

# Part 5

## Controlling

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# Chapter 16

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### Key Terms

Concept Check

Self-Assessment

Management Decision

Management Team Decision

Develop Your Career Potential

Take Two Video

## STUDENT RESOURCES

**ThomsonNOW** On the Job and Biz Flix video applications, concept tutorial, and concept exercise

**Xtra!** Nine exhibit worksheets, author FAQs, quiz, Management News, and video clips from the chapter with exercises

**Web** (<http://williams.swlearning.com>) Quiz, PowerPoint slides, and glossary terms for this chapter

### Walgreen's Headquarters, Deerfield, Illinois.<sup>1</sup>

A dollar invested in Walgreen, the drugstore company, 25 years ago is now worth 5 times as much as a dollar invested in Intel or General Electric and 15 times as much as a dollar invested in the general stock market. Except for Wal-Mart, no other *Fortune* 500 company has increased its sales revenues and profits every year for the last 30 years! Yet that all seemed to be forgotten at the last shareholders' meeting where you got an earful of angry comments from shareholders upset about the company's stock price. When you pointed out that the market would eventually raise the share price, an angry shareholder yelled, "We're going to die before that [happens]."

Well, as they say on Wall Street, "past performance is no guarantee of future performance." In other words, despite Walgreen's storied success, the market has hammered the company's stock because it sees nothing but brutal competition on the horizon. For one, there's Costco, the warehouse discounter. With its rock-bottom

## What Would You Do?

prices, Costco sold \$1 billion of prescriptions last year, 30 percent more than the year before. For example, Costco charges \$14.94 for 100 pills of fluoxetine (Prozac), which Walgreen's sells for \$37.90. For another, as always, there's Wal-Mart, which has 3,144 stores with pharmacies. No one has Wal-Mart's pricing power, and now that it's thinking of opening 24-hour pharmacies (90 percent of Wal-Mart stores are already open 24 hours a day) with low prices and anytime pickup, it represents a tremendous threat. Then there's CVS, which, after spending \$2.15 billion to purchase Eckerd Drug Stores from JC Penney, is now the largest drugstore chain in the United States with nearly 6,000 stores. And with the purchase of Eckerd, CVS now owns over 1,000 stores in two of Walgreen's key markets, Florida and Texas, which are home to millions of elderly customers who have retired to plentiful sunshine and warm weather.

The biggest threat to Walgreen, however, wasn't even on its radar screen three years ago, and that's mail-order pharmacies run by pharmacy benefit managers (PBMs). PBMs work with employers, insurers, and health maintenance organizations (HMOs) to drive down prescription drug costs, which have been rising 10 to 15

percent a year. To contain costs, PBMs fill prescriptions for 90 days instead of the traditional 30 days. As a result, an average prescription costs \$2.50 to fill compared to over \$5.00 at a typical drugstore. Furthermore, PBMs don't need to buy real estate, build stores, advertise, or hire thousands of employees—costs that Walgreen can't avoid at its more than 5,000 stores. With companies' health-care costs increasing by 13 percent per year and a widely cited government study claiming that PBM prices are 27 percent lower for brand-name drugs and 53 percent lower for generic drugs, it's no wonder that companies like General Motors are *requiring* their employees to order their maintenance drugs (drugs taken for more than three months) from PBMs, and not Walgreen. Since PBM sales are increasing by 18 percent per year, double the growth rate of traditional drugstores' sales, and since Walgreen gets 62 percent of its \$40 billion in revenues from prescriptions, the threat from PBMs isn't trivial. And, when people aren't picking up prescriptions at Walgreen's drugstore, they're not buying the nonprescription goods such as makeup and diapers that account for 33 percent of Walgreen's sales.

Well, the problems are clear, but solving them won't be easy. First, how can we control costs? Next, in retail, the key statistic is "same store sales," that is, whether the same store's sales are up or down compared to last year. With all of these threats, how can Walgreen continue to grow same store sales? If we don't, the stock price will never recover. Finally, what can we do about the threat of PBMs and mail-order prescriptions? Our long-term survival depends on figuring this out. **If you were in charge at Walgreen, what would you do?**

### STUDY TIP

The list of key terms on page 547 can be a valuable study aid. Write down the definition of each term on a separate piece of paper without consulting the margin terms in the chapter. Cement your understanding by also writing an example if possible.

**control**

A regulatory process of establishing standards to achieve organizational goals, comparing actual performance against the standards, and taking corrective action, when necessary.

As Walgreen's situation shows, past success is no guarantee of future success. Even successful companies fall short, face challenges, and have to make changes. **Control** is a regulatory process of establishing standards to achieve organizational goals, comparing actual performance against the standards, and taking corrective action when necessary, as at Walgreen's, to restore performance to those standards. Control is achieved when behavior and work procedures conform to standards and company goals are accomplished.<sup>2</sup> Control is not just an after-the-fact process, however. Preventive measures are also a form of control.

We begin this chapter by examining the basic control process used in organizations. In the second part of the chapter, we go beyond the basics to an in-depth examination of the different methods that companies use to achieve control. We conclude the chapter by looking at the things that companies choose to control (i.e., finances, customer retention, product quality, etc.).

## Basics of Control

With many empty stores and a dated look, the Coventry Mall in Pottstown, Pennsylvania, just 22 miles from the gigantic King of Prussia Mall, *was* dying, but mall manager Rene Daniel has it on the mend. The first step was fixing the food. With the mall down to just six food vendors (e.g., Hot Dogs & More and Egg Roll Hut), he convinced McDonald's, Subway, and Saladworks to open restaurants. When the lease expired on the "Everything 99 Cent" store, he convinced Gap to lease the adjacent space, knock out the wall, and replace the aging blue Formica with blond wood and modern glass. Changes like this have increased mall sales by a third to above the national average. Nevertheless, despite the changes, Vickey Sihler, who started shopping at the Coventry Mall again because of Gap and the new Children's Place store, still sees room for improvement. "This place really needs to be fixed up," she says.<sup>3</sup> So, by working the control process (standards, comparison to standards, and corrective action), Rene Daniel is slowly but surely fixing Coventry Mall.

*After reading the next section, you should be able to*

- 1 describe the basic control process.

### 1 THE CONTROL PROCESS

The basic control process **1.1 begins with the establishment of clear standards of performance, 1.2 involves a comparison of performance to those standards, 1.3 takes corrective action, if needed, to repair performance deficiencies, 1.4 is a dynamic, cybernetic process, 1.5 consists of three basic methods: feedback control, concurrent control, and feedforward control.** However, as much as managers would like, **1.6 control isn't always worthwhile or possible.**

#### 1.1 Standards

The control process begins when managers set goals, such as satisfying 90 percent of customers or increasing sales by 5 percent. Companies then specify the performance standards that must be met to accomplish those goals. **Standards** are a basis of comparison for measuring the extent to which organizational performance is satisfactory or unsatisfactory. For example, many pizzerias use 30 minutes as the standard for delivery times. Since anything longer is viewed as unsatisfactory, they'll typically reduce the price if they can't deliver a hot pizza to you in 30 minutes or less.

So how do managers set standards? How do they decide which levels of performance are satisfactory and which are unsatisfactory? The first criterion for a good standard is that it must enable goal achievement. If you're meeting

**standards**

A basis of comparison for measuring the extent to which various kinds of organizational performance are satisfactory or unsatisfactory.

the standard, but still not achieving company goals, then the standard may have to be changed. For example, hospital patients are typically billed a month or two after treatment. But, with the amount of unreimbursed care totaling \$22.3 billion nationwide, many hospitals are changing payment standards by asking that insurance copayments be paid before the patient leaves the hospital. Anyone who can't afford the entire copayment at once is asked to at least make a down payment (those who do are much more likely to pay their entire bill). Karen Dostart, at Marshal Medical Center in Placerville, California, says, "My goal is to reduce elective services that go to bad debt by 50 percent within a year."<sup>4</sup>

Companies also determine standards by listening to customers or observing competitors. After hearing from consumers that they were interested in machines that would automate routine household tasks, iRobot, a manufacturer of industrial and government (military) robots, created the Scooba, a robot that washes floors. Founder Colin Angle says, "People just hated to mop, so we saw a real opportunity."<sup>5</sup> The Scooba vacuums up dirt and debris, sprays a bleach cleaning solution, and then squeegees and sucks up the dirty water from the floor. At about \$250, the Scooba can mop a typical kitchen in 45 minutes.

Standards can also be determined by benchmarking other companies. **Benchmarking** is the process of determining how well other companies (though not just competitors) perform business functions or tasks. In other words, benchmarking is the process of determining other companies' standards.

When setting standards by benchmarking, the first step is to determine what to benchmark. Companies can benchmark anything, from cycle time (how fast) to quality (how well) to price (how much). The next step is to identify the companies against which to benchmark your standards. The last step is to collect data to determine other companies' performance standards. Cadillac sales dropped for three straight decades because car buyers saw Cadillacs as big, bloated, poor-quality, luxury cars. Then, several years ago, after losing most of its luxury car market share, Cadillac began systematically benchmarking its quality and driving performance against Mercedes, BMW, Audi, and Lexus cars. Because of the changes made as a result of that benchmarking, Cadillac's STS sedan is now giving those luxury automakers' cars a run for their money. The *Wall Street Journal* concluded, "We'd have been impressed if the STS had matched these European cars' performance, but what surprised us was that in some ways it was better. The STS felt more nimble and fun to drive than heavier-feeling models including the Mercedes E-Class or Audi A6. It kept us feeling connected to the road, while a Lexus LS430 left us feeling isolated. And up against BMW's 5 Series, considered the benchmark in the class? We'd call it a draw."<sup>6</sup>

## 1.2 Comparison to Standards

The next step in the control process is to compare actual performance to performance standards. Although this sounds straightforward, the quality of the comparison largely depends on the measurement and information systems a company uses to keep track of performance. The better the system, the easier it is for companies to track their progress and identify problems that need to be fixed. One way for retailers to verify that performance standards are being met is to use "secret shoppers." Retail stores spend \$600 million a year to hire these consultants, who visit the stores pretending to be customers, to determine whether employees provide helpful customer service. The "secret shoppers" make detailed observations of the service provided (or not). Secret shopper Cliff Fill recalls the fast-food restaurant where the workers discussed their dating plans as he stood in front of them ready to order. After ignoring him for 90 seconds (secret shoppers often carry timers with them), they turned to him and said, "We'll be done with our conversation in a minute and be with you."<sup>7</sup> Mystery shoppers also note great service. Mike Bare, cofounder of the Mystery Shoppers Providers Association, says, "It used to be about catching people

### benchmarking

The process of identifying outstanding practices, processes, and standards in other companies and adapting them to your company.

doing something wrong. But, more and more, it's validating people who do things right."<sup>8</sup> Indeed, Intrawest, a ski resort, gives \$100 bills to employees praised in its secret shopper reports.

### 1.3 Corrective Action

The next step in the control process is to identify performance deviations, analyze those deviations, and then develop and implement programs to correct them. This is similar to the planning process discussed in Chapter 5: regular, frequent performance feedback allows workers and managers to track their performance and make adjustments in effort, direction, and strategies.

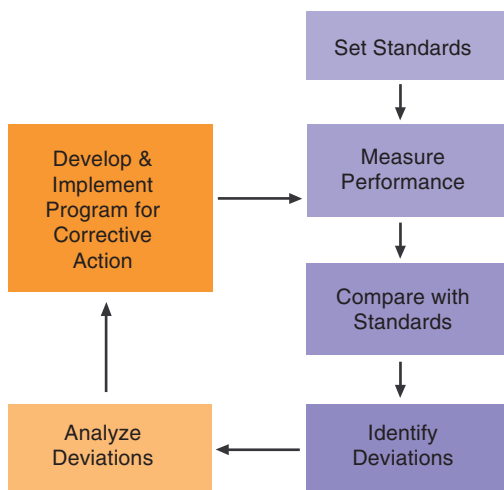
For example, Microsoft uses a program called Dr. Watson to generate feedback whenever something goes wrong on your Windows-based computer. You've probably seen it at one time or another. Something freezes up on your computer, and a dialogue box pops up, asking if you want to send a report to Microsoft so that it can use your information, along with information from others' computers, to figure out what went wrong. Microsoft used a version of Dr. Watson when developing its latest version of Microsoft Office software. Beta copies of Office went out to 600,000 testers, and the Dr. Watson feedback generated from problems they experienced prompted Microsoft to spend an additional three months eliminating bugs from the software before releasing an official version for sale.<sup>9</sup>

### 1.4 Dynamic, Cybernetic Process

As shown in Exhibit 16.1, control is a continuous, dynamic, cybernetic process. It begins by setting standards, measuring performance, and then comparing performance to the standards. If the performance deviates from the standards, then managers and employees analyze the deviations and develop and implement corrective programs that (hopefully) achieve the desired performance by meeting the standards. Managers must repeat the entire process again and again in an endless feedback loop (a continuous process). Thus, control is not a onetime achievement or result. It continues over time (i.e., it is dynamic) and requires daily, weekly, and monthly attention from managers to maintain performance levels at the standard (i.e., it is cybernetic). **Cybernetic** derives from the Greek word *kubernetes*, meaning "steersman," that is, one who steers or keeps on course.<sup>10</sup> Therefore, the control process shown in Exhibit 16.1 is cybernetic because of the feedback loop in which actual performance is compared to standards so that deviations from those standards can be minimized or corrected.

