Chapter 16

Learning Goals

- Explain the functions of accounting and its importance to the firm's management, investors, creditors, and government agencies.
- 2 Identify the three basic activities involving accounting.
- Describe the roles played by public, management, government, and not-for-profit accountants.
- Outline the steps in the accounting process.
- 5 Explain the functions and major components of the three principal financial statements: the balance sheet, the income statement, and the statement of cash flows.
- Discuss how financial ratios are used to analyze a firm's financial strengths and weaknesses.
- **7** Describe the role of budgets in a business.
- 8 Explain how exchange rates influence international accounting practices and the importance of uniform financial statements for global business.

Understanding Accounting and Financial Statements

eeping the books of large corporations is a complicated task. So most big companies, such as General Motors and Sun Microsystems, have traditionally relied on the giants of the auditing industry, known as the Big Four. These huge accounting firms—Pricewaterhouse Coopers, Ernst & Young, Deloitte & Touche, and KPMGall have long histories and multinational operations. They are considered the top tier of their industry. But recently, smaller accounting companies have begun to take some of their prestigious, and lucrative, business away. The change came about partly because of a long list of accounting scandals that involved leading audit and consulting firms such as Arthur Andersen, which was virtually destroyed by its association with some law-breaking clients, such as Enron. Other reasons why organizations are giving a second look to relatively small accounting



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Who Is Grant Thornton?

practices include their nimbleness in responding to legal and technological changes, their ability to deliver personalized service, their specialization in particular industries, and their stain-free records. The lower fees charged by these "second-tier" firms, such as Grant Thornton, BDO Seidman, McGladrey & Pullen, and Crowe Group, are another big factor.

For instance, Hercules, a Delaware chemicals producer with \$2 billion in sales, considered PricewaterhouseCoopers for its audit needs but settled instead on the far smaller firm BDO Seidman. In addition to BDO's speedy decision making and reasonable fees, the firm impressed Hercules with its experience in the chemical industry. And finally, "There was a sense that we would be important to BDO, that there will be top management attention if we have problems," says Hercules's chairman.

Hercules's perception of receiving more personal attention is very real. The Big Four accounting firms are actually giving up some of their clients, sometimes unwillingly, because they often lack the resources to maintain their current client list under the demanding new requirements of the Sarbanes-Oxley Act. These stringent audit reforms lengthen the time required for the typical audit process at a publicly traded company by as much as a

third. That means the bigger firms must work with fewer clients or risk doing an inadequate job for some. A shortage of seasoned auditing professionals has also limited their ability to add staff in the last few years, so all of the Big Four have reduced their number of clients.

As a result of this pressure on the Big Four to reduce their client load, in addition to clients' desire to combine good accounting services with lower professional fees, almost 250 firms earning \$100 million a year or more switched auditors in one recent year—away from the top tier. That's about double the number from the year before. BDO was a big winner, netting 71 new clients, while Grant Thornton, McGladrey & Pullen, and Crowe Group added a total of 46.

Some businesses that are required to follow Sarbanes-Oxley guidelines also hire separate accounting services to help them comply. They are performing the act's mandated audits of their own internal controls to prevent financial wrongdoing. Because federal law prohibits a firm from using its own financial auditing staff to assess its accounting controls, the act has created a flood of new work for outside accounting companies at firms of all sizes. Smaller accounting companies are benefiting from the new business, from the new contacts and leads they are getting

from their new clients, from the opportunity to specialize in Sarbanes-Oxley compliance or in a particular industry, and even from the new employees they have hired often from the Big Four and from Arthur Andersen.

Meanwhile, as the accounting industry continues to struggle back from the scandal-ridden years to meet

growing new demands for its expertise, starting salaries for managers and large accounting firms are expected to jump to a high of \$92,000. More people are taking the CPA exam than ever before, and it's no wonder.¹

Accounting professionals prepare the financial information that organizations present in their annual reports. Whether you begin your career by working for a company or by starting your own firm, you need to understand what accountants do and why their work is so important in contemporary business.

Accounting is the process of measuring, interpreting, and communicating financial information to enable people inside and outside the firm to make informed decisions. Accounting is the language of business. Accountants gather, record, report, and interpret financial information in a way that describes the status and operation of an organization and aids in decision making.

Millions of men and women throughout the world describe their occupation as accountant. In the United States alone, more than 1.1 million people, more than half

of whom are women, work as accountants. According to the Bureau of Labor Statistics, the number of accounting-related jobs is expected to increase by at least 20 percent between now and 2012.² The availability of jobs and relatively high starting salaries for talented graduates—starting salaries for accounting graduates average around \$45,000 per year—have made accounting one of the most in-demand majors on college campuses.³

This chapter begins by describing who uses accounting information. It discusses business activities involving accounting statements: financing, investing, and operations. It explains the accounting process and then discusses the development of accounting statements from information about financial transactions. It presents the methods of interpreting these statements and examines the roles of budgeting in planning and controlling a business.

accounting process of measuring, interpreting, and communicating financial information to support internal and external business decision making.

"They Said It"

"There's no business like show business, but there are several businesses like accounting." —David Letterman (b. 1947) Comedian

USERS OF ACCOUNTING INFORMATION

People both inside and outside an organization rely on accounting information to help them make business decisions. Figure 16.1 lists the users of accounting information and the applications they find for that information.

Managers with a business, government agency, or not-for-profit organization are the major users of accounting information, because it helps them plan and control daily and long-range operations. Business owners and boards of directors of not-for-profit groups also rely on accounting data to determine how well managers are operating the organizations. Union officials use accounting data in contract negotiations, and employees refer to it as they monitor their firms' productivity and profitability performance.

To help employees understand how their work affects the bottom line, many companies share sensitive financial information with their employees and teach them how to understand and use financial statements. Proponents of what is often referred to as **open book management** believe that allowing employees to view financial information helps them better understand how their work contributes to the company's success which, in turn, benefits them. The "Hit & Miss" feature discusses how one small Missouri manufacturer has profited by using open-book management.

Outside a firm, potential investors evaluate accounting information to help them decide whether to buy a firm's securities. As we'll discuss in more detail later in the chapter, any



Opening the Books Opens the Door to Success at Trinity Products

Robert Griggs, president of Trinity Products, has been running his company on an open-book basis since its founding in 1979, but for most of that time, he didn't realize what it was called. Now, thanks in part to a grant from Missouri's state government, Griggs's construction industry supply company can run a formal employee training program to support and continue the open-book management policy he began.

Griggs describes his practice this way: "Open-book management means you open your entire books to every-body in the company, and you require them to learn how to read a financial statement, how to do budgeting, and this is from the guy who sweeps the floor to the gal that answers the phone." Trinity's 50 employees attend financial meetings twice a month and take a financial literacy course that teaches them about balance sheets, sales forecasting, and income statements. Everyone contributes to the forecasting of sales and expenses. Through this form of ownership, as Griggs calls it, "they have a stake in how much money they make by how much money we make."

Setting goals together allows employees to feel invested in the business and in the need to meet goals, monitor costs, and satisfy customers. Even the bonus

plan is put together by mutual agreement. Says Griggs, "We agreed that we would share 20 percent of the profit if we hit 5 percent net return on sales. [The industry average is 3.5 percent.] This year we'll split up \$200,000 among 50 employees."

The company has enjoyed an astonishing growth rate of about 80 percent a year since 1993, with sales rocketing from \$2.2 million that year to an estimated \$25 million. Griggs and his crew's new target is \$39 million. "The biggest contribution to that success is the open-book managing policy," says Trinity's CFO, Brian Davis. "We teach people how to read the books."

Questions for Critical Thinking

- 1. In what specific way does Trinity's open-book policy contribute to its financial success? What other factors might account for its rapid growth?
- 2. Can you think of any situations in which open-book management might not improve a firm's financial performance? Why?

Sources: Trinity Products Web site, accessed July 21, 2006, http://www.trinityinc.com; Ellyn Spragins, "The Open-Book CEO," Fortune Small Business, accessed July 21, 2006, http://www.fortune.com; Robin Seaton Jefferson, "Trinity Products Hangs Success on Open-Book Management," St. Charles County Business Record, July 21, 2005, p. 1.

company whose stock is traded publicly is required to report its financial results on a regular basis. So anyone, for example, can find out what PepsiCo's sales were last year or how much money Starbucks made during the past three months. Bankers and other lenders use accounting information to evaluate a potential borrower's financial soundness. The Internal Revenue Service (IRS) and state tax officials use it to determine a company's tax liability. Citizens' groups and government agencies use such information in assessing the efficiency of operations such as the Cleveland Clinic; the Boulder, Colorado, school system; and the American Museum of Natural History.

