organizations but has become a necessary aspect of a manager’s repertoire of control. With no “one best way” to approach a job and no way to scrutinize what employees do every day, managers must empower employees to make decisions and trust that they will act in the best interests of the firm. But this does not mean giving up control. It means creating a strong culture of high standards and integrity so that employees will exercise effective control on their own.

Recall our extensive discussion of organization culture in Chapter 2. If the organization’s culture encourages the wrong behaviors, then an effort to impose effective controls will be severely hindered. But if managers create and reinforce a strong culture that encourages correct behavior, one in which everyone understands management’s values and expectations and is motivated to act in accordance with them, then clan control can be a very effective control tool.  

As we noted at the beginning of this chapter, clan control involves creating relationships built on mutual respect and encouraging each individual to take responsibility for his or her actions. Employees work within a guiding framework of values, and they are expected to use good judgment. For example, at NetApp, an IT company specializing in data storage and protection, a commitment to employee empowerment prompted the switch from a 12-page travel policy to some simple guidelines for employees who need to go on a business trip: “We are a frugal company. But don’t show up dog-tired to save a few bucks. Use your common sense.” The emphasis in an empowered organization is on satisfying customers, not on pleasing the boss. Mistakes are tolerated as the unavoidable by-product of dealing with change and uncertainty and are viewed as opportunities to learn. And team members learn together. Table 16.7 provides a set of guidelines for managing in an empowered world.

The resiliency and time investment of clan control are a double-edged sword. Clan control takes a long time to develop and an even longer time to change. This gives an organization stability and direction during periods of upheaval in the environment or

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“As a manager the important thing is not what happens when you are there, but what happens when you are not there.”

—Ken Blanchard

Clan control empowers employees to meet performance standards.
Part Five Controlling: Learning and Changing

Yet if managers want to establish a new culture—a new form of clan control—they must help employees unlearn the old values and embrace the new. We will talk about this transition process more in the final chapter of this book.

### TABLE 16.7
Management Control in an Empowered Setting

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<td><strong>1. Put control where the operation is.</strong> Layers of hierarchy, close supervision, and checks and balances are quickly disappearing and being replaced with self-guided teams. For centuries even the British Empire—as large as it was—never had more than six levels of management including the Queen.</td>
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<td><strong>2. Use “real time” rather than after-the-fact controls.</strong> Issues and problems must be solved at the source by the people doing the actual work. Managers become a resource to help out the team.</td>
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<td><strong>3. Rebuild the assumptions underlying management control to build on trust rather than distrust.</strong> Today’s “high-flex” organizations are based on empowerment, not obedience. Information must facilitate decision making, not police it.</td>
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<td><strong>4. Move to control based on peer norms.</strong> Clan control is a powerful thing. Workers in Japan, for example, have been known to commit suicide rather than disappoint or lose face within their team. Although this is extreme, it underlines the power of peer influence. The Japanese have a far more homogeneous culture and set of values than we do. In North America, we must build peer norms systematically and put much less emphasis on managing by the numbers.</td>
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<td><strong>5. Rebuild the incentive systems to reinforce responsiveness and teamwork.</strong> The twin goals of adding value to the customer and team performance must become the dominant raison d’être of the measurement systems.</td>
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Management Close-Up

**ASSESSING OUTCOMES AND SEIZING OPPORTUNITIES**

By establishing and following precise managerial controls, Legal Sea Foods has achieved consistency in its operations. Many of its operational controls have become industry standards. For example, the company worked with the Department of Commerce to develop criteria to protect against foodborne illness. That program—the Hazard Analysis Critical Control Point program—has served as the industry standard since 1997 and is still used by the U.S. Food and Drug Administration today. Legal Sea Foods’ practice of sending its seafood vendors quality reports and copying the Massachusetts Department of Public Health motivates vendors to perform at the highest standards while keeping the government in the loop.

Years before the anti-trans fat campaign was fashionable, Legal Sea Foods president and CEO Roger Berkowitz launched a crusade of his own, to remove trans fats from the restaurant’s menu. The company has also partnered with the Harvard School of Public Health to monitor research findings on seafood nutrition.