**cybernetic**  
The process of steering or keeping on course.

**Exhibit 16.1**  
Cybernetic Control Process



Keeping control of business expenses is an example of a continuous, dynamic, cybernetic process. A company that doesn't closely monitor expenses usually finds that they quickly get out of control, even for the smallest things. For example, when Sandy Weill became the new CEO of Commercial Credit in Baltimore, everywhere he looked, he saw expenses that could be cut. When he saw stacks of "free" copies of the *Wall Street Journal* in the lobby, he proclaimed, "Cancel all subscriptions. If employees want a *Wall Street Journal*, tell them 'pay for it yourself.'" After seeing a plant-service contractor water the potted plants outside his office, he said, "No more watering plants." Instead, he told the closest secretary, "Water your plant yourself." Turning next to company cars, he fired off a memo stating, "You have three days to do one of the following: (1) turn in your company car, or (2) deliver a certified check for the fair-market value of your company car." When the head of personnel, whose company car was a Mercedes, complained, Weill said, "We don't give cars. We don't give memberships to clubs. If people make enough money, they can live whatever lifestyle they want."<sup>11</sup>

Source: H. Koontz & R. W. Bradspsies, "Managing through Feedforward Control: A Future-Directed View," *Business Horizons*, June 1972, 25–36. Reprinted with permission from *Business Horizons*, © 1972 by the Trustees at Indiana University, Kelley School of Business.

Sure, it's a cliché, but it's just as true in business as in sports: If you take your eye off the ball, you're going to strike out. Control is an ongoing, dynamic, cybernetic process.

### 1.5 Feedback, Concurrent, and Feedforward Control

There are three basic control methods: feedback control, concurrent control, and feedforward control.<sup>12</sup> **Feedback control** is a mechanism for gathering information about performance deficiencies *after* they occur. This information is then used to correct or prevent performance deficiencies. Study after study has clearly shown that feedback improves both individual and organizational performance. In most instances, any feedback is better than no feedback.

If there is a downside to feedback, however, it is that it sometimes occurs too late. For example, 90 percent of the time an electrical transformer malfunctions on a neighborhood utility pole, a squirrel caused the problem. Unfortunately, electrical utilities have had little success keeping squirrels away from their equipment. In general, utilities like Pepco Holdings in Washington, D.C., which experiences nearly a thousand squirrel-related outages a year, don't find out about the problem until after a squirrel stands atop a utility pole, touches a live wire, and fries itself and the transformer, creating a huge power surge that blows out computers, televisions, and appliances in nearby homes. Power goes out in the neighborhood and customer complaints pour in with no advance warning. Sheila Frazier, a senior project manager for Energy Consulting Group LLC of Marietta, Georgia, says, "You've got to drive forever to some place, replace the transformer—and the worst problem is you know in your heart it's a squirrel, but you don't often have a fried carcass to show anybody because predators have already snatched it, and customers are crying bloody murder."<sup>13</sup>

**Concurrent control** is a mechanism for gathering information about performance deficiencies *as* they occur. Thus, it is an improvement over feedback because it attempts to eliminate or shorten the delay between performance and feedback about the performance. Aircraft manufacturers have recognized the importance of providing flight crews and maintenance personnel with more information about how their jets are running. Consequently, new-generation planes contain hundreds of computer sensors that airlines can use to monitor an airplane's systems while it is in flight. For instance, according to Lou Mancini, vice president of maintenance services for Boeing's Commercial Airplane Group, Boeing's Airplane Health Management service "is designed to increase the airplane's availability, since the carrier will be able to identify a problem [while the flight is in the air] and be prepared to fix it, as soon as the airplane arrives at the gate."<sup>14</sup>

**Feedforward control** is a mechanism for gathering information about performance deficiencies *before* they occur. In contrast to feedback and concurrent control, which provide feedback on the basis of outcomes and results, feedforward control provides information about performance deficiencies by monitoring inputs, not outputs. Thus, feedforward control seeks to prevent or minimize performance deficiencies *before* they happen. In addition to using the Dr. Watson tool on your computer to provide feedback *after* customers have experienced problems on their computers, Microsoft also uses feedforward controls to try to prevent software problems *before* they occur. For example, when developing the latest version of its Windows Server software (for network and Internet computer servers), Microsoft taught 8,500 experienced programmers new methods for writing more reliable software code *before* asking them to develop new features for Windows Server software. Microsoft has also developed new software testing tools that let the programmers thoroughly test the code they've written (i.e., input) before passing the code on to others to be used in beta testing and then in final products.<sup>15</sup> Exhibit 16.2 lists guidelines that companies can follow to get the most out of feedforward control.

#### feedback control

A mechanism for gathering information about performance deficiencies after they occur.

#### concurrent control

A mechanism for gathering information about performance deficiencies as they occur, thereby eliminating or shortening the delay between performance and feedback.

#### feedforward control

A mechanism for monitoring performance inputs rather than outputs to prevent or minimize performance deficiencies before they occur.

1. Thorough planning and analysis are required.
2. Careful discrimination must be applied in selecting input variables.
3. The feedforward system must be kept dynamic.
4. A model of the control system should be developed.
5. Data on input variables must be regularly collected.
6. Data on input variables must be regularly assessed.
7. Feedforward control requires action.

Source: H. Koontz & R. W. Bradspies, "Managing through Feedforward Control: A Future Directed View," *Business Horizons*, June 1972, 25–36. Reprinted with permission from *Business Horizons*, © 1972 by the Trustees at Indiana University, Kelley School of Business.

### Exhibit 16.2 Guidelines for Using Feedforward Control

#### control loss

A situation in which behavior and work procedures do not conform to standards.

#### regulation costs

The costs associated with implementing or maintaining control.

Increasing regulation costs are forcing the pharmaceutical industry to outsource vaccine development. Charles River Laboratories is one of only a handful of companies that supply pathogen-free eggs required for vaccine development and production.



CHARLES RIVER LABORATORIES

## 1.6 Control Isn't Always Worthwhile or Possible

Control is achieved when behavior and work procedures conform to standards and goals are accomplished. By contrast, **control loss** occurs when behavior and work procedures do not conform to standards.<sup>16</sup> John Caudwell, owner of Phones4U, one of the United Kingdom's largest mobile phone chains, felt that his company had control loss with respect to email. Managers and employees were averaging three hours per day on email and, according to Caudwell, not spending enough time with customers. So he completely banned email: "The policy came from me. The

staff was initially slightly shocked that I should make such a revolutionary move." Said Caudwell, "We have email paralysis. If you have a cancer, you have to cut it out. That's what I've done."<sup>17</sup>

Maintaining control is important because control loss prevents goal achievement (in the Phones4U example, not spending enough time with customers). When control loss occurs managers need to find out what, if anything, they could have done to prevent it. Usually, as discussed above, that means identifying deviations from standard performance, analyzing the causes of those deviations, and taking corrective action. Implementing controls, however, isn't always worthwhile or possible. For example, it's debatable whether, in the long run, Phones4U's email ban is a net plus for the company. Indeed, Tanno Massar, director of media relations at TPG, a logistics company, said, "It would be a serious setback for the company if we could no longer use email, and we are not considering it."<sup>18</sup> Let's look at regulation costs and cybernetic feasibility to see why implementing controls isn't always worthwhile or possible.

To determine whether control is worthwhile, managers need to carefully assess **regulation costs**, that is, whether the costs and unintended consequences of control exceed its benefits. For example, one of the reasons the number of U.S. pharmaceutical companies producing major vaccines has dropped significantly is that the *cost of controlling* legal risk (through liability insurance and in-house legal staffs) is so high. In the 1960s, 37 U.S. companies produced 380 licensed vaccines. In 1984, 15 U.S. companies produced 88 licensed vaccines. Today, because of legal costs, just 5 U.S. companies produce vaccines.<sup>19</sup> As a result, parents and doctors have faced severe shortages in 8 of the 11 recommended vaccines that prevent children from contracting diseases like diphtheria, tetanus, whooping cough, measles, mumps, rubella, and chicken pox.<sup>20</sup> Before choosing to implement control, managers should be confident that the benefits exceed the costs.

An often-overlooked factor in determining the cost of control is that *unintended consequences* sometimes accompany increased control. Control systems help companies, managers, and workers accomplish their goals, but at the same time that control systems help solve some problems, they can create others. Hewlett-Packard became the market leader by manufacturing high-quality, reliable computer printers. But, as competition grew and prices dropped, H-P printers grew relatively more expensive for consumers, and H-P began losing market share. The problem was that H-P, where product quality and functionality always came first, was overengineering its printers. They were too expensive because they were made too well. To convince H-P's computer engineers that this was the problem, manager Tom Alexander put



a \$150 H-P printer on a conference table and then stood on top of it. His point? Consumers want printers that print, so don't add unnecessary costs by making them strong enough to use as step stools.<sup>21</sup>

Another factor to consider is **cybernetic feasibility**, the extent to which it is possible to implement each step in the control process: clear standards of performance, comparison of performance to standards, and corrective action. If one or more steps cannot be implemented, then maintaining effective control may be difficult or impossible. For example, many retail companies provide significant employee discounts, which can be used by entering special codes at the company's online store. However, those codes, meant for employee use, have leaked out via email to nonemployees and are also published at Web sites such as <http://www.quicktoclick.com>. Amy Krasuna doesn't work for Old Navy or Banana Republic, but she has the employee codes for each company. Says Krasuna, "I'm being bombarded with them."<sup>22</sup>

Is it possible to control these discounts so that only employees can use them? Yes, with sufficient money, technical expertise, and the proper software tools (i.e., the cost of control), online retailers can create unique online discount codes that only work once and email them to employees. A spokesperson for Gap, which uses such codes, said, "We want to make sure we're protecting the integrity of the [sales] event. We really consider it a benefit to our employees." However, at Banana Republic, which ironically is owned by Gap, a spokesperson said that "technological challenges" prevented the company from using unique onetime codes. As a result, Banana Republic's 25 percent employee discount was being widely used by people who aren't employees like Amy Krasuna.

### cybernetic feasibility

The extent to which it is possible to implement each step in the control process.

## Review 1: The Control Process

The control process begins by setting standards, measuring performance, and then comparing performance to the standards. The better a company's information and measurement systems, the easier it is to make these comparisons. The control process continues by identifying and analyzing performance deviations, and then developing and implementing programs for corrective action. However, control is a continuous, dynamic, cybernetic process, not a onetime achievement or result. Control requires frequent managerial attention. The three basic control methods are feedback control (after-the-fact performance information), concurrent control (simultaneous performance information), and feedforward control (preventive performance information). Control, however, has regulation costs and unanticipated consequences and therefore isn't always worthwhile or possible.

## How and What to Control

At about 10 percent of Sam's Club and Wal-Mart stores, midnight shift employees are locked in to keep out robbers and, some say, also to prevent employee theft. According to Mona Williams, Wal-Mart's vice president for communications, "Wal-Mart secures these stores just as any other business does that has employees working overnight. Doors are locked to protect associates and the store from intruders."<sup>23</sup> But many employees dislike the policy. When Michael Rodriguez injured his ankle at 3 A.M., he had to wait an hour for a store manager to show up to unlock the doors. Said Rodriguez, "Being locked in in an emergency like that, that's not right."<sup>24</sup> Wal-Mart's Mona Williams responded, "Fire doors are always accessible [and unlocked from the inside] for safety, and there will always be at least one manager in the store with a set of keys to unlock the doors."<sup>25</sup>

If you managed a Wal-Mart store, would you lock in your midnight employees? Would doing so jeopardize or improve their safety? Kmart, Sears,

Home Depot, and Costco don't lock in their employees, so is Wal-Mart being overly restrictive? Or is this policy a reasonable response to employee theft, which can often exceed a store's profits? Former Sam's Club manager Tom Lewis says of the lock-in practice, "They're concerned about the bottom line, and the bottom line is affected by shrinkage in the store."<sup>26</sup> If you were a Wal-Mart or Sam's Club store manager, what would you do?