Accountants play fundamental roles not only in business but also in other aspects of society. Their work influences each of the business environments discussed earlier in this book. They clearly contribute important information to help managers deal with the competitive and economic environments. Less obvious contributions

Users of Accounting Information

Users **Applications** Owners, Stockholders, To Evaluate Operations of the Firm Potential Investors, Creditors To Make Investment Decisions To Plan and Control Management Employees, Union Officials To Use in Contract Negotiations Lenders, Suppliers To Evaluate Credit Ratings To Evaluate Tax Liabilities Government Agencies, Economic Planners, To Approve New Issues of Consumer Groups Stocks and Bonds

Figur

16.1

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2. Who uses accounting information?

help others understand, predict, and react to the technological, regulatory, and social and cultural environments.

For instance, thousands of people volunteer each year to help people with their taxes. One of the largest organized programs is Tax-Aide, sponsored by AARP (formally known as American Association of Retired Persons), which is the leading nonprofit, nonpartisan membership organization for people age 50

and over in the United States. Its program has in excess of 30,000 volunteers helping more than 1.5 million low- and middle-income senior citizens file their state and federal tax returns.⁴

BUSINESS ACTIVITIES INVOLVING ACCOUNTING

The natural progression of a business begins with financing. Subsequent steps, including investing, lead to operating the business. All organizations, profit oriented and not-for-profit, perform these three basic activities, and accounting plays a key role in each one:

- Financing activities provide necessary funds to start a business and expand it after it begins operating.
- *Investing activities* provide valuable assets required to run a business.
- Operating activities focus on selling goods and services, but they also consider expenses as important elements of sound financial management.

Bob Parsons performed these three activities during the start-up and growth of Go Daddy Group, a provider of Web domain registration services. He financed his new company with the proceeds from the sale of another firm he founded, Parsons Technology. Parsons invested these funds in computer systems and other office equipment. His operating activities involved hiring professional and clerical staff and promoting the company's services to a variety of clients. Par-

> sons is also keenly aware of the importance of cost control, because lower costs mean he can charge lower prices for his products and still turn a profit. The role of accounting has increased considerably since GoDaddy was founded in 1997, driven by the firm's rapid growth. The company ranks in the top ten of Inc. magazine's 500 fastest-growing companies. The firm's revenues have increased by more than 7,500 percent since its first year in operation. GoDaddy now has

around 350 employees and annual revenues of more than \$40 million.⁵

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- 1. List the three business activities that involve accounting.
- 2. Give an example of one of the business activities that involves accounting.

ACCOUNTING PROFESSIONALS

Accounting professionals work in a variety of areas in and for business firms, government agencies, and not-for-profit organizations. They can be classified as public, management, government, and not-for-profit accountants.

Public Accountants

public accountant

accountant who works for an independent accounting firm.

A public accountant provides accounting services to individuals or business firms for a fee. Most public accounting firms provide three basic services to clients: (1) auditing, or examining, financial records; (2) tax preparation, planning, and related services; and (3) management consulting. Because public accountants are not employees of a client firm, they can provide unbiased advice about the firm's financial condition.

While there are hundreds of public accounting firms in the United States, the industry is heavily concentrated at the top. The four largest public accounting firms noted earlier—Deloitte & Touche, Ernst & Young, KPMG, and PricewaterhouseCoopers (PWC)—collect close to \$20 billion annually from U.S. clients. By contrast, the nation's fifth-largest accounting firm, Chicago-based Grant Thornton, has annual revenues of less than \$500 million.⁶

Several years ago, public accounting firms came under sharp criticism for providing management consulting services to many of the same firms they audited. Critics contended that when a public accounting firm does both—auditing and management consulting an inherent conflict of interest is created. In addition, this conflict of interest may undermine confidence in the quality of the financial statements accounting firms audit. The bankruptcies of such highprofile firms as Enron and WorldCom increased pressure on public accounting firms to end the practice. Legislation also established strict limits on the types of consulting services auditors can provide. For example, an accounting firm that audits a company's books cannot provide any other services to that company, including tax services. As a result, three of the four largest public accounting firms either sold large portions of their consulting practices or spun them off into separate companies, and they now concentrate on providing auditing and tax services. PWC, for instance, sold much of its consulting business to IBM.



The certified public accountant (CPA) is the highest professional designation for a public accountant.

Certified public accountants (CPAs) demonstrate their accounting knowledge by meeting state requirements for education and experience and successfully completing a number of rigorous tests in accounting theory and practice, auditing, law, and taxes. Other accountants who meet specified educational and experience requirements and pass certification exams carry the title *certified management accountant* or *certified internal auditor*.

Management Accountants

An accountant employed by a business other than a public accounting firm is called a **management accountant.** Such a person collects and records financial transactions and prepares financial statements used by the firm's managers in decision making. Management accountants provide timely, relevant, accurate, and concise information that executives can use to operate their firms more effectively and more profitably than they could without this input. In addition to preparing financial statements, a management accountant plays a major role in interpreting them. A management accountant should provide answers to many important questions:

- Where is the company going?
- What opportunities await it?
- Do certain situations expose the company to excessive risk?
- Does the firm's information system provide detailed and timely information to all levels of management?

Management accountants frequently specialize in different aspects of accounting. A cost accountant, for example, determines the cost of goods and services and helps set their prices. An internal auditor examines the firm's financial practices to ensure that its records include accurate data and that its operations comply with federal, state, and local laws and regulations. A tax accountant works to minimize a firm's tax bill and assumes responsibility for its federal, state, county, and city tax returns.

certified public accountant (CPA) accountant who meets specified educational and experiential requirements and has passed a comprehensive examination on accounting theory and practice.

"They Said It"

"I don't know technology and engineering. I don't know accounting." —Bernie Ebbers (b. 1941) Former CEO, WorldCom MCI

(b)usiness 🥌

Tips for Gift Giving

Gifts to clients and prospective clients are a well-established business tradition that can yield longlasting positive results. But because the practice of giving can be tricky, many industries and individual firms have established rules and guidelines to prevent missteps and backfires. Here are a few general suggestions.

- 1. Before you give a gift, find out what the gift policy and limit on gift value are at the company where the recipient works. If individual gifts are frowned on or even prohibited because management fears undue influence, you might still make a group gift, make a charitable contribution in the company's name, or contribute to a gift-matching program.
- 2. Avoid giving gifts when negotiating or bidding for new business.
- 3. Give only to those you know well; otherwise, the gesture may backfire.
- 4. Present the gift with taste and care. Wrap it or have it wrapped and include a handwritten note.
- 5. If possible, deliver the gift yourself—in person.
- 6. Be creative about when you give. In addition to traditional gift-giving holidays, consider the date of contract

- renewal or the anniversary of a business relationship. Or give to commemorate a joint achievement or to celebrate a client's promotion.
- 7. Be thoughtful and choose a practical gift that you're sure will be appreciated. Know your recipient's taste and interests (sports, hobbies, food, or music preferences) and choose accordingly.
- 8. Avoid giving a gift that makes the recipient uncomfortable for any reason steer clear of a gift that is too large, too small, inappropriate, poorly timed, humorous, or too personal.
- 9. Use restraint. Giving too many gifts reduces their effect and can embarrass the recipient.
- 10. Recognize that gifts with your company's logo on them may be seen as tacky or impersonal. If you must include it, use the logo in the wrapping and not the gift.

Sources: "Gift Giving Etiquette," American Express, accessed August 16, 2006, http://www.133 americanexpress.com; Mike Hetherington, "Client Gifts That Keep on Giving," Bozeman (MT) Daily Chronicle, accessed July 21, 2006, http://www.bozemandailychronicle .com; "Holiday Etiquette," Eticon, accessed July 21, 2006, http://www.eticon.com.

One small way in which taxes affect a firm is under the IRS ruling that a business can deduct the value of business gifts to individuals, but only up to \$25 during a given tax year. The "Business Etiquette" feature provides some further tips on business gift giving.

Government and Notfor-Profit Accountants

Federal, state, and local governments also require accounting services. Government accountants and those who work for notfor-profit organizations perform professional services similar to those of management accountants. Accountants in these sectors concern themselves primarily with determining how efficiently the organizations accomplish their objectives. Among the many government agencies that employ accountants are NASA, the Federal Bureau of Investigation, the IRS, the Commonwealth of Pennsylvania, and the City of Fresno, California. Not-for-profit organizations, such as churches, labor unions, political parties, charities, schools, hospitals, and universities, also hire accountants. In fact, the not-for-profit sector is one of the fastestgrowing segments of accounting practice. An increasing number of not-for-profits publish financial information because contributors want to know how the groups spend the money that they donate.