Legal Sea Foods was among the first in its industry to identify the need to preserve the environment and focus on sustainable seafood sources. Years ago it began recycling its vegetable oil into biodiesel fuels to conserve energy. Berkowitz regularly visits the Gloucester fish auctions, maintaining contact with fishermen who bring in the catch. He recognizes the importance of protecting fishing stocks but also sees firsthand where federal regulations threaten to become onerous for the fishing industry. He serves as a vocal industry advocate with members of Congress.52

- Legal Sea Foods’ CEO Roger Berkowitz has this comment about quality: “Anybody can be good once in a while, but very few people can be good all the time.” How do you think this perspective affects the control processes in place at Legal Sea Foods?
- Legal Sea Foods’ management thinks of it as a seafood company in the restaurant business—not a restaurant group that sells seafood. How does this distinction drive the type of managerial controls the company imposes?
Now that you have studied Chapter 16, you should be able to:

**LO 1** Explain why companies develop control systems for employees.

Left to their own devices, employees may act in ways that do not benefit the organization. Control systems are designed to eliminate idiosyncratic behavior and keep employees directed toward achieving the goals of the firm. Control systems are a steering mechanism for guiding resources, for helping each individual act on behalf of the organization.

**LO 2** Summarize how to design a basic bureaucratic control system.

The design of a basic control system involves four steps: (1) setting performance standards, (2) measuring performance, (3) comparing performance with the standards, and (4) eliminating unfavorable deviations by taking corrective action. Performance standards should be valid and should cover issues such as quantity, quality, time, and cost. Once performance is compared with the standards, the principle of exception suggests that the manager needs to direct attention to the exceptional cases that have significant deviations. Then the manager takes the action most likely to solve the problem.

**LO 3** Describe the purposes for using budgets as a control device.

Budgets combine the benefits of feedforward, concurrent, and feedback controls. They are used as an initial guide for allocating resources, a reference point for using funds, and a feedback mechanism for comparing actual levels of sales and expenses with their expected levels. Recently, companies have modified their budgeting processes to allocate costs over basic processes (such as customer service) rather than to functions or departments. By changing the way they prepare budgets, many companies have discovered ways to eliminate waste and improve business processes.

**LO 4** Define basic types of financial statements and financial ratios used as controls.

The basic financial statements are the balance sheet and the profit and loss statement. The balance sheet compares the value of company assets to the obligations the company owes to owners and creditors. The profit and loss statement shows company income relative to costs incurred. In addition to these statements, companies look at liquidity ratios (whether the company can pay its short-term debts), leverage ratios (the extent to which the company is funding operations by going into debt), and profitability ratios (profit relative to investment). These ratios provide a goal for managers as well as a standard against which to evaluate performance.

**LO 5** List procedures for implementing effective control systems.

To maximize the effectiveness of controls, managers should (1) establish valid performance standards, (2) provide adequate information to employees, (3) ensure acceptability, (4) maintain open communication, and (5) see that multiple approaches are used (such as bureaucratic, market, and clan control).

**LO 6** Identify ways in which organizations use market control mechanisms.

Market controls can be used at the level of the corporation, the business unit or department, or the individual. At the corporate level, business units are evaluated against one another based on profitability. At times, less profitable businesses are sold while more profitable businesses receive more resources. Within business units, transfer pricing may be used to approximate market mechanisms to control transactions among departments. At the individual level, market mechanisms control the wage rate of employees and can be used to evaluate the performance of individual managers.

**LO 7** Discuss the use of clan control in an empowered organization.

Approaching control from a centralized, mechanistic viewpoint is increasingly impractical. In today’s organizations, it is difficult to program “one best way” to approach work, and it is often difficult to monitor performance. To be responsive to customers, companies must harness the expertise of employees and give them the freedom to act on their own initiative. To maintain control while empowering employees, companies should (1) use self-guided teams, (2) allow decision making at the source of the problems, (3) build trust and mutual respect, (4) base control on a guiding framework of norms, and (5) use incentive systems that encourage teamwork.
DISCUSSION QUESTIONS

1. What controls can you identify in the management of your school or at a company where you now work (or recently worked)? If you can, interview a manager or employee of the organization to learn more about the controls in use there. How might the organization's performance change if those controls were not in place?

2. How are leadership and control different? How are planning and control different? How are structure and control different?

3. Imagine you are the sales manager of a company that sells medical supplies to hospitals nationwide. You have 10 salespeople reporting to you. You are responsible for your department achieving a certain level of sales each year. In general terms, how might you go about taking each step in the control cycle?