*After reading the next two sections, you should be able to*

- 2** discuss the various methods that managers can use to maintain control.
- 3** describe the behaviors, processes, and outcomes that today's managers are choosing to control in their organizations.

## **2** CONTROL METHODS

Managers can use five different methods to achieve control in their organizations: **2.1 bureaucratic**, **2.2 objective**, **2.3 normative**, **2.4 concertive**, and **2.5 self-control**.

### **2.1 Bureaucratic Control**

When most people think of managerial control, what they have in mind is bureaucratic control. **Bureaucratic control** is top-down control, in which managers try to influence employee behavior by rewarding or punishing employees for compliance or noncompliance with organizational policies, rules, and procedures. Most employees, however, would argue that bureaucratic managers emphasize punishment for noncompliance much more than rewards for compliance. For instance, when visiting the company's regional offices and managers, the president of a training company, who was known for his temper and for micromanaging others, would get some toilet paper from the restrooms and aggressively ask, "What's this?" When the managers answered, "Toilet paper," he would scream that it was two-ply toilet paper that the company couldn't afford. When told of a cracked toilet seat in one of the women's restrooms, he said, "If you don't like sitting on that seat, you can stand up like I do!"<sup>27</sup>

Ironically, bureaucratic management and control were created to prevent just this type of managerial behavior. By encouraging managers to apply well-thought-out rules, policies, and procedures in an impartial, consistent manner to everyone in the organization, bureaucratic control is supposed to make companies more efficient, effective, and fair. Perversely, it frequently has just the opposite effect. Managers who use bureaucratic control often emphasize following the rules above all else. When an employee collapsed from chest pains, her boss, fearing a heart attack, helped carry her to an ambulance. Yet, when the employee was thankfully diagnosed with indigestion and not a heart attack and returned to work several hours later, her boss filed a disciplinary action accusing her of an unexcused absence. Employees complained to the company CEO, who then took steps to correct the situation. The boss subsequently apologized to the employee and to his entire 25-person staff, explaining that he was wrong for taking the company's absence policy "too literally."<sup>28</sup>

Another characteristic of bureaucratically controlled companies is that due to their rule- and policy-driven decision making, they are highly resistant to change and slow to respond to customers and competitors. Recall from Chapter 2 that even Max Weber, the German philosopher who is largely credited with popularizing bureaucratic ideals in the late nineteenth century, referred to bureaucracy as the "iron cage." He said, "Once fully established, bureaucracy is among those social structures which are the hardest to destroy."<sup>29</sup> Of course, the national government, with hundreds of bureaus, agencies, and departments, is typically the largest bureaucracy in most countries. In the United States, because of the thousands of career bureaucrats who staff the offices of the

#### **bureaucratic control**

The use of hierarchical authority to influence employee behavior by rewarding or punishing employees for compliance or noncompliance with organizational policies, rules, and procedures.

federal government, even presidents and Congress have difficulty making changes. When General Dwight Eisenhower became president after Harry Truman, Truman, who as president had dealt with government bureaucracies, quipped, “Poor Ike. It won’t be a bit like the army. He’ll sit here and he’ll say, ‘Do this, do that,’ and nothing will happen.”<sup>30</sup>

## 2.2 Objective Control

In many companies, bureaucratic control has evolved into **objective control**, which is the use of observable measures of employee behavior or output to assess performance and influence behavior. Whereas bureaucratic control focuses on whether policies and rules are followed, objective control focuses on the observation or measurement of worker behavior or output. For example, determining whether sales representatives filed expense reports within 30 days, as specified by company policy, is an example of bureaucratic control, while measuring whether they met their sales quotas or returned phone calls in a timely manner is an example of objective control. There are two kinds of objective control: behavior control and output control.

**Behavior control** is regulating behaviors and actions that workers perform on the job. The basic assumption of behavior control is that if you do the right things (i.e., the right behaviors) every day, then those things should lead to goal achievement. Behavior control is still management-based, however, which means that managers are responsible for monitoring and rewarding or punishing workers for exhibiting desired or undesired behaviors. Companies that use global positioning satellite (GPS) technology to track where workers are and what they’re doing are using behavior control. For example, after getting complaints that his police officers weren’t always on the job, Sergeant John Kuczynsky quietly put GPS tracking devices in his officers’ cars. Contrary to the officers’ reports indicating that they were patrolling streets or using radar to catch speeding drivers, the GPS tracking software soon showed that five officers were sitting for long periods in parking lots or taking long breaks for meals. All five are now barred from law enforcement jobs.<sup>32</sup> Likewise, some organizations, worried that employees are wasting time on nonproductive behaviors, are removing Solitaire and Mine Sweeper games from employees’ computers. The reason? Researchers at the Internal Revenue Service have found that half the time IRS employees are using computers they’re playing games, gambling, or shopping on the Internet.<sup>33</sup>

Instead of measuring what managers and workers do, **output control** measures the results of their efforts. Whereas behavior control regulates, guides, and measures how workers behave on the job, output control gives managers and workers the freedom to behave as they see fit as long as they accomplish prespecified, measurable results. Output control is often coupled with rewards and incentives.

Three things must occur for output control and rewards to lead to improved business results. First, output control measures must be reliable, fair, and accurate. Second, employees and managers must believe that they can produce the desired results. If they don’t, then the output controls won’t affect their behavior. Third, the rewards or incentives tied to outcome control measures must truly be dependent on achieving established standards of performance. For example, Smithfield Foods CEO Joseph Luter doesn’t earn a bonus unless pretax profits exceed \$100 million. Ray Goldberg, chairman of the company’s compensation committee, says that the performance requirements shouldn’t “be so low that you get a bonus no matter what you do.”<sup>34</sup> Goldberg explains,

### objective control

The use of observable measures of worker behavior or outputs to assess performance and influence behavior.

### behavior control

Regulation of the behaviors and actions that workers perform on the job.

### DON'T CHEAT ON TRAVEL EXPENSE REPORTS

Workers are often tempted to pad their travel expense reports. As one put it, “After a while you feel that they owe it to ya, so the hell with ‘em. I’m going to expense it.” Frank Navran of the Ethics Resource Center says that people justify this by telling themselves, “I’m not really stealing from the company—I’m just getting back what I feel I’m entitled to.” However, Joel Richards, executive vice president and chief administrative officer of El Paso Corporation, says, “You learn a lot about people from their expense reports. If you can’t trust an employee to be truthful on an expense report, if you can’t trust them with small dollars, how can you trust them with making decisions involving millions of dollars?” So, do the right thing, don’t cheat on your travel expense reports.<sup>31</sup>

DOING THE RIGHT THING

### output control

Regulation of workers’ results or outputs through rewards and incentives.

“We were trying to make sure [Mr. Luter’s] rewards are based on the ups and downs of the company.”<sup>35</sup> So, with pretax profits of \$227.1 million, Luter’s bonus, based on 2 percent of earnings between \$100 million and \$300 million, and 3 percent of profits over \$300 million, would total \$2.5 million. For output control to work with rewards, the rewards must truly be at risk if performance doesn’t measure up.

### 2.3 Normative Control

**normative control**  
Regulation of workers’ behavior and decisions through widely shared organizational values and beliefs.

Rather than monitoring rules, behavior, or output, another way to control what goes on in organizations is to use normative control to shape the beliefs and values of the people who work there. With **normative controls**, a company’s widely shared values and beliefs guide workers’ behavior and decisions. For example, at Nordstrom, a Seattle-based department store chain, one value permeates the entire work force from top to bottom: extraordinary customer service. On the first day of work at Nordstrom, trainees begin their transformation to the “Nordstrom way” by reading the employee handbook. Sounds boring, doesn’t it? But Nordstrom’s handbook is printed on one side of a 3-by-5-inch note card. In its entirety, it reads:

*Welcome to Nordstrom’s. We’re glad to have you with our company. Our Number One goal is to provide outstanding customer service. Set both your personal and professional goals high. We have great confidence in your ability to achieve them. Nordstrom Rules: Rule #1: Use your good judgment in all situations. There will be no additional rules. Please feel free to ask your department manager, store manager or division general manager any question at any time.*<sup>36</sup>

That’s it. No lengthy rules. No specifics about what behavior is or is not appropriate. Use your judgment.<sup>37</sup>

Normative controls are created in two ways. First, companies that use normative controls are very careful about whom they hire. While many companies screen potential applicants on the basis of their abilities, normatively controlled companies are just as likely to screen potential applicants based on their attitudes and values. For example, before building stores in a new city, Nordstrom sends its human resource team into town to interview prospective applicants. In a few cities, the company canceled its expansion plans when it could not find enough qualified applicants who embodied the service attitudes and values for which Nordstrom is known. Nordstrom would rather give up potential sales in lucrative markets than do business using people who cannot provide Nordstrom’s level of service.<sup>38</sup>

Second, with normative controls, managers and employees learn what they should and should not do by observing experienced employees and by listening to the stories they tell about the company. At Nordstrom, many of these stories, which employees call “heroics,” have been inspired by the company motto, “Respond to Unreasonable Customer Requests!”<sup>39</sup> “Nordies,” as Nordstrom employees call themselves, like to tell the story about a customer who just had to have a pair of burgundy Donna Karan slacks that had gone on sale, but she could not find her size. The sales associate, who was helping her, contacted five nearby Nordstrom stores, but none had the customer’s size. So rather than leave the customer dissatisfied with her shopping experience, the sales associate went to her manager for petty cash and then went across the street and paid full price for the slacks at a competitor’s store. She then resold them to the

Nordstrom sets the retailing industry’s benchmark for customer service by using normative control. Here an employee is helping customers in Nordstrom’s Costa Mesa, California store.



GETTY IMAGES

customer at Nordstrom's lower sale price.<sup>40</sup> Obviously, Nordstrom would quickly go out of business if this were the norm. Nevertheless, this story makes clear the attitude that drives employee performance at Nordstrom in ways that rules, behavioral guidelines, or output controls could not.

## 2.4 Concertive Control

Whereas normative controls are based on beliefs that are strongly held and widely shared throughout a company, **concertive controls** are based on beliefs that are shaped and negotiated by work groups.<sup>41</sup> Whereas normative controls are driven by strong organizational cultures, concertive controls usually arise when companies give autonomous work groups complete autonomy and responsibility for task completion (see Chapter 10, Managing Teams, for a complete discussion of the role of autonomy in teams and groups). The most autonomous groups operate without managers and are completely responsible for controlling work group processes, outputs, and behavior. Such groups do their own hiring, firing, worker discipline, work schedules, materials ordering, budget making and meeting, and decision making.

Concertive control is not established overnight. Highly autonomous work groups evolve through two phases as they develop concertive control. In phase one, group members learn to work with each other, supervise each other's work, and develop the values and beliefs that will guide and control their behavior. And, because they develop these values and beliefs themselves, work group members feel strongly about following them.

For example, a member of an autonomous team at ISE Electronics, a small manufacturer of electronic boards, said, "I feel bad, believe it or not. Last Friday, we missed a shipment. I feel like *I* missed the shipment since I'm the last person that sees what goes to ship. But Friday we missed the shipment by two boards and it shouldn't have been missed. But it was and I felt bad because it's me. It's a reflection on me, too, for not getting the boards out the door."<sup>42</sup> Another member of the same team said, "Under the old system [management-led bureaucratic control], who gave a hoot if the boards shipped today or not? We just did our jobs. Now, we have more buy-in by the team members. We feel more personal responsibility for the product."<sup>43</sup>

The second phase in the development of concertive control is the emergence and formalization of objective rules to guide and control behavior. The beliefs and values developed in phase one usually develop into more objective rules as new members join teams. The clearer those rules, the easier it becomes for new members to figure out how and how not to behave.

For example, a team member at ISE Electronics described how the team dealt with members who showed up late to work: "Well, we had some disciplinary thing, you know. We had a few certain people who didn't show up on time and made a habit of coming in late. So the team got together and kinda set some guidelines and we told them, you know, 'If you come in late the third time and you don't wanna do anything to correct it, you're gone.' That was a team decision that this was a guideline that we were gonna follow."<sup>44</sup> Again, the key difference in concertive control is that the teams—and not management—enforce these rules.