1. What is the difference between

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a public accountant and a management accountant? 2. What services does the typical public accounting firm provide to clients? How has the mix of services changed in recent years?

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THE ACCOUNTING PROCESS

Accounting deals with financial transactions between a firm and its employees, customers, suppliers, and owners; bankers; and various government agencies. For example, payroll checks result in a cash outflow to compensate employees. A payment to a vendor results in receipt of

needed materials for the production process. Cash, check, and credit purchases by customers generate funds to cover the costs of operations and to earn a profit. Prompt payment of bills preserves the firm's credit rating and its future ability to earn a profit. The procedure by which accountants convert data about individual transactions to financial statements is called the accounting **process.** Figure 16.2 illustrates the activities involved in the accounting process: recording, classifying, and summarizing transactions in order to produce financial statements for the firm's management and other interested parties.

The Accounting Process

Basic Data Processing

Transactions Re

Receipts, invoices, and other source documents related to each transaction are assembled to justify making an entry in the firm's accounting records.

RecordTransactions are recorded, usually electronically, in

chronological order in books called journals, along with a brief explanation for each entry.

Classify

Journal entries are transferred, or posted, usually electronically, to individual accounts kept in a ledger. All entries involving cash are brought together in the ledger's cash account; all entries involving sales are recorded in the ledger's sales account.

Summarize

All accounts in the ledger are summarized at the end of the accounting period, and financial statements are prepared from these account summaries.

Financial Statements

Balance

Income Statement

Statement of Cash Flows

The Impact of Computers and the Internet on the Accounting Process

For hundreds of years, bookkeepers recorded, or posted, accounting transactions through manual entries in journals. They then transferred the information, or posted it, to individual accounts listed in ledgers. Computers have simplified the process, making it faster and easier than the manual method. For instance, point-of-sale terminals perform a number of functions each time they record sales. These terminals not only recall prices from computer system memory and maintain constant inventory counts of individual items in stock but also automatically perform accounting data entry functions.

Accounting software programs are used widely in both large and small businesses today. They allow a do-it-once approach, in which a single input leads to automatic conversion of a sale into a journal entry, which then is stored until needed. Decision makers can then request up-to-date financial statements and financial ratios when needed. Improvements in accounting software continue to make the process even faster and easier.

Because the accounting needs of entrepreneurs and small businesses differ from those of larger firms, accounting software makers have designed programs that meet specific user needs. Some examples of accounting software programs designed for entrepreneurs and small businesses, and designed to run on personal computers, include QuickBooks, Peachtree, and BusinessWorks. Software programs designed for larger firms, often requiring more sophisticated computer systems, include products from Computer Associates, Oracle, and SAP.

For firms that conduct business worldwide, software producers have introduced new accounting programs that handle all of a company's accounting information for every country in which it operates. The software handles different languages and currencies, as well as the financial, legal, and tax requirements of each nation in which the firm conducts business.

The Internet also influences the accounting process. Several software producers offer Web-based accounting products designed for small and medium-sized businesses. One example is the series of products from Sage Software. Among other benefits, these products allow users to access their complete accounting systems from anywhere using a standard Web browser. Witt Industries—a Cincinnati-based manufacturer of a proprietary line of metal waste receptacle products—uses one Sage product, Insight, for fast and accurate managerial

accounting process set of activities involved in converting information about individual transactions into financial statements.



Accounting software is available to help small businesses.

reporting and analyses of accounting data. Gregg Battaglia, the firm's vice president and CFO, comments, "It used to take us a long time to create spreadsheets, print reports, and send them out. Now we generate information in a fraction of the time and distribute it company-wide electronically."

The Foundation of the Accounting System

To provide reliable, consistent, and unbiased information to decision makers, accountants follow guidelines, or standards, known as **generally accepted accounting principles** (**GAAP**). These principles encompass the conventions, rules, and procedures for determining acceptable accounting practices at a particular time. In the United States, the **Financial Accounting Standards Board** (**FASB**) is primarily responsible for evaluating, setting, or modifying GAAP. Accountants adhere to GAAP to create uniform financial statements for comparison between firms. Using GAAP ensures a solid basis for sound business decision making. FASB carefully monitors changing business conditions, enacting new rules and modifying existing rules when necessary. One major change in accounting rules recently dealt with the expensing of executive and employee stock options. Stock

options give the holder the right to buy stock at a fixed price. FASB now requires that firms who give employees stock options calculate the cost of the options and treat the cost as an expense, similar to salaries.

FASB is also proposing new rules in the area of pension accounting—how firms with pensions account for pension obligations. These rules are quite controversial and are strongly opposed by many corporate executives. The pros and cons of the new rules for pension accounting are debated in the "Solving an Ethical Controversy" feature.

In response to cases of accounting fraud, and questions about the independence of auditors, the Sarbanes-Oxley Act—commonly known as SOX—created the Public Accounting Oversight Board. The five-member board has the power to set audit standards and to investigate and sanction accounting firms that certify the books of publicly traded firms. Members of the Public Accounting Oversight Board are appointed by the Securities and Exchange Commission (SEC)—the chief federal regulator of the securities markets and the accounting industry—to serve staggered five-year terms. No more than two of the five members of the board can be certified public accountants.

In addition to creating the Public Accounting Oversight Board, SOX also added to the reporting requirements for publicly traded companies. Senior executives including the CEO and chief financial officer (CFO), for example, have to personally certify that the financial information reported by the company is correct. These requirements have increased the demand for accounting professionals, especially managerial accountants. One result of this increased demand has been higher salaries. The "Hit & Miss" feature describes the growing need for managerial accountants.

Two financial statements form the foundation of the accounting system: the balance sheet and the income statement. The information found in these statements is calculated using the accounting equation and the double-entry bookkeeping system. A third statement, the statement of cash flows, is also prepared to focus specifically on the sources and uses of cash for a firm from its operating, investing, and financing activities.

"They Said It"

"There are no accounting issues, no trading issues, no reserve issues, no previously unknown problem issues."

—Kenneth Lay (1942–2006)
Founder and Former CEO, Enron

DOES ACCOUNTING FOR PENSION OBLIGATIONS TELL THE REAL STORY?

A new report by the publisher of The Analyst's Accounting Observer reveals that General Motors, with the country's largest corporate pension fund, would have negative shareholder equity if it fully accounted for its pension obligations. GM's net worth would fall by about \$38 billion, reducing shareholder equity to -\$10 billion, if its balance sheet were adjusted to show pension-related items realistically. The study "shows the General without its clothes, and it's not pretty," says the study's author.

GM defends its financial reporting by claiming, correctly, that it has not violated any rules nor done anything unusual or improper by representing its obligations with balance sheet "placeholders." It says its pension fund is in no danger of running dry, and the company is a very long way from having negative value. As one accounting consultant says, "It's the rules that are wrong."

Should companies be required to show the true market value of their pension fund obligations on their balance sheets?

PRO

- Investors and employees have a right to full disclosure and deserve to see the real numbers.
- 2. Accurate accounting will force managers to ensure the safety of the company's pension funds and prevent failures such as United Airlines' recent historic default on its employee pension plan.

CON

- Accurate numbers are kept elsewhere in companies' financial reports; the balance sheet numbers are used for convenience.
- A pension fund is a long-term entity whose ups and downs net out over time and therefore have little meaning for investors on a year-to-year basis.

Summary

According to the study, other companies that fared poorly with adjusted pension numbers inserted into their balance sheets included Boeing, Goodyear, Lucent Technologies, Delta Air Lines, Maytag, Qwest, and to a lesser degree General Electric. GM has been scrupulous about complying with the rules for funding its pension system, which are unconnected with the rules for accounting for it. But—inspired partly by the pension default of United Airlines—separate inquiries are under way in

Congress and at the Securities and Exchange Commission, and a pension reporting rule change could result. In fact, the FASB began a review of the rules for how a company must show the true economic value of its retirement plans on its balance sheet. But at the moment, it has decided to defer a more comprehensive examination of the effects on a firm's earnings.