4. In the situation described in Question 3, what actions would you need to take if sales fell far below the budgeted level? What, if any, actions would you need to take if sales far exceeded the sales budget? If sales are right on target, does effective controlling require any response from you? (Would your answer differ if the department were on target overall, but some salespeople fell short and others exceeded their targets?)

5. Besides sales and expenses, identify five other important control measures for a business. Include at least one nonfinancial measure.

6. What are the pros and cons of bureaucratic controls such as rules, procedures, and supervision?

7. Suppose a company at which executives were rewarded for meeting targets based only on profits and stock price switches to a balanced scorecard that adds measures for customer satisfaction, employee engagement, employee diversity, and ethical conduct. How, if at all, would you expect executives’ performance to change in response to the new control system? How, if at all, would you expect the company’s performance to change?

8. Google has recently begun offering Google Apps, such as Gmail, Google Calendar, and Docs & Spreadsheets, as collaboration tools for employees. Describe how the company could use market controls to determine whether Google employees will use these software programs or competing software (e.g., Word and Excel).

9. How effective is clan control as a control mechanism? What are its strengths? Its limitations? When would a manager rely on clan control the most?

10. Does empowerment imply the loss of control? Why or why not?

11. Some people use the concept of “personal control” to describe the application of business control principles to individual careers. Thinking about your school performance and career plans, which steps of the control process (Figure 16.1) have you been applying effectively? How do you keep track of your performance in meeting your career and life goals? How do you measure your success? Does clan control help you meet your personal objectives?

CONCLUDING CASE

The Grizzly Bear Lodge

Diane and Rudy Conrad own a small lodge outside Yellowstone National Park. Their lodge has 15 rooms that can accommodate up to 40 guests, with some rooms set up for families. Diane and Rudy serve a continental breakfast on weekdays and a full breakfast up to 40 guests, with some rooms set up for families. Diane and Rudy serve a continental breakfast on weekdays and a full breakfast on weekends, including in the room rates they charge. Their busy season runs from May through September, but they remain open until Thanksgiving and reopen in April for a short spring season. They currently employ one cook and two waitpersons for the breakfasts on weekends, handling the other breakfasts themselves. They also have several housekeeping staff members, a groundskeeper, and a front-desk employee. The Conrads take pride in the efficiency of their operation, including the loyalty of their employees, which they attribute to their own form of clan control. If a guest needs something—whether it’s a breakfast catered to a special diet or an extra set of towels—Grizzly Bear workers are empowered to supply it.

The Conrads are considering expanding their business. They have been offered the opportunity to buy the property next door, which would give them the space to build an annex containing an additional 20 rooms. Currently, their annual sales total $300,000. With expenses running at $230,000—including mortgage, payroll, maintenance, and so forth—the Conrads’ annual income is $70,000. They want to expand and make improvements without cutting back on the personal service they offer to their guests. In fact, in addition to hiring more staff to handle the larger facility, they are considering collaborating with more local businesses to offer guided rafting, fishing, hiking, and horseback riding trips. They also want to expand their food service to include dinner during the high season, which means renovating the restaurant area of the lodge and hiring more kitchen and wait staff. Ultimately, the Conrads would like the lodge to be open year-round, offering guests opportunities to cross-country ski, ride snowmobiles, or hike in the winter. They hope to offer holiday packages for Thanksgiving, Christmas, and New Year’s celebrations in the great outdoors. The Conrads report that their employees are enthusiastic about their plans and want to stay with them through the expansion process. “This is our dream business,” says Rudy. “We’re only at the beginning.”
You call the accident trend to the attention of your production supervisors, pointing out the seriousness of the situation and their continuing responsibility to enforce the gloves and safety goggles rules. Effective immediately, every supervisor will review his or her accident reports for the past year, file a report summarizing these accidents with you, and state their intended actions to correct recurring causes of the accidents. They will make out weekly safety reports as well as meet with you every Friday to discuss what is being done and any problems they are running into.

You request the union steward’s cooperation in helping the safety supervisor set up a short program on shop safety practices.

Because the machine operators are having the accidents, you encourage your supervisors to talk to their workers and find out what they think can be done to reduce the downtime accident rate to its previous level.

While the program is going on, you review the weekly reports, looking for patterns that will tell you how effective the program is and where the trouble spots are. If a supervisor’s operators are not decreasing their accident rate, you discuss the matter in considerable detail with the supervisor and his or her key workers.