Ironically, concertive control may lead to even more stress for workers to conform to expectations than bureaucratic control. Under bureaucratic control, most workers only have to worry about pleasing the boss. But with concertive control, their behavior has to satisfy the rest of their team members. For example, one team member said, "I don't have to sit there and look for the boss to be around; and if the boss is not around, I can sit there and talk to my neighbor or do what I want. Now the whole team is around me and the whole team is observing what I'm doing."<sup>45</sup> Plus, with concertive control, team members have a second, much more stressful role to perform—that of making sure that their team members adhere to team values and rules.

### concertive control

Regulation of workers' behavior and decisions through work group values and beliefs.

## 2.5 Self-Control

### self-control (self-management)

A control system in which managers and workers control their own behavior by setting their own goals, monitoring their own progress, and rewarding themselves for goal achievement.

**Self-control**, also known as **self-management**, is a control system in which managers and workers control their own behavior.<sup>46</sup> Self-control does not result in anarchy in which everyone gets to do whatever he or she wants. In self-control or self-management, leaders and managers provide workers with clear boundaries within which they may guide and control their own goals and behaviors.<sup>47</sup> Leaders and managers also contribute to self-control by teaching others the skills they need to maximize and monitor their own work effectiveness. In turn, individuals who manage and lead themselves establish self-control by setting their own goals, monitoring their own progress, rewarding or punishing themselves for achieving or for not achieving their self-set goals, and constructing positive thought patterns that remind them of the importance of their goals and their ability to accomplish them.<sup>48</sup>

For example, let's assume you need to do a better job of praising and recognizing the good work that your staff does for you. You can use goal setting, self-observation, and self-reward to self-manage this behavior. For self-observation, write "praise/recognition" on a 3-by-5-inch card. Put the card in your pocket. Put a check on the card each time you praise or recognize someone (wait until the person has left before you do this). Keep track for a week. This serves as your baseline or starting point. Simply keeping track will probably increase how often you do this. After a week, assess your baseline or starting point, and then set a specific goal. For instance, if your baseline was twice a day, you might set a specific goal to praise or recognize others' work five times a day. Continue monitoring your performance with your cards. Once you've achieved your goal every day for a week, give yourself a reward (perhaps a CD, a movie, lunch with a friend at a new restaurant) for achieving your goal.<sup>49</sup>

As you can see, the components of self-management, self-set goals, self-observation, and self-reward have their roots in the motivation theories you read about in Chapter 13. The key difference, though, is that the goals, feedback, and rewards originate from employees themselves and not from their managers or organizations.

### Review 2: Control Methods

There are five methods of control: bureaucratic, objective, normative, concertive, and self-control (self-management). Bureaucratic and objective controls are top-down, management-based, and measurement-based. Normative and concertive controls represent shared forms of control because they evolve from company-wide or team-based beliefs and values. Self-control, or self-management, is a control system in which managers turn much, but not all, control over to the individuals themselves.

Bureaucratic control is based on organizational policies, rules, and procedures. Objective controls are based on reliable measures of behavior or outputs. Normative control is based on strong corporate beliefs and careful hiring practices. Concertive control is based on the development of values, beliefs, and rules in autonomous work groups. Self-control is based on individuals' setting their own goals, monitoring themselves, and rewarding or punishing themselves with respect to goal achievement.

We end this section by noting that each of these control methods may be more or less appropriate depending on the circumstances. Examine Exhibit 16.3 to find out when each of these five control methods should be used.

## 3 WHAT TO CONTROL?

In the first section of this chapter, we learned the basics of the control process and that control isn't always worthwhile or possible. In the second section, we looked at the various ways in which control can be obtained. In this third and

|                      |  |
|----------------------|--|
| BUREAUCRATIC CONTROL | <ul style="list-style-type: none"> <li>• When it is necessary to standardize operating procedures</li> <li>• When it is necessary to establish limits</li> </ul>   |
| BEHAVIOR CONTROL     | <ul style="list-style-type: none"> <li>• When it is easier to measure what workers do on the job than what they accomplish on the job</li> <li>• When “cause-effect” relationships are clear, that is, when companies know which behaviors will lead to success and which won’t</li> <li>• When good measures of worker behavior can be created</li> </ul> |
| OUTPUT CONTROL       | <ul style="list-style-type: none"> <li>• When it is easier to measure what workers accomplish on the job than what they do on the job</li> <li>• When good measures of worker output can be created</li> <li>• When it is possible to set clear goals and standards for worker output</li> <li>• When “cause-effect” relationships are unclear</li> </ul>  |
| NORMATIVE CONTROL    | <ul style="list-style-type: none"> <li>• When organizational culture, values, and beliefs are strong</li> <li>• When it is difficult to create good measures of worker behavior</li> <li>• When it is difficult to create good measures of worker output</li> </ul>  |
| CONCERTIVE CONTROL   | <ul style="list-style-type: none"> <li>• When responsibility for task accomplishment is given to autonomous work groups</li> <li>• When management wants workers to take “ownership” of their behavior and outputs</li> <li>• When management desires a strong form of worker-based control</li> </ul>   |
| SELF-CONTROL         | <ul style="list-style-type: none"> <li>• When workers are intrinsically motivated to do their jobs well</li> <li>• When it is difficult to create good measures of worker behavior</li> <li>• When it is difficult to create good measures of worker output</li> <li>• When workers have or are taught self-control and self-leadership skills</li> </ul>  |

Sources: L. J. Kirsch, “The Management of Complex Tasks in Organizations: Controlling the Systems Development Process,” *Organization Science* 7 (1996): 1–21; S. A. Snell, “Control Theory in Strategic Human Resource Management: The Mediating Effect of Administrative Information,” *Academy of Management Journal* 35 (1992): 292–327.

final section, we address an equally important issue, “What should managers control?” The way managers answer this question has critical implications for most businesses. In the midst of an economic slowdown, a medium-sized financial company created a huge upheaval when it tried to cut costs by eliminating company-paid-for cell phones. Salespeople were furious, claiming, “No other group in the company had their cell phone use restricted.” Lynda Ford, a consultant who was working with the company at the time, said that canceling cell phones “became the straw that broke the camel’s back.” As a result, salespeople started quitting and productivity dropped significantly. Several months later, realizing the policy was wrong, the company reinstated company cell phones.<sup>50</sup>

This financial company lost salespeople and productivity because it only worried about (i.e., controlled) one thing—reducing costs. Companies need to have a clear vision. They can’t be everything to everybody. Most companies successfully carry out their visions and missions by finding a balance that comes from doing a multitude of small things right, like managing costs, providing value, and keeping customers and employees satisfied.

After reading this section, you should be able to explain **3.1 the balanced scorecard approach to control and how companies can achieve balanced control of company performance by choosing to control 3.2 budgets, cash flows, and economic value added, 3.3 customer defections, 3.4 quality, and 3.5 waste and pollution.**

### 3.1 The Balanced Scorecard

Most companies measure performance using standard financial and accounting measures, such as return on capital, return on assets, return on investments, cash flow, net income, net margins, and so forth. The **balanced scorecard**

#### Exhibit 16.3

When to Use Different Methods of Control

#### balanced scorecard

Measurement of organizational performance in four equally important areas: finances, customers, internal operations, and innovation and learning.

encourages managers to look beyond traditional financial measures to four different perspectives on company performance. How do customers see us (the customer perspective)? At what must we excel (the internal perspective)? Can we continue to improve and create value (the innovation and learning perspective)? How do we look to shareholders (the financial perspective)?<sup>51</sup>

The balanced scorecard has several advantages over traditional control processes that rely solely on financial measures. First, it forces managers at each level of the company to set specific goals and measure performance in each of the four areas. For example, Exhibit 16.4 shows that Southwest Airlines uses nine different measures in its balanced scorecard. Of those, only three, market value, seat revenue, and plane lease costs (at various rates of compounded annual growth, or CAGR), are standard financial measures of performance. In addition, Southwest measures its FAA (Federal Aviation Administration) on-time arrival rating and the cost of its fares compared to competitors (customer perspective); how much time each plane spends on the ground after landing and the percentage of planes that depart on time (internal business perspective); and the percentage of its ground crew workers, such as mechanics and luggage handlers, who own company stock and have received job training (learning perspective).

The second major advantage of the balanced scorecard approach to control is that it minimizes the chances of **suboptimization**, which occurs when performance improves in one area, but only at the expense of decreased performance in others. Jon Meliones, chief medical director at Duke’s Children’s Hospital, stated, “We explained the [balanced scorecard] theory to clinicians and administrators like this. . . . if you sacrifice too much in one quadrant to satisfy another, your organization as a whole is thrown out of balance. We could, for example, cut costs to improve the financial quadrant by firing half the staff, but that would hurt quality of service, and the customer quadrant would fall out of balance. Or we could increase productivity in the internal business quadrant by assigning more patients to a nurse, but doing so would raise the likelihood of errors—an unacceptable trade-off.”<sup>52</sup>

Let’s examine some of the ways in which companies are controlling the four basic parts of the balanced scorecard: the financial perspective (budgets, cash

**suboptimization**

Performance improvement in one part of an organization but only at the expense of decreased performance in another part.

**Exhibit 16.4**

Southwest Airlines’ Balanced Scorecard

|           | OBJECTIVES                               | MEASURES                         | TARGETS                                    | INITIATIVES  |
|-----------|--|----------------------------------|--|--|
| FINANCIAL | Profitability                            | Market Value                     | 30% CAGR                                   |  |
|           | Increased Revenue                        | Seat Revenue                     | 20% CAGR                                   |  |
|           | Lower Costs                              | Plane Lease Cost                 | 5% CAGR                                    |  |
| CUSTOMER  | On-Time Flights                          | FAA On-Time Arrival Rating       | #1   | Quality Management, Customer Loyalty Program       |
|           | Lowest Prices                            | Customer Ranking (Market Survey) | #1   |  |
| INTERNAL  | Fast Ground Turnaround                   | Time on Ground                   | 30 Minutes                                 | Cycle Time Optimization Program                    |
|           |  | On-Time Departure                | 90%  |  |
| LEARNING  | Ground Crew Alignment with Company Goals | % Ground Crew Shareholders       | Year 1: 70%<br>Year 3: 90%<br>Year 5: 100% | Employee Stock Option Plan<br>Ground Crew Training |
|           |  | % Ground Crew Trained            |  |  |

Sources: G. Anthes, “ROI Guide: Balanced Scorecard,” *Computer World* [Online] available at <http://www.computerworld.com/managementtopics/roi/story/0,10801,78512,00.html>, 5 May 2003.



flows, and economic value added), the customer perspective (customer defections), the internal perspective (total quality management), and the innovation and learning perspective (waste and pollution).

### 3.2 The Financial Perspective: Controlling Budgets, Cash Flows, and Economic Value Added

The traditional approach to controlling financial performance focuses on accounting tools, such as cash flow analysis, balance sheets, income statements, financial ratios, and budgets. **Cash flow analysis** predicts how changes in a business will affect its ability to take in more cash than it pays out. **Balance sheets** provide a snapshot of a company's financial position at a particular time (but not the future). **Income statements**, also called profit and loss statements, show what has happened to an organization's income, expenses, and net profit (income less expenses) over a period of time. Exhibit 16.5 shows the basic steps or parts for cash flow analyses, balance sheets, and income statements. **Financial ratios** are typically used to track a business's liquidity (cash), efficiency, and profitability over time compared to other businesses in its industry. Exhibit 16.6 lists a few of the most common financial ratios and explains how they are calculated, what they mean, and when to use them. Finally, **budgets** are used to project costs and revenues, prioritize and control spending, and ensure that expenses don't exceed available funds and revenues. Exhibit 16.7 reviews the different kinds of budgets managers can use to track and control company finances.

By themselves, none of these tools—cash flow analyses, balance sheets, income statements, financial ratios, or budgets—tell the whole financial story of a business. They must be used together when assessing a company's financial performance. Since these tools are reviewed in detail in your accounting and finance classes, only a brief overview is provided here. Still, these are necessary tools for controlling organizational finances and expenses, and they should be part of your business toolbox. Unfortunately, most managers don't (but should) have a good understanding of these accounting tools.<sup>53</sup> When Boeing's new chief financial officer attended her first company retreat with other Boeing executives, she assumed that her discussion of financial ratios, like those shown in Exhibit 16.6, would be a boring review for everyone present. Afterwards, she was shocked when dozens of the 280 executives attending the retreat told her that for the very first time they finally understood what the formulas meant.<sup>54</sup>

So, if, like those experienced executives, you struggle to understand how financial ratios can be used where you work, you might find help in the following

#### STEPS FOR A BASIC CASH FLOW ANALYSIS

1. Forecast sales (steady, up, or down).
2. Project changes in anticipated cash inflows (as a result of changes).
3. Project anticipated cash outflows (as a result of changes).
4. Project net cash flows by combining anticipated cash inflows and outflows.