Sources: Mary Williams Walsh, "Thorny Issue for Board: How to Value Pension Plans," New York Times, accessed July 21, 2006, http://www.nytimes.com; Mary Williams Walsh, "GM Tops List as Study Questions Pension Accounting," New York Times, accessed July 21, 2006, http://www.nytimes.com; Jane Tisdale, "PBGC Woes Galvanize U.S. Pension Reform," State Street Global Advisors, accessed July 21, 2006, http://www.ssga.com; Douglas Fore, "Changes in Accounting Practices Will Drive Pension Paradigm Shift," Position Research Council, working paper, Wharton School, 2004, accessed July 21, 2006, http://prc.wharton.upenn.edu/prc/prc.html.





The Accounting Equation

Three fundamental terms appear in the accounting equation: assets, liabilities, and owners' equity. An **asset** is anything of value owned or leased by a business. Assets include land, buildings, supplies, cash, accounts receivable (amounts owed to the business as payment for credit sales), and marketable securities.

Although most assets are tangible assets, such as equipment, buildings, and inventories, intangible possessions such as patents and trademarks are often some of a firm's most important assets. This kind of asset is especially essential for many companies, including computer software firms, biotechnology companies, and pharmaceutical companies. For instance, Johnson & Johnson—which has both biotechnology and pharmaceutical operations—reported close to \$12 billion in intangible assets in one recent year, compared with around \$43 billion in tangible assets.⁸

asset anything of value owned or leased by a business.



Accounting Jobs on the Rise in the Wake of SOX

Tired of hearing how tight the job market is? Joe McCann, dean of Sykes College of Business at the University of Tampa, says this about jobs in the accounting profession: "There's no question that demand is up for accounting graduates—and in particular those interested in, or having a background in, anything related to forensic accounting and auditing. From a student's standpoint, accounting is back, and it's back in a big way."

The Bureau of Labor Statistics reports that the number of accountants and accounting jobs is increasing. In some areas, the number of accountants has grown while the size of the overall workforce has remained the same. Demand for accounting expertise is expanding rapidly in the wake of the Sarbanes-Oxley Act (SOX), which was passed to regulate publicly owned firms after financial scandals at fraud-riddled companies such as Enron and WorldCom. With numerous new requirements, such as annual audits of internal financial controls that must be performed by a third-party accounting firm, the act has fueled not just better management practices but also a big jump in employment and growth opportunities for managerial accountants. There's more work to be done, and more people are needed to do it.

Accountants will find themselves well compensated for expertise in the newest areas of accounting regulation and technology. A recent survey by the Institute of Management Accountants (available at http://www.imanet.org)

found salaries and other compensation rising, especially for certified management accountants (CMAs) but also for certified public accountants (CPAs). Each can earn at least \$90,000 a year, and those with both a CMA and CPA can make \$105,000 or more. Salary gains occurred at all levels in the profession. "These changes in salary and overall compensation are a direct result of Sarbanes-Oxley," says IMA's president and chief executive officer, "and we expect this trend to continue."

Questions for Critical Thinking

- 1. What unanticipated effects has the Sarbanes-Oxley Act had on the accounting profession and on accounting education and certification?
- 2. Do you think that the application of Sarbanes-Oxley (or similar legislation) will eventually widen to include not-for-profit and private organizations or that legal demands on smaller companies will be reduced? What impact would each possibility have on the accounting profession and why?

Sources: Bruce Pounder, "The Overworked Accountant, Part 1," CareerBank.com, accessed July 21, 2006, http://www.careerbank.com; "Sarbanes-Oxley Requirements Boost Value of CMA Certification; New Survey Reveals Salaries for Management Accountants Rising," PR Newswire, accessed July 16, 2006, http://www.prnewswire.com; Dave Simanoff, "Accountants Can Count On More Job Offers," Tampa Tribune, June 30, 2006, http://www.tampatrib.com.

liability claim against a firm's assets by a creditor.

owners' equity all claims of the proprietor, partners, or stockholders against the assets of a firm, equal to the excess of assets over liabilities.

basic accounting equation relationship that states that assets equal liabilities

plus owners' equity.

There are two claimants to the assets of a firm: creditors and owners. A **liability** of a business is anything owed to creditors—that is, the claims of a firm's creditors. When a firm borrows money to purchase inventory, land, or machinery, the claims of creditors are shown as accounts payable, notes payable, or long-term debt. Wages and salaries owed to employees also represent liabilities (known as wages payable or accrued wages).

Owners' equity represents the owners' initial investment in the business plus profits that were not paid out to owners over time in the form of cash dividends. A strong owners' equity position often is used as evidence of a firm's financial strength and stability.

The **basic accounting equation** states that assets equal liabilities plus owners' equity. This equation reflects the financial position of a firm at any point in time:

Assets = Liabilities + Owners' Equity

Because financing comes from either creditors or owners, the right side of the accounting equation also represents the business's financial structure.

The basic accounting equation also illustrates **double-entry bookkeeping**—the process by which accounting transactions are recorded. Because assets must always equal liabilities plus equity, each individual transaction must have an offsetting transaction. For example, if a company increases an asset, either another asset must decrease, a liability must increase, or owners' equity must increase. So if a company uses cash to purchase inventory, one asset (inventory) is increased while another (cash) is decreased by the same amount. Similarly, a decrease in an asset must be offset by either an increase in another asset, a decrease in a liability, or a decrease in owners' equity. If a company uses cash to repay a bank loan,

both an asset (cash) and a liability (bank loans) decrease, and by the same amount.

The relationship expressed by the accounting equation underlies development of the balance sheet and income statement. These two statements reflect the firm's current financial position and the most recent report of its incomes, expenses, and profits for interested parties inside and outside the firm. They provide a fundamental basis for planning activities and help companies attract new investments, secure borrowed funds, and complete tax returns.

double-entry bookkeeping process by which accounting transactions are entered; each individual transaction always has an offsetting transaction.

assessment check

- 1. Briefly describe the accounting
- process.

 2. Define GAAP. What is the role of the Financial Accounting Standards the Financial
- Board?
 3. Describe the basic accounting equation.

FINANCIAL STATEMENTS

Financial statements provide managers with essential information they need to evaluate the liquidity position of an organization—its ability to meet current obligations and needs by converting assets into cash; the firm's profitability; and its overall financial health. The balance sheet, income statement, and statement of cash flows provide a foundation on which managers can base their decisions. By interpreting the data provided in these statements, the appropriate information can be communicated to internal decision makers and to interested parties outside the organization.

The Balance Sheet

A firm's **balance sheet** shows its financial position on a particular date. It is similar to a photograph of the firm's assets together with its liabilities and owners' equity at a specific moment in time. Balance sheets must be prepared at regular intervals, because a firm's managers and other internal parties often request this information every day, every week, or at least every month. On the other hand, external users, such as stockholders or industry analysts, may use this information less frequently, perhaps every quarter or once a year.

The balance sheet follows the accounting equation. On the left side of the balance sheet are the firm's assets—what it owns. These assets, shown in descending order of liquidity (in other words, convertibility to cash), represent the uses that management has made of available funds. On the right side of the equation are the claims against the firm's assets. Liabilities and owners' equity indicate the sources of the firm's assets and are listed in the order in which they are due. Liabilities reflect the claims of creditors—financial institutions or bondholders that have loaned the firm money, suppliers that have provided goods and services on credit, and others to be paid, such as federal, state, and local tax authorities. Owners' equity represents the owners' claims (those of stockholders, in the case of a corporation) against the firm's assets. It also amounts to the excess of all assets over liabilities.

Figure 16.3 shows the balance sheet for Shasta Outfitters, a California-based chain of retail stores selling fitness gear and clothing. The basic accounting equation is illustrated by the three classifications of assets, liabilities, and owners' equity on the company's balance sheet. Remember, total assets must always equal the sum of liabilities and owners' equity.

"They Said It"

"I never get the accountants in before I start up a business."
—Richard Branson (b. 1950)
Businessman and entrepreneur

balance sheet statement of a firm's financial position—what it owns and the claims against its assets—at a particular point in time. 16.3

Balance Sheet for Shasta Outfitters

1 Current Assets:
Cash and other liquid
assets that can or will
be converted to cash or
used within one year.

Plant, property, equipment, and other assets expected to last for more than one year. Accumulated depreciation represents the cumulative value of fixed assets that have been expensed, or depreciated.

3 Current Liabilities:
Claims of creditors that are to be repaid within one year.

4 Long-Term Debt:
Debts that come due one year or longer after the date on the balance sheet.

5 Owners'(Shareholders')
Equity: Claims of the
proprietor, partners, or
stockholders against the
assets of the firm; the
difference between total
assets and total
liabilities.