QUESTIONS
1. Discuss how Rudy and Diane can use feedforward, concurrent, and feedback controls both now and in the future at the Grizzly Bear Lodge to ensure their guests’ satisfaction.
2. What might be some of the fundamental budgetary considerations the Conrads would have as they plan the expansion of their lodge?
3. Describe how the Conrads could use market controls to plan and implement their expansion.

EXPERIENTIAL EXERCISES

16.1 Safety Program

OBJECTIVE
To understand some of the specific activities that fall under the management functions planning, organizing, controlling and staffing, and directing.

INSTRUCTIONS
After reading the following case, briefly describe the kinds of steps you would take as production manager in trying to solve your safety problem. Be sure to relate your answer specifically to the activities of planning, organizing, controlling and staffing, and directing.

MANAGING THE VAMP CO. SAFETY PROGRAM
If there are specific things that a manager does, how are they done? What does it “look like” when one manages? The following describes a typical situation in which a manager performs managerial functions:

As production manager of the Vamp Stamping Company, you’ve become quite concerned over the metal stamping shop’s safety record. Accidents that resulted in operators’ missing time on the job have increased quite rapidly in the past year. These more serious accidents have jumped from 3 percent of all accidents reported to a current level of 10 percent.

Because you’re concerned about your workers’ safety as well as the company’s ability to meet its customers’ orders, you want to reduce this downtime accident rate to its previous level or lower within the next six months.

16.2 Preliminary, Concurrent, and Feedback Control

OBJECTIVES
1. To demonstrate the need for control procedures.
2. To gain experience in determining when to use preliminary, concurrent, and feedback controls.

INSTRUCTIONS
1. Read the text materials on preliminary, concurrent, and feedback control.
2. Read the Control Problem Situation and be prepared to resolve those control problems in a group setting.
3. Your instructor will divide the class into small groups. Each group completes the Preliminary, Concurrent, and Feedback Control Worksheet by achieving consensus on the types of control that should be applied in each situation. The group also develops responses to the discussion questions.
4. After the class reconvenes, group spokespersons present group findings.

DISCUSSION QUESTIONS
1. For which control(s) was it easier to determine application? For which was it harder?
2. Would this exercise be better assigned to groups or to individuals?
CONTROL PROBLEM SITUATION

Your management consulting team has just been hired by Technocron International, a rapidly growing producer of electronic surveillance devices that are sold to commercial and government end users. Some sales are made through direct selling, and some through industrial resellers. Direct-sale profits are being hurt by what seem to be exorbitant expenses paid to a few of the salespeople, especially those who fly all over the world in patterns that suggest little planning and control. There is trouble among the resellers because standard contracts have not been established and each reseller has an entirely different contractual relationship. Repayment schedules vary widely from customer to customer. Also, profits are reduced by the need to customize most orders, making mass production almost impossible. However, no effort has been made to create interchangeable components. There are also tremendous inventory problems. Some raw materials and parts are bought in such small quantities that new orders are being placed almost daily. Other orders are so large that there is hardly room to store everything. Many of these purchased components are later found to be defective and unusable, causing production delays. Engineering changes are made that make large numbers of old components still in storage obsolete. Some delays result from designs that are very difficult to assemble, and assemblers complain that their corrective suggestions are ignored by engineering. To save money, untrained workers are hired and assigned to experienced “worker-buddies” who are expected to train them on the job. However, many of the new people are too poorly educated to understand their assignments, and their worker-buddies wind up doing a great deal of their work. This, along with the low pay and lack of consideration from engineering, is causing a great deal of worker unrest and talk of forming a union. Last week alone nine new worker grievances were filed, and the U.S. Equal Employment Opportunity Commission has just announced intentions to investigate two charges of discrimination on the part of the company. There is also a serious cash-flow problem, as a number of long-term debts are coming due at the same time. The cash-flow problem could be relieved somewhat if some of the accounts payable could be collected.

The CEO manages corporate matters through five functional divisions: operations, engineering, marketing, finance, and human resources management and general administration.

Preliminary, Concurrent, and Feedback Control Worksheet

Technocron International is in need of a variety of controls. Complete the following matrix by noting the preliminary, concurrent, and feedback controls that are needed in each of the five functional divisions.

<table>
<thead>
<tr>
<th>Divisions</th>
<th>Preliminary Controls</th>
<th>Concurrent Controls</th>
<th>Feedback Controls</th>
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<tbody>
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<td>HRM and general administration</td>
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