#### PARTS OF A BASIC BALANCE SHEET (ASSETS = LIABILITIES + OWNER'S EQUITY)

1. Assets
  - a. Current Assets (cash, short-term investment, marketable securities, accounts receivable, etc.)
  - b. Fixed Assets (land, buildings, machinery, equipment, etc.)
2. Liabilities
  - a. Current Liabilities (accounts payable, notes payable, taxes payable, etc.)
  - b. Long-Term Liabilities (long-term debt, deferred income taxes, etc.)
3. Owner's Equity
  - a. Preferred stock and common stock
  - b. Additional paid-in capital
  - c. Retained earnings

#### BASIC INCOME STATEMENT

|  |
|--|
| SALES REVENUE  |
| – sales returns and allowances   |
| + other income   |
| = NET REVENUE  |
| – cost of goods sold (beginning inventory, costs of goods purchased, ending inventory) |
| = GROSS PROFIT   |
| – total operating expenses (selling, general, and administrative expenses)             |
| = INCOME FROM OPERATIONS   |
| – interest expense   |
| = PRETAX INCOME  |
| – income taxes   |
| = NET INCOME   |

#### Exhibit 16.5

Basic Accounting Tools for Controlling Financial Performance

#### cash flow analysis

A type of analysis that predicts how changes in a business will affect its ability to take in more cash than it pays out.

#### balance sheets

Accounting statements that provide a snapshot of a company's financial position at a particular time.

#### income statements

Accounting statements, also called "profit and loss statements," that show what has happened to an organization's income, expenses, and net profit over a period of time.

| RATIOS                      | FORMULA  | WHAT IT MEANS   | WHEN TO USE   |
|-----------------------------|--|---|---|
| <b>LIQUIDITY RATIOS</b>     |  |   |   |
| Current Ratio               | $\frac{\text{Current Assets}}{\text{Current Liabilities}}$                           | <ul style="list-style-type: none"> <li>Whether you have enough assets on hand to pay for short-term bills and obligations.</li> <li>Higher is better.</li> <li>Recommended level is two times as many current assets as current liabilities.</li> </ul>   | <ul style="list-style-type: none"> <li>Track monthly and quarterly.</li> <li>Basic measure of your company's health.</li> </ul>   |
| Quick (Acid Test) Ratio     | $\frac{(\text{Current Assets} - \text{Inventories})}{\text{Current Liabilities}}$    | <ul style="list-style-type: none"> <li>Stricter than current ratio. Whether you have enough (i.e., cash) to pay short-term bills and obligations.</li> <li>Higher is better.</li> <li>Recommended level is one or higher.</li> </ul>  | <ul style="list-style-type: none"> <li>Track monthly.</li> <li>Also calculate quick ratio with potential customers to evaluate whether they're likely to pay you in a timely manner.</li> </ul>                     |
| <b>LEVERAGE RATIOS</b>      |  |   |   |
| Debt to Equity              | $\frac{\text{Total Liabilities}}{\text{Total Equity}}$                               | <ul style="list-style-type: none"> <li>Indicates how much the company is leveraged (in debt) by comparing what is owed (liabilities) to what is owned (equity).</li> <li>Lower is better. A high debt-to-equity ratio could indicate that the company has too much debt.</li> <li>Recommended level depends on industry.</li> </ul> | <ul style="list-style-type: none"> <li>Track monthly.</li> <li>Lenders often use this to determine the creditworthiness of a business (i.e., whether to approve additional loans).</li> </ul>                       |
| Debt Coverage               | $\frac{(\text{Net Profit} + \text{Noncash Expense})}{\text{Debt}}$                   | <ul style="list-style-type: none"> <li>Indicates how well cash flow covers debt payments.</li> <li>Higher is better.</li> </ul>   | <ul style="list-style-type: none"> <li>Track monthly.</li> <li>Lenders look at this ratio to determine if there is adequate cash to make loan payments.</li> </ul>  |
| <b>EFFICIENCY RATIOS</b>    |  |   |   |
| Inventory Turnover          | $\frac{\text{Cost of Goods Sold}}{\text{Average Value of Inventory}}$                | <ul style="list-style-type: none"> <li>Whether you're making efficient use of inventory.</li> <li>Higher is better, indicating that inventory (dollars) isn't purchased (spent) until needed.</li> <li>Recommended level depends on industry.</li> </ul>  | <ul style="list-style-type: none"> <li>Track monthly by using a 12-month rolling average.</li> </ul>  |
| Average Collections Period  | $\frac{\text{Accounts Receivable}}{(\text{Annual Net Credit Sales Divided by 365})}$ | <ul style="list-style-type: none"> <li>Shows on average how quickly your customers are paying their bills.</li> <li>Recommended level is no more than 15 days longer than credit terms. If credit is net 30 days, then average should not be longer than 45 days.</li> </ul>  | <ul style="list-style-type: none"> <li>Track monthly.</li> <li>Use to determine how long company's money is being tied up in customer credit.</li> </ul>  |
| <b>PROFITABILITY RATIOS</b> |  |   |   |
| Gross Profit Margin         | $\frac{\text{Gross Profit}}{\text{Total Sales}}$                                     | <ul style="list-style-type: none"> <li>Shows how efficiently a business is using its materials and labor in the production process.</li> <li>Higher is better, indicating that a profit can be made if fixed costs are controlled.</li> </ul>   | <ul style="list-style-type: none"> <li>Track monthly.</li> <li>Analyze when unsure about product or service pricing. Low margin compared to competitors means you're underpricing.</li> </ul>                       |
| Return on Equity            | $\frac{\text{Net Income}}{\text{Owner's Equity}}$                                    | <ul style="list-style-type: none"> <li>Shows what was earned on your investment in the business during a particular period. Often called "return on investment."</li> <li>Higher is better.</li> </ul>  | <ul style="list-style-type: none"> <li>Track quarterly and annually.</li> <li>Use to compare what you might have earned on the stock market, bonds, or government Treasury bills during the same period.</li> </ul> |

**Exhibit 16.6**  
Common Financial Ratios

|   |   |
|---|---|
| <b>Revenue Budgets</b> —used to project or forecast future sales.   | <ul style="list-style-type: none"> <li>• Accuracy of projection depends on economy, competitors, sales force estimates, etc.</li> <li>• Determined by estimating future sales volume and sales prices for all products and services.</li> </ul>   |
| <b>Expense Budgets</b> —used within departments and divisions to determine how much will be spent on various supplies, projects, or activities. | <ul style="list-style-type: none"> <li>• One of the first places that companies look for cuts when trying to lower expenses.</li> </ul>   |
| <b>Profit Budgets</b> —used by profit centers, which have “profit and loss” responsibility.   | <ul style="list-style-type: none"> <li>• Profit budgets combine revenue and expense budgets into one budget.</li> <li>• Typically used in large businesses with multiple plants and divisions.</li> </ul>   |
| <b>Cash Budgets</b> —used to forecast how much cash a company will have on hand to meet expenses.   | <ul style="list-style-type: none"> <li>• Similar to cash flow analyses.</li> <li>• Used to identify cash shortfalls, which must be covered to pay bills, or cash excesses, which should be invested for a higher return.</li> </ul>   |
| <b>Capital Expenditure Budgets</b> —used to forecast large, long-lasting investments in equipment, buildings, and property.                     | <ul style="list-style-type: none"> <li>• Help managers identify funding that will be needed to pay for future expansion or strategic moves designed to increase competitive advantage.</li> </ul>   |
| <b>Variable Budgets</b> —used to project costs across varying levels of sales and revenues.   | <ul style="list-style-type: none"> <li>• Important because it is difficult to accurately predict sales revenue and volume.</li> <li>• Lead to more accurate budgeting with respect to labor, materials, and administrative expenses, which vary with sales volume and revenues.</li> <li>• Build flexibility into the budgeting process.</li> </ul> |

### Exhibit 16.7 Common Kinds of Budgets

books: *Accounting the Easy Way*, by Peter J. Eisen; *Accounting for Dummies* and *How to Read a Financial Report: Wringing Vital Signs Out of the Numbers*, both by John A. Tracy; *Schaum's Quick Guide to Business Formulas: 201 Decision-Making Tools for Business, Finance, and Accounting Students*, by Joel G. Siegel, Jae K. Shim, and Stephen W. Hartman; *The Vest-Pocket Guide to Business Ratios*, by Michael R. Tyran; *Essential Managers: Managing Budgets*, by Stephen Brookson; or *Forecasting Budgets: 25 Keys to Successful Planning (The New York Times Pocket MBA Series)*, by Norman Moore and Grover Gardner.

Though no one would dispute the importance of cash flow analyses, balance sheets, income statements, financial ratios, or budgets for determining the financial health of a business, accounting research also indicates that the complexity and sheer amount of information contained in these accounting tools can shut down the brain and glaze over the eyes of even the most experienced manager.<sup>55</sup> Sometimes, there's simply too much information to make sense of. The balanced scorecard simplifies things by focusing on one simple question when it comes to finances: How do we look to shareholders? One way to answer that question is through something called economic value added.

Conceptually, **economic value added (EVA)** is more than just profits. It is the amount by which profits exceed the cost of capital in a given year. It is based on the simple idea that it takes capital to run a business and that capital comes at a cost. Although most people think of capital as cash, capital, once invested (i.e., spent), is more likely to be found in a business in the form of computers, manufacturing plants, employees, raw materials, and so forth. And just like the interest that a homeowner pays on a mortgage or that a college student pays on a student loan, there is a cost to that capital.

The most common costs of capital are the interest paid on long-term bank loans used to buy all those resources, the interest paid to bondholders (who lend organizations their money), and the dividends (cash payments) and growth in stock value that accrue to shareholders. EVA is positive when company profits

#### financial ratios

Calculations typically used to track a business's liquidity (cash), efficiency, and profitability over time compared to other businesses in its industry.

#### budgets

Quantitative plans through which managers decide how to allocate available money to best accomplish company goals.

#### economic value added (EVA)

The amount by which company profits (revenues minus expenses minus taxes) exceed the cost of capital in a given year.

|   |  |
|---|--|
| 1. Calculate Net Operating Profit After Tax (NOPAT).  | \$3,500,000  |
| 2. Identify how much capital the company has invested (i.e., spent).                            | \$16,800,000   |
| 3. Determine the cost (i.e., rate) paid for capital (usually between 5 percent and 13 percent). | 10%  |
| 4. Multiply capital used (Step 2) times cost of capital (Step 3).                               | $(10\% \times \$16,800,000) = \$1,680,000$   |
| 5. Subtract the total dollar cost of capital from net profit after taxes.                       | $  \begin{array}{r}  \$3,500,000 \text{ Net Operating Profit After Tax} \\  - \$1,680,000 \text{ Total Cost of Capital} \\  \hline  \underline{\$1,820,000} \text{ Economic Value Added}  \end{array}  $ |

**Exhibit 16.8**  
Calculating Economic Value  
Added (EVA)

(revenues minus expenses minus taxes) exceed the cost of capital in a given year. In other words, if a business is to truly grow, its revenues must be large enough to cover both short-term costs (annual expenses and taxes) and long-term costs (the cost of borrowing capital from bondholders and shareholders). If you're a bit confused, the late Roberto Goizueta, the former CEO of Coca-Cola, explained it this way: "You borrow money at a certain rate and invest it at a higher rate and pocket the difference. It is simple. It is the essence of banking."<sup>56</sup>