Shasta Outfitters Balance Sheet Year Ending January 31 (\$ millions) 2007 2006 **Current Assets** Cash and equivalents 23.50 20.40 52.30 Short-term investments 65.50 13.90 12.30 Accounts receivable 90.00 Inventory 100.50 Total current assets 203.40 175.00 382.00 285.00 Fixed assets (104.00)(Accumulated depreciation) (142.30)181.00 Net fixed assets 239.70 **Total Assets** 443.10 356.00 **Current Liabilities** Accounts payable 32.50 18.50 Accruals 22.56 19.40 45.23 38.00 Short-term debt Total current liabilities 100.29 75.90 4 Long-term debt 20.31 10.80 **Total Liabilities** 120.60 86.70 5 Owner's Equity 322.50 269.30 443.10 Total Assets and Equity 356.00

The Income Statement

income statement financial record of a company's revenues, expenses, and profits over a period of time. Whereas the balance sheet reflects a firm's financial situation at a specific point in time, the income statement represents the flow of resources that reveals the performance of the organization over a specific time period. Resembling a video rather than a photograph, the **income statement** is a financial record summarizing a firm's financial performance in terms of revenues, expenses, and profits over a given time period, say a quarter or a year.



Cost of **Goods Sold:**

Cost of merchandise or services that generate the firm's sales.

Operating Expenses: Salaries, advertising, and other operational expenses not directly related to the acquisition, production, or sale of the firm's output.

Shasta Outfitters Income Statement Year Ending January 31, 2007

(\$ millions)

2007

2006

1	Net sales	713.00	615.00
2	Cost of sales Gross profit	<u>410.00</u> 303.00	375.30 239.70

Operating expenses 175.60 152.30 Operating income 127.40 87.40

Depreciation 38.30 32.00 Net interest 3.70 2.70 Taxable income 85.40 52.70 Taxes 25.62 15.81 59.78 36.89 Net income Dividends 6.58 5.30

4 Operating Income (EBIDTA): Gross income minus operating expenses; also called EBIDTA (earnings before interest, depreciation, taxes, and amortization).

5 Depreciation: Noncash expense that reflects the systematic reduction in the value of the firm's fixed assets.

Net Income: Sales minus total expenses; profit after taxes.

In addition to reporting the firm's profit or loss results, the income statement helps decision makers focus on overall revenues and the costs involved in generating these revenues. Managers of a not-for-profit organization use this statement to determine whether its revenues from contributions and other sources will cover its operating costs. Finally, the income statement provides much of the basic data needed to calculate the financial ratios managers use in planning and controlling activities. Figure 16.4 shows the income statement for Shasta Outfitters.

An income statement (sometimes called a profit-and-loss, or P&L, statement) begins with total sales or revenues generated during a year, quarter, or month. Subsequent lines then deduct all of the costs related to producing the revenues. Typical categories of costs include costs involved in producing the firm's goods or services, operating expenses, interest, and taxes.

After all of them have been subtracted, the remaining net income may be distributed to the firm's owners (stockholders, proprietors, or partners) or reinvested in the company as retained earnings. The final figure on the income statement—net income after taxes—is the so-called **bottom line.**

Keeping costs under control is an important part of running a business. Too often, however, companies concentrate more on increasing revenue than controlling costs. Regardless of how much money a company collects in revenues, it wouldn't stay in business for long unless it eventually earns a profit.

statement of cash flows

statement of a firm's cash receipts and cash payments that presents information on its sources and uses of cash.

accrual accounting

accounting method that records revenue and expenses when they occur, not necessarily when cash actually changes hands.

The Statement of Cash Flows

In addition to the income statement and the balance sheet, most firms prepare a third accounting statement—the statement of cash flows. Public companies are required to prepare and publish a statement of cash flows. In addition, commercial lenders often require a borrower to submit a statement of cash flows. The **statement of cash flows** provides investors and creditors with relevant information about a firm's cash receipts and cash payments for its operations, investments, and financing during an accounting period. Figure 16.5 shows the statement of cash flows for Shasta Outfitters.

Companies often prepare a statement of cash flows due to the widespread use of **accrual accounting.** Accrual accounting recognizes revenues and costs when they occur, not when actual cash changes hands. As a result, there can be differences between what is reported as sales, expenses, and profits, and the amount of cash that actually flows into and out of the business during a period of time. An example is depreciation. Companies depreciate fixed assets—such as machinery and buildings—over a specified period of time, meaning that they systematically reduce the value of the asset. Depreciation is reported as an expense on the firm's income statement—see Figure 16.4—but does not involve any actual cash. The fact that depreciation is a noncash expense means that what a firm reports as net income (profits after tax) for a particular period actually understates the amount of cash the firm took in, less expenses, during that period of time. Consequently, depreciation is added back to net income to obtain **cash flow.**

The fact that cash flow is the lifeblood of every organization is evidenced by the business failure rate. Many owners of firms that fail blame inadequate cash flow. Proponents of the

statement of cash flows hope that its preparation and scrutiny by affected parties will prevent financial distress for otherwise profitable firms, too many of which are forced into bankruptcy due to a lack of cash needed to continue day-to-day operations.

Even for firms for which bankruptcy is not an issue, the statement of cash flows can provide investors and other interested parties with vital information. For instance, assume that a firm's income statement reports rising earnings. At the same time, however, the statement of cash flows shows that the firm's inventory is rising faster than sales—often a signal that demand for the firm's products is softening, which may in turn be a sign of impending financial trouble.

assessment check

- Explain how a company's balance sheet is organized and its overall purpose.
 What is an income statement?
 - What is an income students.
 Why do firms prepare a statement of cash flows? Explain accrual accounting.

FINANCIAL RATIO ANALYSIS

Accounting professionals fulfill important responsibilities beyond preparing financial statements. In a more critical role, they help managers interpret the statements by comparing data about the firm's current activities to that for previous periods and to results posted by other companies in the industry. **Ratio analysis** is one of the most commonly used tools for measur-



Operating Activities:

The nuts and bolts, day-to-day activities of a company carrying out its regular business; in financially healthy firms, net cash flow from operating activities should be positive.



Investing Activities:

Transactions to accumulate or use cash in ways that affect operating activities in the future; often a use of cash.



Financing Activities:

Ways to transfer cash to/from outsiders and/or owners; can be either positive or negative.



4 Total Cash Flow:

A reconcilement of cash from the beginning to the end of the accounting period (one year in this example).

	Shasta Outfitters	
	Statement of Cash Flows	
	Year Ending January 31, 2007	
		(Φ 2112)
	Cach Flow from Operations	(\$ millions)
	Cash Flow from Operations Net income	59.78
	Depreciation	38.30
	Decrease (increase) in inventory	(10.50)
	Decrease (increase) in accounts receivable	(1.60)
	Increase (decrease) in current liabilities	24.39
	Total cash flow from operations	110.37
	·	
_		
2	Cash Flow from Investing Activities	
	Capital expenditures	(97.00)
	Short-term investments	(13.20)
	Total cash flow from investing activities	(110.20)
3	Cash Flow from Financing Activities	(0.50)
	Cash dividends	(6.58)
	Long-term debt	9.51
	Total cash flow from investing activities	2.93
	Total cash now nom investing activities	2.33
4	Total cash flow	3.10
	Cash and equivalents (beginning of period)	20.40
	Cash and equivalents (end of period)	23.50

ing the firm's liquidity, profitability, and reliance on debt financing, as well as the effectiveness of management's resource utilization. This analysis also allows comparisons with other firms and with the firm's own past performance.

Ratios assist managers by interpreting actual performance and making comparisons to what should have happened. Comparisons with ratios of similar companies help managers understand their firm's performance relative to competitors' results. These industry standards

serve as important yardsticks and help pinpoint problem areas as well as areas of excellence. Ratios for the current accounting period also may be compared with similar calculations for previous periods to spot developing trends. Ratios can be classified according to their specific purposes. The four major categories of financial ratios are summarized in Table 16.1.

Liquidity Ratios

A firm's ability to meet its short-term obligations when they must be paid is measured by **liquidity ratios.** Increasing liquidity reduces the likelihood that a firm will face emergencies caused by the need to raise funds to repay loans. On the other hand, firms with low liquidity may be forced to choose between default or borrowing from high-cost lending sources to meet their maturing obligations.