Exhibit 16.8 shows how to calculate EVA. First, starting with a company's income statement, you calculate Net Operating Profit After Taxes (NOPAT) by subtracting taxes owed from Income from Operations (see Exhibit 16.5 for a review of an income statement). The NOPAT shown in Exhibit 16.8 is \$3,500,000. Second, identify how much capital the company has invested (i.e., spent). Total liabilities (what the company owes) less accounts payable and less accrued expenses, neither of which you pay interest on, provides a rough approximation of this amount. In Exhibit 16.8, total capital invested is \$16,800,000. Third, calculate the cost (i.e., rate) paid for capital by determining the interest paid to bondholders (who lend organizations their money), which is usually somewhere between 5 and 8 percent, and the return that stockholders want in terms of dividends and stock price appreciation, which is historically about 13 percent. Take a weighted average of the two to determine the overall cost of capital. In Exhibit 16.8, the cost of capital is 10 percent. Fourth, multiply the total capital (\$16,800,000) from Step 2 by the cost of capital (10 percent) from Step 3. In Exhibit 16.8, this amount is \$1,680,000. Fifth, subtract the total dollar cost of capital in Step 4 from Net Profit After Taxes in Step 1. In Exhibit 16.8, this value is \$1,820,000, which means that our example company has created economic value or wealth this year. If our EVA number had been negative, meaning that the company didn't make enough profit to cover the cost of capital from bondholders and shareholders, then the company would have destroyed economic value or wealth by taking in more money than it returned.<sup>57</sup>

But why is EVA so important? First and most importantly, because it includes the cost of capital, it shows whether a business, division, department, profit center, or product is really paying for itself. The key is to make sure that managers and employees can see how their choices and behavior affect the company's EVA. For example, because of EVA training and information systems, factory workers at Herman Miller, a leading office furniture manufacturer, understand that using more efficient materials, such as less expensive wood-dust board instead of real wood sheeting, contributes an extra dollar of EVA from each desk the company makes.<sup>58</sup>

Second, because EVA can easily be determined for subsets of a company, such as divisions, regional offices, manufacturing plants, and sometimes even departments, it makes managers and workers at all levels pay much closer attention to their segment of the business. When company offices were being refurbished at Genesco, a shoe company, a worker who had EVA training handed CEO Ben Harris \$4,000 in cash. The worker explained that he now understood the effect his job had on the company's ability to survive and prosper. And since the

| MVA RANKING IN 2004 | MVA RANKING IN 2003 | COMPANY             | MARKET VALUE ADDED (\$ MILLIONS) | ECONOMIC VALUE ADDED/(LOST) (\$ MILLIONS) |
|---------------------|---------------------|---------------------|----------------------------------|---|
| 1                   | 1                   | General Electric    | \$299,810                        | \$5,288                                   |
| 2                   | 9                   | ExxonMobil          | 197,782                          | 14,456                                    |
| 3                   | 3                   | Microsoft           | 178,032                          | 6,426                                     |
| 4                   | 2                   | Wal-Mart            | 161,693                          | 4,972                                     |
| 5                   | 10                  | Johnson & Johnson   | 138,199                          | 5,655                                     |
| 6                   | 15                  | United Health Group | 112,755                          | 1,897                                     |
| 7                   | 7                   | Procter & Gamble    | 105,858                          | 3,951                                     |
| 8                   | 4                   | CitiGroup           | 99,485                           | 4,536                                     |
| 9                   | 5                   | Intel               | 97,468                           | 1,720                                     |
| 10                  | 13                  | Dell                | 88,086                           | 1,891                                     |

Source: R. Grizzetti, "U.S. Performance 1000," Stern Stewart & Co, [Online] available by request, <http://www.sternstewart.com>, 20 June 2005.

company was struggling, he had sold the old doors that had been removed during remodeling so that the company could have the cash.<sup>59</sup> In other words, EVA motivates managers and workers to think like small business owners who must scramble to contain costs and generate enough business to meet their bills each month. And, unlike many kinds of financial controls, EVA doesn't specify what should or should not be done to improve performance. Thus, it encourages managers and workers to be creative in looking for ways to improve EVA performance.

Exhibit 16.9 shows the top 10 companies in terms of EVA and market value added (MVA), as measured by the Stern Stewart Performance 1000 index. Remember that EVA is the amount by which profits exceed the cost of capital in a given year. So the more that EVA exceeds the total dollar cost of capital, the better a company has used investors' money that year. MVA is simply the cumulative EVA created by a company over time. Thus, MVA indicates how much value or wealth a company has created or destroyed in total during its existence. As indicated by the MVA figures in Exhibit 16.9, over time the top 10 companies have created considerable wealth, ranging from almost \$88 billion at Dell to \$300 billion at General Electric; thus, they have returned substantially more than they took in. All of the top 10 in MVA had positive EVAs in the most recent year. However, this doesn't always happen. Good businesses sometimes have years with negative EVAs.

### 3.3 The Customer Perspective: Controlling Customer Defections

The second aspect of organizational performance that the balanced scorecard helps managers monitor is customers. It does so by forcing managers to address the question, "How do customers see us?" Unfortunately, most companies try to answer this question through customer satisfaction surveys, but these are often misleadingly positive. Most customers are reluctant to talk about their problems because they don't know who to complain to or think that complaining will not do any good. Indeed, a study by the federal Office of Consumer Affairs found that 96 percent of unhappy customers never complain to anyone in the company.<sup>60</sup>

Another reason that customer satisfaction surveys can be misleading is that sometimes even very satisfied customers will leave to do business with competitors. Dave Nichol, founder of the President's Choice brand, explained why: "Customer loyalty is the absence of something better."<sup>61</sup> So, even if customers are pleased, they may go elsewhere if they believe they can get a better product or service. Finally, customer satisfaction surveys can be misleading because they

#### Exhibit 16.9

Leading Companies by Market Value Added and Economic Value Added.

greatly overestimate the degree to which customers will buy from a company again. For example, it's common for automakers to advertise that "90 percent of customers are satisfied with their cars." But what they don't say in their advertising is that only 30 to 40 percent of car buyers purchase their next car from the same company.<sup>62</sup>

#### customer defections

A performance assessment in which companies identify which customers are leaving and measure the rate at which they are leaving.

Rather than pouring over customer satisfaction surveys from current customers, studies indicate that companies may do a better job of answering the question "How do customers see us?" by closely monitoring **customer defections**, that is, by identifying which customers are leaving the company and measuring the rate at which they are leaving. Unlike the results of customer satisfaction surveys, customer defections and retention do have a great effect on profits.

For example, very few managers realize that obtaining a new customer costs five times as much as keeping a current one. In fact, the cost of replacing old customers with new ones is so great that most companies could double their profits by increasing the rate of customer retention by just 5 to 10 percent per year.<sup>63</sup> And, if a company can keep a customer for life, the benefits are even larger. According to Stew Leonard, owner of the Connecticut-based Stew Leonard's grocery store chain, "The lifetime value of a customer in a supermarket is about \$246,000. Every time a customer comes through our front door I see, stamped on their forehead in big red numbers, '\$246,000.' I'm never going to make that person unhappy with me. Or lose her to the competition."<sup>64</sup>

Beyond the clear benefits to the bottom line, the second reason to study customer defections is that customers who have left are much more likely than current customers to tell you what you are doing wrong. Perhaps the best way to tap into this source of good feedback is to have top-level managers from various departments talk directly to customers who have left. It's also worthwhile to have top managers talk to dissatisfied customers who are still with the company. Every day, John Chambers, CEO of Cisco Systems, listens to 15 to 20 voice mails that have been forwarded to him from dissatisfied Cisco customers. Chambers says, "Email would be more efficient, but I want to hear the emotion, I want to hear the frustration, I want to hear the caller's level of comfort with the strategy we're employing. I can't get that through email." Likewise, at Vanguard, a leading investment fund company, CEO Jack Brennan visits the customer call center and, working alongside call representatives, answers customer questions and addresses customer complaints.<sup>65</sup> Some might argue that it's a waste of valuable executive time to have upper-level managers make or listen to these calls, but there's no faster way for the people in charge to learn what needs to be done than to hear it directly from customers who are unhappy with the company's performance.

Finally, companies that understand why customers leave can not only take steps to fix ongoing problems, but can also identify which customers are likely to leave and make changes to prevent them from leaving.

### 3.4 The Internal Perspective: Controlling Quality

The third part of the balanced scorecard, the internal perspective, consists of the processes, decisions, and actions that managers and workers make within the organization. In contrast to the financial perspective of EVA and the outward-looking customer perspective, the internal perspective asks the question "At what must we excel?" For McDonald's, the answer would be quick, low-cost food. For America Online, the answer would be reliability—when your modem dials, the network should be up and running, and you should be able to connect without getting a busy signal. Yet no matter what area a company chooses, the key is to excel in that area. Consequently, the internal perspective of the balanced scorecard usually leads managers to a focus on quality.

Quality is typically defined and measured in three ways: excellence, value, and conformance to expectations.<sup>66</sup> When the company defines its quality goal as *excellence*, then managers must try to produce a product or service of unsurpassed

performance and features. For example, by almost any count, Singapore International Airlines (SIA) is “the best” airline in the world. It has been named “best” 14 years in a row by readers of *Conde Nast Traveler* magazine.<sup>67</sup> It has also received various “best airline” awards from the *Asian Wall Street Journal*, *Business Traveler International*, *Germany Business Traveler*, *Travel and Leisure*, and *Fortune*.<sup>68</sup> Even SIA’s competitors recognize its excellence. *Air Transport World*, the magazine read by those who work in the airline industry, stated, “In an age in which more and more airlines are delivering less and less, it is especially pleasing to be able to recognize one that never stops reaching for the skies. This year’s winner of our Passenger Service Award, Singapore Airlines, is always on the lookout for new ways to satisfy its customers.”<sup>69</sup> SIA was the first airline to introduce a choice of meals, complimentary drinks, and earphones in coach class in the 1970s. It was the first to introduce worldwide video, news, telephone, and fax service (40 video channels with movies, news, and documentaries, 50 CDs for music, and 50 different games, all viewed on 10.4-inch monitors). SIA has had AC power for laptop computers for some time, and now it has become the first airline to introduce on-board, real-time, *high-speed* Internet access.<sup>70</sup>

**Value** is the customer perception that the product quality is excellent for the price offered. At a higher price, for example, customers may perceive the product to be less of a value. When a company emphasizes value as its quality goal, managers must simultaneously control excellence, price, durability, or other features of a product or service that customers strongly associate with value. One company that has put value at the core of everything it does is Lands’ End, the catalog company that sells quality clothing and accessories at reasonable prices. In its advertising, Lands’ End says, “Value is more than price. Value is the combination of product quality, world class customer service, and a fair price.” Lands’ End puts its commitment to value into practice through its eight principles of doing business, which are shown in Exhibit 16.10.

When a company defines its quality goal as conformance to specifications, employees must base decisions and actions on whether services and products measure up to standard specifications. In contrast to excellence and value-based definitions of quality that can be somewhat ambiguous, measuring whether products and services are “in spec” is relatively easy. Furthermore, while conformance to specifications (i.e., precise tolerances for a part’s weight or thickness) is usually associated with manufacturing, it can be used equally well to control quality in nonmanufacturing jobs. Exhibit 16.11, on the next page, shows a checklist that a cook or restaurant owner would use to ensure quality when buying fresh fish.

The way in which a company defines quality affects the methods and measures that workers use to control quality. Accordingly, Exhibit 16.12, also on the next page, shows the advantages and disadvantages associated with the excellence, value, and conformance to specification definitions of quality.

### 3.5 The Innovation and Learning Perspective: Controlling Waste and Pollution

The last part of the balance scorecard, the innovation and learning perspective, addresses the question “Can we continue to improve and create value?” Thus, the

#### The Lands’ End Principles of Doing Business

##### Principle 1.

We do everything we can to make our products better. We improve material, and add back features and construction details that others have taken out over the years. We never reduce the quality of a product to make it cheaper.

##### Principle 2.

We price our products fairly and honestly. We do not, have not, and will not participate in the common retailing practice of inflating mark-ups to set up a future phony “sale.”

##### Principle 3.

We accept any return for any reason, at any time. Our products are guaranteed. No fine print. No arguments. We mean exactly what we say: **GUARANTEED PERIOD.**

##### Principle 4.

We ship fast and reliably. We embroider and hem products faster than any company we know. We ship nearly all of our in-stock items the day after we receive an order. And we strive to be the industry leader when it comes to having our products in-stock when the customer wants them.

##### Principle 5.

We believe that what is best for our customer is best for all of us. Everyone here understands that concept. Our sales and service people are trained to know our products, and to be friendly and helpful. They are urged to take all the time necessary to take care of you. We even pay for your call, for whatever reason you call.

##### Principle 6.

We are able to sell at lower prices because we have eliminated middlemen; because we don’t buy branded merchandise with high protected mark-ups; and because we have placed our contracts with manufacturers who have proven that they are cost conscious and efficient.

##### Principle 7.

We are able to sell at lower prices because we operate efficiently. Our people are hard-working, intelligent, and share in the success of the company.

##### Principle 8.

We encourage our customers to shop for our products in whatever way they find most convenient. Whether it is through our catalogs, our Web site, or in retail stores, we offer the same quality products at the same honest prices, with the same unconditional promise to stand by everything we sell.

Source: “The Lands’ End Principles of Doing Business,” Lands’ End Web site, [Online] available at <http://www.landsend.com>, 20 June 2005. Reprinted with permission of Lands’ End, Inc.

#### Exhibit 16.10

The Lands’ End Principles of Doing Business

#### value

Customer perception that the product quality is excellent for the price offered.

| QUALITY CHECKLIST FOR BUYING FRESH FISH |  |   |
|---|--|---|
| FRESH WHOLE FISH                        | ACCEPTABLE   | NOT ACCEPTABLE  |
| Gills                                   | ✓ bright red, free of slime, clear mucus                         | ✗ brown to grayish, thick, yellow mucus                       |
| Eyes                                    | ✓ clear, bright, bulging, black pupils                           | ✗ dull, sunken, cloudy, gray pupils                           |
| Smell                                   | ✓ inoffensive, slight ocean smell                                | ✗ ammonia, putrid smell                                       |
| Skin                                    | ✓ opalescent sheen, scales adhere tightly to skin                | ✗ dull or faded color, scales missing or easily removed       |
| Flesh                                   | ✓ firm and elastic to touch, tight to the bone                   | ✗ soft and flabby, separating from the bone                   |
| Belly cavity                            | ✓ no viscera or blood visible, lining intact, no bone protruding | ✗ incomplete evisceration, cuts or protruding bones, off-odor |

Sources: "A Closer Look: Buy It Fresh, Keep It Fresh," *Consumer Reports Online*, [Online] available at <http://www.seagrant.sunysb.edu/SeafoodTechnology/SeafoodMedia/CR02-2001/CR-Seafood1020101.htm>, 20 June 2005; "How to Purchase: Buying Fish," AboutSeaFood Web site, [Online] available at <http://www.aboutseafood.com/faqs/purchase1.html>, 20 June 2005.

**Exhibit 16.11**




Conformance to Specifications Checklist for Buying Fresh Fish

innovation and learning perspective involves continuous improvement in ongoing products and services (discussed in Chapter 18), as well as relearning and redesigning the processes by which products and services are created (discussed in Chapter 7). Since these are discussed in more detail elsewhere in the text, this section reviews an increasingly important topic, waste and pollution minimization.

**Exhibit 16.12**

Advantages and Disadvantages of Different Measures of Quality

Exhibit 16.13 shows the four levels of waste minimization, from waste disposal, which produces the smallest minimization of waste, to waste prevention and reduction, which produces the greatest minimization.<sup>71</sup> The goals of the top level, *waste prevention and reduction*, are to prevent waste and pollu-

| QUALITY MEASURE   | ADVANTAGES   | DISADVANTAGES   |
|---|--|---|
| <b>Excellence</b><br>                    | Promotes clear organizational vision.  | Provides little practical guidance for managers.  |
|   | Being/providing the "best" motivates and inspires managers and employees.              | Excellence is ambiguous. What is it? Who defines it?  |
| <b>Value</b><br>                         | Appeals to customers, who "know excellence when they see it."                          | Difficult to measure and control.   |
|   | Customers recognize differences in value.  | Can be difficult to determine what factors influence whether a product/service is seen as having value. |
| <b>Conformance to Specifications</b><br> | Easier to measure and compare whether products/services differ in value.               | Controlling the balance between excellence and cost (i.e., affordable excellence) can be difficult.     |
|   | If specifications can be written, conformance to specifications is usually measurable. | Many products/services cannot be easily evaluated in terms of conformance to specifications.            |
|   | Should lead to increased efficiency.   | Promotes standardization, so may hurt performance when adapting to changes is more important.           |
|   | Promotes consistency in quality.   | May be less appropriate for services, which are dependent on a high degree of human contact.            |

Source: Republished with permission of Academy of Management, PO Box 3020, Briar Cliff Manor, NY, 10510-8020. C. A. Reeves & D. A. Bednar, "Defining Quality: Alternatives and Implications," *Academy of Management Review* 19 (1994): 419–445. Reproduced by permission of the publisher via Copyright Clearance Center, Inc.

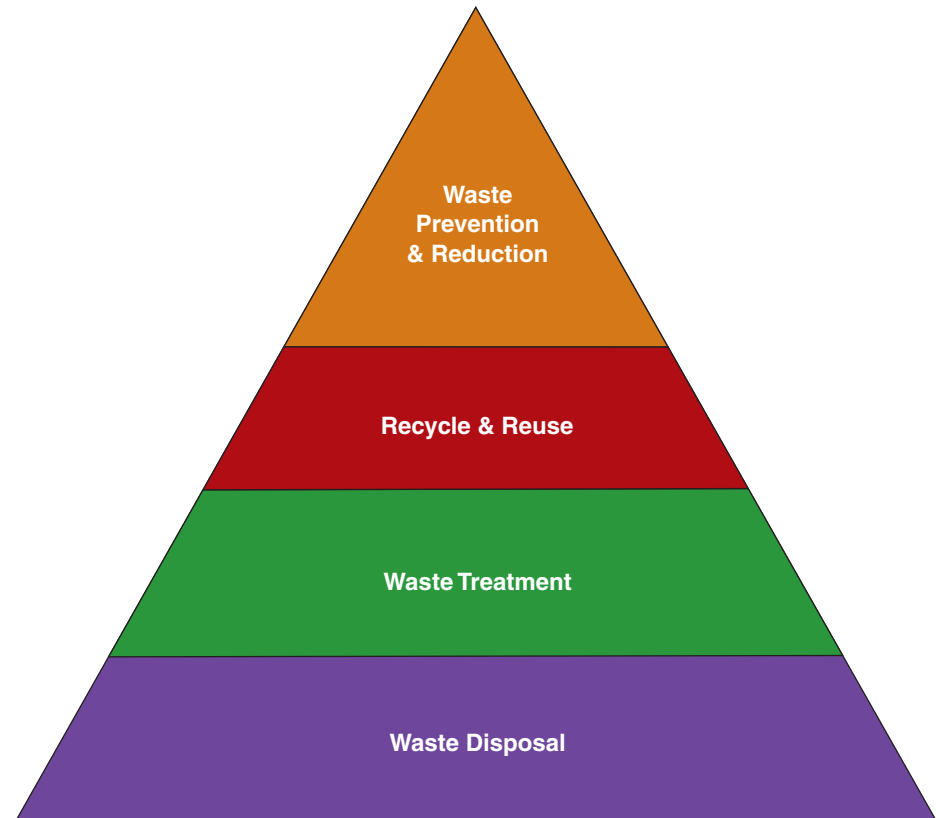


tion before they occur, or to reduce them when they do occur. There are three strategies for waste prevention and reduction.

1. *Good housekeeping*—performing regularly scheduled preventive maintenance for offices, plants, and equipment. Quickly fixing leaky valves and making sure machines are running properly so that they don't use more fuel than necessary are examples of good housekeeping. For example, Doug Goulding, a maintenance supervisor at Canada Cordage, a producer of synthetic and natural fiber ropes, reduced the water bills at the company's factory in Kitchener, Canada, from \$1,200 to \$200 per month by systematically plugging leaks in machines and pipes and installing water-saving devices.<sup>72</sup>
2. *Material/product substitution*—replacing toxic or hazardous materials with less harmful materials. As part of its Pollution Prevention Pays program over the last 30 years, 3M eliminated 2.2 billion pounds of pollutants and saved \$1 billion by using benign substitutes for toxic solvents in its manufacturing processes.<sup>73</sup>
3. *Process modification*—changing steps or procedures to eliminate or reduce waste. Cargill Dow has developed a way to use corn to make biodegradable plastic that is used in carpets, T-shirts, and the plastic baskets in which strawberries are sold. Compared to plastic made from oil, corn-made plastic reduces greenhouse gas emissions by 20 to 60 percent.<sup>74</sup> Similarly, by changing the manufacturing process at its Midland, Michigan plant, Dow Chemical was able to reduce chloromethane gas waste by 97 percent. And by not having to treat the gas to turn it into a safe, inert compound, Dow is saving \$3.3 million per year.<sup>75</sup>

At the second level of waste minimization, *recycle and reuse*, wastes are reduced by reusing materials as long as possible or by collecting materials for on- or off-site recycling. Sears recycles the 90 million clothes hangers used at its 860 stores each year. The hangers are collected and shipped to Sears' distribution centers where they are reused or processed for recycling. In a recent year, Sears also recycled 48,000 tons of corrugated cardboard, 1,000 tons of plastic bags and coverings, and 995,000 plastic ratchets. Over the last eight years, Sears has reduced waste by 60 percent. Now, 48 percent of its waste is recycled.<sup>76</sup>

A growing trend in recycling is *design for disassembly*, where products are designed from the start for easy disassembly, recycling, and reuse once they are no longer usable. For example, the European Union (EU) is moving toward prohibiting companies from selling products unless most of the product



Source: D. R. May & B. L. Flannery, "Cutting Waste with Employee Involvement Teams," *Business Horizons*, September–October 1995, 28–38. Reprinted with permission from *Business Horizons*, © 1995 by the Trustees at Indiana University, Kelley School of Business.

**Exhibit 16.13**  
Four Levels of Waste Minimization



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Waste disposal is becoming an increasingly important issue for many businesses, particularly computer manufacturers. At Hewlett-Packard's computer recycling operation, computer cases are sorted into bins for crushing after parts have been removed.

and its packaging can be recycled.<sup>77</sup> Since companies, not consumers, will be held responsible for recycling the products they manufacture, they must design their products from the start with recycling in mind.<sup>78</sup> At reclamation centers throughout Europe, companies will have to be able to recover and recycle 80 percent of the parts that go into their original products.<sup>79</sup> Already, under the EU's end-of-life vehicle program, all cars built in Europe since June 2002 are subject to the 80 percent requirement, which will rise to 85 percent in 2006 and 95 percent by 2015 for autos. Moreover, beginning in 2007, the EU will require auto manufacturers to pay to recycle all the cars they made between 1989 and 2002.<sup>80</sup> One company that already does this in part is Bosch in Germany, which takes back old auto alternators, remanufactures them, and then re-sells them, certifying that they are as good as new.<sup>81</sup>

At the third level of waste minimization, *waste treatment*, companies use biological, chemical, or other processes to turn potentially harmful waste into harmless compounds or useful by-products. For example, during "pickling," a process in the manufacture of steel sheets, the steel is bathed in an acid solution to clean impurities and oxides (that would rust) from its surface. Getting rid of the "pickle juice" has always been a problem. Not only is the juice an acid, but it also contains ferric chloride and other metals that prevent steelmakers from dumping it into local water supplies. Fortunately, Magnetics International has found a safe, profitable way to treat the pickle juice. It sprays the juice into a 100-foot-high chamber at 1,200 degrees Fahrenheit. The iron chloride in the juice reacts with oxygen at that temperature to form pure iron oxide, which can be transformed into a useful magnetic powder. Inland Steel is now using this process to transform pickle juice into 25,000 tons of magnetic powder that can be reused in electric motors, stereo speakers, and refrigerator gaskets.<sup>82</sup>

The fourth and lowest level of waste minimization is *waste disposal*. Wastes that cannot be prevented, reduced, recycled, reused, or treated should be safely disposed of in processing plants or in environmentally secure landfills that prevent leakage and contamination of soil and underground water supplies. Contrary to common belief, all businesses, not just manufacturing firms, have waste disposal problems. For example, with the average computer lasting just three years, approximately 60 million computers come out of service each year, creating disposal problems for offices all over the world.<sup>83</sup> But with cathode ray tubes in the monitors that contain lead, toxic metals in the circuit boards, paint-coated plastic, and metal coatings that can contaminate ground water, organizations can't just throw old computers away.<sup>84</sup> Many companies give old computers and computer equipment to local computer recycling centers that distribute usable computers to nonprofit organizations or correctly dispose of lead and other toxic materials. Hewlett-Packard has started a unique computer disposal program that allows individual computer users to recycle PCs and electronic equipment. Prices range from \$13 to \$34 per item. The service is available at <http://www.hp.com/hpinfo/globalcitizenship/environment/recycle/index.html>. With three clicks and a credit card number, H-P will arrange

to pick up the old PC equipment and properly dispose of it.<sup>85</sup> The company makes no profit from this service.