Two commonly used liquidity ratios are the current ratio and the acid-test ratio. The current ratio compares current assets to current liabilities, giving managers information about the firm's ability to pay its current debts as they mature. The current ratio compares current assets to current liabilities, giving executives information about the firm's ability to pay its current debts as they mature. The current ratio of Shasta Outfitters can be computed as follows:

Current ratio =
$$\frac{$203.40}{$100.29}$$
 = 2.03

In other words, Shasta Outfitters has \$2.03 of current assets for every \$1.00 of current liabilities. In general, a current ratio of 2 to 1 is considered to indicate satisfactory liquidity. This rule of thumb must be considered along with other factors, such as the nature of the business, the season, and the quality of the company's management team. Shasta Outfitters' management and other interested parties are likely to evaluate this ratio of 2.03 to 1 by comparing it with ratios for previous operating periods and with industry averages.

The acid-test (or quick) ratio measures the ability of a firm to meet its debt payments on short notice. This ratio compares quick assets—the most liquid current assets—against current liabilities. Quick assets generally consist of cash and equivalents, short-term investments, and accounts receivable.

Major Financial Ratios

Ratio Category	Ratio	How Defined	Shasta Outfitters Ratio
Liquidity	Current ratio	Current assets divided by current liabilities	2.03
	Acid-test ratio	Current assets (less inventory) divided by current liabilities	1.03
Activity	Inventory turnover	Sales divided by average inventory	7.49
	Asset turnover	Sales divided by average assets	1.78
Profitability	Gross profit margin	Gross profit divided by sales	42.5%
	Net profit margin	Net income divided by sales	8.4%
	Return on assets	Net income divided by average assets	15.0%
	Return on equity	Net income divided by average equity	44.4%
Leverage	Debt ratio	Total liabilities divided by total assets	27.2%
	Long-term debt to equity	Long-term debt divided by equity	6.3%

Shasta Outfitters' current balance sheet lists the following quick assets: cash and equivalents (\$23.50 million), short-term investments (\$65.50 million), and accounts receivable (\$13.90 million). The firm's acid-test ratio is computed as follows:

Acid-test ratio =
$$\frac{$102.90}{$100.29}$$
 = 1.03

Because the traditional rule of thumb for an adequate acid-test ratio is around 1 to 1, Shasta Outfitters appears to have a reasonable level of liquidity. However, the same cautions apply here as for the current ratio. The ratio should be compared with industry averages and data from previous operating periods in determining whether it is adequate for the firm.

Activity Ratios

Activity ratios measure the effectiveness of management's use of the firm's resources. One of the most frequently used activity ratios, the inventory turnover ratio, indicates the number of times merchandise moves through a business:

Inventory turnover =
$$\frac{$713.00}{$95.25}$$
 = 7.49

Average inventory for Shasta Outfitters is determined by adding the inventory as of January 31, 2007 (\$100.50 million) with the inventory as of January 31, 2006 (\$90.00 million) and dividing it by 2. Comparing the 7.49 inventory turnover ratio with industry standards gives a measure of efficiency. It's important to note, however, that inventory turnover can vary substantially depending on the products a company sells and the industry in which in operates. For instance, grocery retailer Supervalu has an inventory turnover of almost 13. By contrast, clothing retailer the Gap has an inventory turnover of around 9.

Another measure of efficiency is total asset turnover. It measures how much in sales each dollar invested in assets generates:

Total asset turnover =
$$\frac{$713.00}{$399.55}$$
 = 1.78

Average total assets for Shasta Outfitters equals total assets as of January 31, 2007 (\$443.10 million) plus total assets as of January 31, 2006 (\$356.00 million) divided by 2.

Shasta Outfitters generates about \$1.78 in sales for each dollar invested in assets. Although a higher ratio generally indicates that a firm is operating more efficiently, care must be taken when comparing firms that operate in different industries.

Some industries simply require higher investment in assets than do other industries. For example, American Electric Power has an asset turnover ratio of around 0.45, meaning that every dollar AEP invests in assets generates only 45 cents in revenue. While this figure seems low, it is actually relatively high compared with other electric utilities.

Profitability Ratios

Some ratios measure the organization's overall financial performance by evaluating its ability to generate revenues in excess of operating costs and other expenses. These measures are called **profitability ratios.** To compute these ratios, accountants compare the firm's earnings with total sales or investments. Over a period of time, profitability ratios may reveal the effectiveness

of management in operating the business. Four important profitability ratios are gross profit margin, net profit margin, return on assets, and return on equity:

Gross profit margin =
$$\frac{\$303.00 \text{ million}}{\$713.00 \text{ million}} = 42.5\%$$

Net profit margin = $\frac{\$59.78 \text{ million}}{\$713.00 \text{ million}} = 8.4\%$

Return on assets = $\frac{\$59.78 \text{ million}}{\$399.55 \text{ million}} = 15.0\%$

Return on equity = $\frac{\$59.78 \text{ million}}{\$295.90 \text{ million}} = 20.2\%$

All of these ratios support positive evaluations of the current operations of Shasta Outfitters. For example, the net profit margin indicates that the firm realizes a profit of about 8.4 cents on each dollar of merchandise it sells. Although this ratio varies widely among business firms, Shasta Outfitters compares favorably with retailers in general, which have an average net profit margin of around 5 percent. However, this ratio, like the other profitability ratios, should be evaluated in relation to profit forecasts, past performance, or more specific industry averages to enhance the interpretation of results. Similarly, while the firm's return on equity of more than 20 percent appears outstanding, the degree of risk in the industry also must be considered.

Leverage Ratios

Leverage ratios measure the extent to which a firm relies on debt financing. They provide particularly interesting information to potential investors and lenders. If management has assumed too much debt in financing the firm's operations, problems may arise in meeting future interest payments and repaying outstanding loans. Relying too heavily on debt financing can lead to bankruptcy. More generally, both investors and lenders may prefer to deal with firms whose owners have invested enough of their own money to avoid overreliance on borrowing. The total liabilities to total assets ratio and long-term debt to equity ratio help analysts evaluate these concerns:

Total liabilities to total assets =
$$\frac{\$120.60 \text{ million}}{\$443.10 \text{ million}} = 27.2\%$$

Long-term debt to equity = $\frac{\$20.31 \text{ million}}{\$322.50 \text{ million}} = 6.3\%$

A total liabilities to total assets ratio greater than 50 percent indicates that a firm is relying more on borrowed money than owners' equity. Because Shasta Outfitters' total liabilities to total assets ratio is 27.2 percent, the firm's owners have invested considerably more than the total amount of liabilities shown on the firm's balance sheet. Moreover, the firm's long-term debt to equity ratio is only 6.3%, indicating that Shasta Outfitters has only about 6.3 cents in long-term debt to every dollar in equity. The long-term debt to equity ratio also indicates that Shasta Outfitters hasn't relied very heavily on borrowed money.

The four categories of financial ratios relate balance sheet and income statement data to one another, help management pinpoint a firm's strengths and weaknesses, and indicate areas in need of further investigation. Large, multiproduct firms that operate in diverse markets use

their information systems to update their financial ratios every day or even every hour. Each company's management must decide on an appropriate review schedule to avoid

the costly and time-consuming mistake of overmonitoring. ssessment

In addition to calculating financial ratios, managers, investors, and lenders should pay close attention to how accountants applied a number of accounting rules when preparing financial statements. GAAP gives accountants leeway in reporting certain revenues and expenses. Public companies are required to disclose, in footnotes to the financial statements, how the various accounting rules were applied.

check

1. What is the purpose of financial ratio analysis? 2. List the categories of financial ratios. Give an example of each.

> budget planning and control tool that reflects a firm's expected sales revenues, operating expenses, and cash

receipts and outlays.

BUDGETING

Although the financial statements discussed in this chapter focus on past business activities, they also provide the basis for planning in the future. A budget is a planning and controlling tool that reflects the firm's expected sales revenues, operating expenses, and cash receipts and outlays. It quantifies the firm's plans for a specified future period. Because it reflects management estimates of expected sales, cash inflows and outflows, and costs, the budget serves as a financial blueprint and can be thought of as a short-term financial plan. It becomes the standard for comparison against actual performance.

Budget preparation is frequently a time-consuming task that involves many people from various departments within the firm. The complexity of the budgeting process varies with the size and complexity of the organization. Large corporations such as United Technologies, Clorox, and Motorola maintain complex and sophisticated budgeting systems. Their budgets help managers integrate their numerous divisions in addition to serving as planning and controlling tools. But budgeting in both large and small firms is similar to household budgeting in its purpose: to match income and expenses in a way that accomplishes objectives and correctly times cash inflows and outflows.