### Review 3: What to Control?

Deciding what to control is just as important as deciding whether to control or how to control. In most companies, performance is measured using financial measures alone. However, the balanced scorecard encourages managers to measure and control company performance from four perspectives: financial, customers, internal operations, and innovation and learning. Traditionally, financial control has been achieved through cash flow analysis, balance sheets, income statements, financial ratios, and budgets. Another way to measure and control financial performance, however, is through economic value added (EVA). Unlike traditional financial measures, EVA helps managers assess whether they are performing well enough to pay the cost of the capital needed to run the business. Instead of using customer satisfaction surveys to measure performance, companies should pay attention to customer defectors, who are more likely to speak up about what the company is doing wrong. Performance of internal operations is often measured in terms of quality, which is defined in three ways: excellence, value, and conformance to expectations.<sup>86</sup> Minimization of waste has become an important part of innovation and learning in companies. The four levels of waste minimization are waste prevention and reduction, recycling and reuse, waste treatment, and waste disposal.

## Key Terms

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## Concept Check

1. Describe the basic control process
2. How can a manager determine if more control is necessary or even possible?
3. What are a manager's options if more control isn't possible?
4. Identify and describe the various methods that managers can use to maintain control.
5. Explain how concertive control evolves in an organization.
6. Describe the elements of the balanced scorecard.
7. Explain why economic value added (EVA) includes more than just profits.
8. What can companies do to control the customer perspective?
9. What is quality, and how does it differ from value?
10. Describe the strategies managers can use for waste prevention and reduction.

## Self-Assessment

### TOO MUCH INFORMATION?

Imagine that your professor handed back term papers, and the only mark on yours was the grade. Would you be content, or would you feel gyped? People have different comfort about receiving feedback: Some thrive on it; others are ambivalent. What about you? Would you rather see comments in the margins of your term

paper or not? The Self-Assessment Appendix contains a 32-question survey to give you insights into your perceptions of feedback. Understanding your preferences in this area will help you develop the skills you'll need as a manager. Turn to page 623 to find out more about your interest in feedback.

## Management Decision

### BALANCING PRODUCTIVITY AND RISK ON THE INTERNET

When your insurance company, Penn National, first went online, your employees quickly became exuberant users of all things Internet.<sup>87</sup> Now that the Internet is ubiquitous (most employees have access outside work), heavy personal usage at work has declined a bit, but security risks still exist. One of the greatest comes from phishing attacks. The *Wall Street Journal* gave a very succinct explanation in a recent article: "In its most-basic form, phishing is crafting an email that pretends to be from a financial institution, e-commerce site, or some organization you have a relationship with. The email—which can appear to come from the organization and even include its logo—claims that account information urgently needs updating, or some transaction needs to be made. Users are typically asked to click a Web link in the email. The link typically looks like it leads to the organization's Web site, but it goes to a lookalike site, and any personal information offered up there winds up in the hands of the phisher, who may use it to run up credit-card charges, lock the user out of his or her own account, or steal his or her identity."

Because today's employees (yours included) consider themselves quite savvy with regard to the Internet, many downplay the dangers of scams like phishing. In fact, most employees are at much bigger risk from things like phishing attacks than they think. In one survey, only 4 percent of employees said they had fallen for a phishing attacks, but nearly 45 percent of IT managers said that workers did click through links on phishing email.

For your company, that discrepancy represents a serious risk. Your 900 employees use the Web as a valuable research and information-gathering tool, increasing company productivity. Annual written premiums are at \$511 million and assets at \$1.3 billion. If your

employees are unaware of criminal strategies to gain access to corporate information or are ashamed to admit they've been duped, then Penn National may be an easy target for security breaches. New federal legislation requires financial services and insurance companies to take measures to protect their corporate assets and consumers' confidential financial information from emerging Internet threats like phishing, key-logging applications, and malicious spyware.

Recreational Internet surfing opens your company up to all of those threats. Furthermore, they can go undetected for extended periods of time, resulting in a continuous, long-term extraction of sensitive information by ill-meaning third parties. Today, there are all kinds of software packages that will monitor employees' Web activities, and some are extremely comprehensive. Until now, you have simply reprimanded employees whose personal use of the Internet at work became excessive. But with increased risks and regulations, you may need a more formal way to handle future use and abuse. Or do you? Consumer-products giant Procter & Gamble doesn't monitor the Web use of its employees (and there are tens of thousands of them). P&G recognizes that managers have more to do than look over workers' shoulders all day and that, at some point, you just have to trust your employees to act responsibly and wisely.

### Questions

1. Can you control employees' personal Internet use at work?
2. Do you trust employees to use their common sense and good judgment, or do you risk a backlash from perpetually looking over their shoulders via monitoring software?
3. If you do opt for control measures, which would be most appropriate in this situation?

## Management Team Decision

### IS H & R BLOCK TAXED TO ITS LIMITS?

When you first came to H & R Block four years ago, you had a vision: increase the scope of the company and transform it from a simple tax preparation service to a full-service financial services provider.<sup>88</sup> And why not? Block has roughly 17 million customers, and converting only a fraction of them to financial services clients would mean substantial growth for the 60-year-old company. Couple that with the company's recent expansion into mortgage financing, and Block could become a financial services powerhouse.

Eagerly you set about mapping the company's growth. You bought Olde Financial, a discount-brokerage business, and quickly found yourself with around \$50 billion in assets under management. You hired financial advisers, and then to get them more clients, you instructed tax preparers to refer new financial prospects to them. Another way you planned to fuel growth was by aggressively opening new tax preparation outlets. Today, Block has more U.S. storefronts (over 11,000) than Barnes & Noble (2,356), Gap (3,051), and even growth-happy Starbucks (6,409)! Over one thousand outlets were added just this year to expand coverage during tax-filing season.

Despite all the good ideas, H & R Block is not producing the results you expected. In fact, it is struggling. Assets under management in the financial services division have declined by more than 30 percent (around \$28 billion) since the division was acquired, and its advisers are leaving faster than they can be replaced. Outwardly, you say that the economic upswing is creating more demand for junior advisers, the largest percentage of your financial managers, but you also know that even new advisers are going to follow the money. And the money seems to be flowing out of Block. Mortgage refinancing, which at its peak contributed an incredible 70 percent of pretax income, now contributes only 28 percent per year, or \$112 million. Mortgage activity has dropped since the Federal Reserve began increasing interest rates, and competitive pricing among lenders has not subsided as you expected it would.

On the tax front, the company faces serious competition from smaller upstarts like Jackson Hewitt and Liberty Tax Service, which are both experiencing increases in the number of returns prepared at Block's expense. This tax season Jackson Hewitt handled nearly 6 percent more returns than last year. Compare that to Block, which has lost over 1 million customers in the past three years. Aggressive cost cutting is minimizing damage to the bottom line, but it is also having some adverse effects, including waits as long as two to three hours for some customers. Digitally, Block is being surpassed by Intuit's TurboTax software. Even though Intuit's TurboTax costs 50 percent more than Block's competing TaxCut software, Intuit has three times the market share of TaxCut, and is growing by double digits each tax season. All this trouble has caused Block's revenues to slide over 5 percent from last year.

As you hang up the phone from yet another apologetic conference call with Wall Street analysts, during which you revised your expectations for earnings per share sharply downward, you sigh and sink back into your chair. You are getting tired of announcing quarterly losses. Plans should be flexible enough to change if expected results don't materialize, but you really believe in the growth strategy. One analyst even said, "It seems like a smart strategy, and they seem to have the right infrastructure, but for some reason it's just not happening." You think to yourself, "There's got to be a way to get things back on track!"

Form a team of four students to answer the following questions.

### Questions

1. As a team, identify where more control is needed at H & R Block. Is control in these areas possible? Explain.
2. Build a balanced scorecard for H & R Block that proposes objectives and measures for each the four quadrants of the card (financial, customer, internal, and learning).

## Develop Your Career Potential

### LEARNING FROM FAILURE

There is the greatest practical benefit of making a few failures early in life.

—T. H. Huxley

No one wants to fail.<sup>89</sup> Everyone wants to succeed. Nevertheless, some businesspeople believe that failure can have enormous value. At Microsoft, founder and chairman Bill Gates encourages his managers to hire people who have made mistakes in their jobs or careers. A Microsoft vice president said, “We look for somebody who learns, adapts, and is active in the process of learning from mistakes. We always ask, what was a major failure you had? What did you learn from it?” Another reason that failure is viewed positively is that it is often a sign of risk taking and experimentation, both of which are in short supply in many companies. John Kotter, a Harvard Business School professor says, “I can imagine a group of executives 20 years ago discussing a candidate for a top job and saying, ‘This guy had a big failure when he was 32.’ Everyone else would say, ‘Yep, yep, that’s a bad sign.’ I can imagine that same group considering a candidate today and saying, ‘What worries me about this guy is that he’s never failed.’” Jack Matson, who teaches a class at the University of Michigan called Failure 101, says, “If you are doing something innovative, you are going to trip and fumble. So the more failing you do faster, the quicker you can get to success.”

One of the most common mistakes that occurs after failure is the *attribution error*. An *attribution* is to assign blame or credit. When we succeed, we take credit for the success by claiming it was due to our strategies, how we behaved, and how hard we worked. When we fail, however, we ignore our strategies, how we behaved, and how hard we worked (or didn’t). Instead, when we fail, we assign the blame to other people, or to the circumstances, or to bad luck. In other words, the basic attribution error is that success is our fault but failure isn’t. The disappointment we feel when we fail often prevents us from learning from our failures.

This means that attribution errors disrupt the control process. The three basic steps of control are to set goals and performance standards, to compare actual

performance to the performance standards, and to identify and correct performance deviations. When we put all of the blame on external forces rather than our own actions, we stop ourselves from identifying and correcting performance deviations.

Furthermore, by not learning from our mistakes, we make it even more likely that we will fail again. Your task in this exercise is to begin the process of learning from failure. This is not an easy thing to do. When Fortune magazine writer Patricia Sellers wrote an article called “So You Fail,” she found that most of the people she contacted were reluctant to talk about their failures. She wrote:

*Compiling this story required months of pleading and letter writing to dozens of people who failed and came back. “If it weren’t for the ‘F’ word, I’d talk,” lamented one senior executive who got fired twice, reformed his know-it-all management style, and considered bragging about his current hot streak. Others cringed at hearing the word “failure” in the same breath as “your career.”*

### Questions

1. Identify and describe a point in your life when you failed. Don’t write about simple or silly mistakes. The difference between a failure and a mistake is how badly you felt afterwards. Years later, a real failure still makes you cringe when you think about it. What was the situation? What were your goals? And how did it turn out?
2. Describe your initial reaction to the failure. Were you shocked, surprised, angry, or depressed? Initially, who or what did you blame for the failure? Explain.
3. One purpose of control is to identify and correct performance deviations. With that in mind, describe three mistakes that you made that contributed to your failure. Now that you’ve had time to think about it, what could you have done differently to prevent these mistakes? Finally, summarize what you learned from your mistakes that will increase your chances of success the next time around.



## Biz Flix *Brazil*

*Brazil* takes place in a retro-futuristic world in which automation pervades every facet of life, but paperwork, inefficiency, and mechanical failures are the rule. *Brazil* stars Jonathan Pryce in the role of Sam, a low-level bureaucrat. In this scene, Sam inadvertently gets wrapped up in an intrigue surrounding the so-called terrorist Harry Tuttle (played by Robert DeNiro), who is actually a renegade heating technician for whom the Ministry of Central Services has issued an arrest order. The clip moves quickly, so you may need to review it several times to really grasp the nuances in the conversation.

### What to Watch for and Ask Yourself

1. What kind of control is being used by Central Services?
2. Tuttle describes a paradox of control. What is it?
3. What kind of control does Tuttle seem to prefer? Explain.



## Management Workplace Wahoo's Fish Taco

Based in southern California, Wahoo's Fish Taco is the brainchild of three brothers who grew up in the restaurant business. Because of their extensive experience in the industry, they spent many years managing from "between the ears." That is, they never had any paperwork in place. They simply remembered everything they needed to do. By the time they had three stores, however, it was clear that they needed more formal control measures.

### What to Watch for and Ask Yourself

1. Based on the video, what methods of control seem most prevalent at Wahoo's?
2. How does Steve Karfaridis use the cybernetic control process at Wahoo's?
3. What does Wahoo's need to control to be successful? In other words, what would Wahoo's balanced scorecard potentially look like?

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