Because the accounting department is an organization's financial nerve center, it provides much of the data for budget development. The overall master, or operating, budget is actually a composite of many individual budgets for separate units of the firm. These individual budgets typically include the production budget, cash budget, capital expenditures budget, advertising budget, and sales budget.

Technology has improved the efficiency of the budgeting process. The accounting software products discussed earlier—such as Quick-Books—all include budgeting features. Moreover, modules designed for specific businesses are often available from third parties. The University of Missouri, for example, has developed a series of QuickBooks modules designed to meet the budgeting needs of dairy farmers.⁹

One of the most important budgets prepared by firms is the cash budget. The cash budget, usually prepared monthly, tracks the firm's cash inflows and outflows. Figure 16.6 illustrates a sample cash budget for Velo Mart—a Texas-based chain of bicycle shops. The company has set a \$350,000 target cash balance. The cash budget indicates months in which the firm will need temporary loans—May, June, and July in the

"They Said It"

"If the subject matter isn't inherently interesting—accounting comes to mind—I've got to make it amusing, if only to keep myself awake." —Allan Sloan (b. 1944) Business writer and journalist

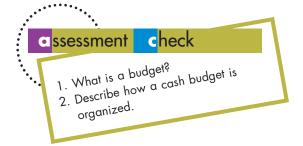


Specialized accounting software can serve individual business needs.

6.6 Four-Month Cash Budget for Velo Mart (thousands of dollars)

	Velo N Four-Month Ca			
	May	June	July	August
Sales	800.0	1,500.0	1,800.0	1,500.0
Cash sales	560.0	1,050.0	1,260.0	1,050.0
Collection of credit sales				
One month prior	140.0	160.0	300.0	360.0
Two months prior	60.0	70.0	80.0	150.0
Other cash inflows				
Total cash inflows	760.0	1,280.0	1,640.0	1,560.0
Purchases	1,050.0	1,260.0	1,050.0	840.0
Cash purchases	525.0	630.0	525.0	420.0
Payment of credit purchase	s s			
One month prior	140.0	262.5	315.0	262.5
Two months prior	122.5	140.0	262.5	315.0
Rent and utilities	100.0	100.0	100.0	100.0
Salaries	175.0	175.0	175.0	175.0
Other cash outflows		50.0		25.0
Total cash outflows	1,062.5	1,357.5	1,377.5	1,297.5
Net cash flow	(302.5)	(77.5)	262.5	262.5
Beginning cash balance	350.0	47.5	(30.0)	232.5
Ending cash balance	47.5	(30.0)	232.5	495.0
Surplus (deficit)	(302.5)	(380.0)	(117.5)	145.0
Cumulative surplus (deficit)	(302.5)	(682.5)	(497.5)	27.2

case of Velo Mart. The document also indicates months in which the firm can invest excess funds in securities to earn interest rather than leaving them idle in a bank account—August in the case of Velo Mart. Finally, the cash budget produces a tangible standard against which to compare actual cash inflows and outflows.



INTERNATIONAL ACCOUNTING

Today, accounting procedures and practices must be adapted to accommodate an international business environment. The Coca-Cola Company and McDonald's both generate more than half their annual revenues from sales outside the United States. Nestlé, the giant chocolate and food products multinational, operates throughout the world. It derives 98 percent of its revenues from outside Switzerland, its

home country. International accounting practices for global firms must reliably translate the financial statements of the firm's international affiliates, branches, and subsidiaries and convert data about foreign currency transactions to dollars. Also, foreign currencies and exchange rates influence the accounting and financial reporting processes of firms operating internationally.

Exchange Rates

As defined in Chapter 4, an exchange rate is the ratio at which a country's currency can be exchanged for other currencies. Currencies can be treated as goods to be bought and sold. Like the price of any product, currency prices change daily according to supply and demand. So exchange rate fluctuations complicate accounting entries and accounting practices.

Accountants who deal with international transactions must appropriately record their firms' foreign sales and purchases. Today's sophisticated accounting software helps firms handle all of their international transactions within a single program. An international firm's consolidated financial statements must reflect any gains or losses due to changes in exchange rates during specific periods of time. Financial statements that cover operations in two or more countries also need to treat fluctuations consistently to allow for comparison.

In the United States, GAAP requires that firms make adjustments to their earnings reflecting changes in exchange rates. In general, a weakening dollar increases the earnings of a U.S.

firm that has international operations because the same units of a foreign currency will translate into more U.S. dollars. By the same token, a strengthening dollar will have the opposite effect on earnings—the same number of units of a foreign currency will translate into fewer dollars. Over a recent three-year period, foreign currency adjustments effectively added more than \$1.5 billion to Procter & Gamble's earnings. 10

International Accounting Standards

The International Accounting Standards Committee (IASC) was established in 1973 to promote worldwide consistency in financial reporting practices. The IASC is recognized worldwide as the body with the sole responsibility and authority to issue pronouncements on international accounting standards. The International Federation of Accountants supports the work of the IASC and develops international guidelines for auditing, ethics, education, and management accounting. Every five years, an international congress is held to judge progress in achieving consistency in standards and works toward increasing comparability among nations' financial data and currencies.

The European Union and NAFTA have led to widespread recognition of the necessity for comparability and uniformity of international accounting standards. An increasing number of investors are buying shares in foreign multinational corporations. In response to global investors' needs, more and more firms are beginning to report their financial information according to international accounting standards. This practice helps investors compare the financial results of firms in different countries. Moreover, the SEC and FASB are working with the IASC with the goal of eventually creating one worldwide set of accounting rules.

ssessment

- 1. Assume the U.S. dollar gets stronger relative to the euro. What impact would that have on a U.S. firm with extensive operations in Europe?
 - 2. What is the IASC?

WHAT'S AHEAD

This chapter describes the role of accounting in an organization. Accounting is the process of measuring, interpreting, and communicating financial information to interested parties both inside and outside the firm. The next chapter discusses the finance function of an organization. Finance deals with planning, obtaining, and managing the organization's funds to accomplish its objectives in the most efficient and effective manner possible.

Summary of Learning Goals

Explain the functions of accounting and its importance to the firm's management, investors, creditors, and government agencies.

Accountants measure, interpret, and communicate financial information to parties inside and outside the firm to support improved decision making. Accountants gather, record, and interpret financial information to management. They also provide financial information on the status and operations of the firm for evaluation by such outside parties as government agencies, stockholders, potential investors, and lenders.

Assessment Check Answers

1.1 Define accounting.

Accounting is the process of measuring, interpreting, and communicating financial information in a way that describes the status and operation of an organization and aids in decision making.

1.2 Who uses accounting information?

Managers of all types of organizations use accounting information to help them plan, assess performance, and control daily and long-term operations. Outside users of accounting information include government officials, investors, creditors, and donors.

2 Identify the three basic business activities involving accounting.

Accounting plays key roles in financing activities, which help start and expand an organization; investing activities, which provide the assets it needs to continue operating; and operating activities, which focus on selling goods and services and paying expenses incurred in regular operations.

Assessment Check Answers

2.1 List the three business activities that involve accounting.

The three activities involving accounting are financing, investing, and operations.

2.2 Give an example of one of the business activities that involves accounting.

Financing activities provide the necessary funds to start a business and expand it after it begins operating. Investing activities determine what type of assets the business needs in order to operate. Operating activities focus on selling products as well as other activities such as cost control.

3 Describe the roles played by public, management, government, and not-for-profit accountants.

Public accountants provide accounting services to other firms or individuals for a fee. They are involved in such activities as tax statement preparation, management consulting, and accounting system design. Management accountants collect and record financial transactions, prepare financial statements, and interpret them for managers in their own firms. Government and not-for-profit accountants perform many of the same functions as management accountants, but they analyze how effectively the organization or agency is operating rather than its profits and losses.

Assessment Check Answers

3.1 What is the difference between a public accountant and a management accountant?

A public accountant provides accounting services to individuals and organizations for a fee. A management accountant is employed by an organization other than a public accounting firm.

3.2 What services does the typical public accounting firm provide to clients? How has the mix of services changed in recent years?

Public accounting firms provide audit, tax, and consulting services to clients. In recent years, some of the largest public accounting firms, such as PWC, sold their consulting businesses in order to focus mainly on tax and auditing services.

Outline the steps in the accounting process.

The accounting process involves recording, classifying, and summarizing data about transactions and then using this information to produce financial statements for the firm's managers and other interested parties. Transactions are recorded chronologically in journals, posted in ledgers, and then summarized in accounting statements. Today much of this takes place electronically. The foundation of the accounting system is GAAP (generally accepted accounting principles), a set of guidelines or standards that accountants follow. In the United States, the Financial Accounting Standards Board (FASB) is primarily responsible for evaluating, setting, and modifying GAAP. The basic accounting equation states that assets (what a firm owns) must always equal liabilities (what a firm owes creditors) plus owners' equity. This equation also illustrates double-entry bookkeeping—the process by which accounting transactions are recorded. Under double-entry bookkeeping, each individual transaction must have an offsetting transaction.

Assessment Check Answers

4.1 Briefly describe the accounting process.

The accounting process involves recording, classifying, and summarizing transactions in order to produce financial statements.

4.2 Define GAAP. What is the role of the Financial Accounting Standards Board?

GAAP stands for generally accepted accounting principles and consists of guidelines or standards that accountants follow when recording, classifying, and summarizing transactions. In the United States the Financial Accounting Standards Board (FASB) is primarily responsible for evaluating, setting, and modifying GAAP.

4.3 Describe the basic accounting equation.

The basic equation states that assets (what a firm owns) always equals liabilities (what a firm owes creditors) plus owners' equity.

5 Explain the functions and major components of the three principal financial statements: the balance sheet, the income statement, and the statement of cash flows.

The balance sheet shows the financial position of a company on a particular date. The three major classifications of balance sheet data represent the components of the accounting equation: assets, liabilities, and owners' equity. The income statement shows the results of a firm's operations over a specific period. It focuses on the firm's activities—its revenues and expenditures—and the resulting profit or loss during the period. The major components of the income statement are revenues, cost of goods sold, expenses, and profit or loss. The statement of cash flows indicates a firm's cash receipts and cash payments during an accounting period. It shows the sources and uses of cash in the basic business activities of financing, investing, and operating.

Assessment Check Answers

5.1 Explain how a company's balance sheet is organized and its overall purpose.

The purpose of a balance sheet is to show a company's financial position at a point in time—say the end of the fiscal year. Assets are listed on one side in order of liquidity (how easily and quickly the asset could be converted into cash). Liabilities are listed on the other side in the order in which they are due. Owners' equity is listed after liabilities.

5.2 What is an income statement?

The income statement lists all sales (or revenues) and expenses that occurred during a period of time (such as a quarter or year). The bottom line of the income statement is net income.

5.3 Why do firms prepare a statement of cash flows? Explain accrual accounting.

The statement of cash flows lists the sources and uses of cash during a period of time. Public companies are required to prepare and report a statement of cash flows. Cash flow can differ from income because of the widespread use of accrual accounting. Accrual accounting records transactions when they occur, not necessarily when cash changes hands.

6 Discuss how financial ratios are used to analyze a firm's financial strengths and weaknesses.

Liquidity ratios measure a firm's ability to meet shortterm obligations. Examples are the current ratio and the acid-test ratio. Activity ratios, such as the inventory turnover ratio and the total asset turnover ratio, measure how effectively a firm uses its resources. Profitability ratios assess the overall financial performance of the business. The gross profit margin, net profit margin, return on assets, and return on owners' equity are examples. Leverage ratios, such as the total liabilities to total assets ratio and the long-term debt to equity ratio, measure the extent to which the firm relies on debt to finance its operations. Financial ratios help managers and outside evaluators compare a firm's current financial information with that of previous years and with results for other firms in the same industry.

Assessment Check Answers

6.1 What is the purpose of financial ratio analysis?

Financial ratios provide managers and outside investors and creditors with information concerning the financial health of a company. They allow comparisons of a company's financial information with that of previous years and with results for similar firms.

6.2 List the categories of financial ratios. Give an example of each.

The major categories of financial ratios are liquidity, activity, profitability, and leverage. Examples include current ratio (liquidity), inventory turnover (activity), net profit margin (profitability), and debt ratio (leverage).

Describe the role of budgets in a business.

Budgets are financial guidelines for future periods reflecting expected sales revenues, operating expenses, and/or cash receipts and outlays. They represent management expectations for future occurrences based on plans that have been made. Budgets serve as important planning and controlling tools by providing standards against which actual performance can be measured.

Assessment Check Answers

7.1 What is a budget?

A budget is a planning and control tool that reflects the firm's expected sales revenues, operating expenses, cash receipts, and cash outlays.

7.2 Describe how a cash budget is organized.

Cash budgets are generally prepared monthly. Cash receipts are listed first. They include cash sales as well as the collection of past credit sales. Cash outlays are listed next. These include cash purchases, payment of past credit purchases, and operating expenses. The difference between cash receipts and cash outlays is net cash flow.

8 Explain how exchange rates influence international accounting practices and the importance of uniform financial statements for global business.

An exchange rate is the ratio at which a country's currency can be exchanged for other currencies. Daily changes in exchange rates affect the accounting entries for sales and purchases of firms involved in international markets. These fluctuations create either losses

or gains for particular companies. Data about international financial transactions must be translated into the currency of the country in which the parent company resides. The International Accounting Standards Committee was established to provide worldwide consistency in financial reporting practices and comparability and uniformity of international accounting standards.

Assessment Check Answers

8.1 Assume the U.S. dollar gets stronger relative to the euro. What impact would that have on a U.S. firm with extensive operations in Europe?

European profits have to be converted from euros to dollars. If the value of the dollar rises relative to the euro, the dollar value of European profits declines. This decline will hurt the firm's earnings.

8.2 What is the IASC?

The IASC (International Accounting Standards Committee) provides worldwide consistency in financial reporting practices and comparability and uniformity of accounting standards worldwide.

Business Terms You Need to Know

accounting 514
public accountant 516
certified public accountant (CPA) 517
accounting process 519
asset 521

liability 522 owners' equity 522 basic accounting equation 522 double-entry bookkeeping 523 balance sheet 523 income statement 524 statement of cash flows 526 accrual accounting 526 budget 531

Other Important Business Terms

open-book management 514 management accountant 517 government accountant 518 generally accepted accounting principles (GAAP) 520 Financial Accounting Standards Board (FASB) 520 bottom line 526 cash flow 526 ratio analysis 526 liquidity ratios 528 activity ratios 529 profitability ratios 529 leverage ratios 530 cash budget 531

Review Questions

- 1. Define *accounting*. Who are the major users of accounting information?
- 2. What are the three major business activities in which accountants play a major role? Give an example of each.
- 3. Explain the differences between a public accountant, a management accountant, and a government accountant. What services do public accounting firms provide for clients?
- 4. What does the term *GAAP* mean? Briefly explain the role of the Financial Accounting Standards Board.
- 5. List the three major financial statements.
- 6. Explain the basic accounting equation.
- 7. What is double-entry bookkeeping? Give an example.

- 8. What is the difference between a current asset and a long-term asset? Why is cash typically listed first on a balance sheet?
- 9. What is accrual accounting? Give an example of how accrual accounting affects a firm's financial statements.
- 10. List the four categories of financial ratios and give an example of each. What is the purpose of ratio analysis?
- 11. What is a cash budget? Briefly outline what a simple cash budget might look like.
- 12. What financial statements are affected by exchange rates for firms with global operations? What are the benefits of uniform international accounting standards?

Projects and Teamwork Applications

- 1. Your grandmother sends you a large check for your birthday, asking that you use the money to buy shares of stock in a company. She recommends that you review the company's financial statements before investing. What can a company's financial statements tell you about the investment potential of its stock?
- 2. Contact a local public accounting firm and set up an interview with one of the firm's partners. Ask the individual what his or her educational background is, what attracted the individual to the accounting profession, and what he or she does during a typical day. Prepare a brief report on your interview. Do you now want to learn more about the accounting profession? Are you more interested in possibly pursuing a career in accounting?
- 3. Suppose you work for a U.S. firm that has extensive European operations. You need to restate data from the various European currencies in U.S. dollars in order to prepare your firm's financial statements. Which financial statements and which components of these statements will be affected? Has the adoption of the euro made your job easier or more difficult?

- 4. The collapse of Enron, WorldCom, and other firms raised a number of questions concerning the ethical standards of outside auditors. As a result, a number of new rules and laws were adopted. Some complain that these rules have increased audit fees and even make it more difficult for firms to find auditors. Working with a small group, research these new rules and laws, and write a two-page report summarizing them.
- 5. Working with a partner, identify a public company you've heard of. Collect at least three years' worth of financial statements for the company. Calculate the financial ratios listed in Table 16.1. Prepare an oral report summarizing your findings.
- 6. Suppose you are offered a job with a small, private company. Because the company isn't required to publish its financial information—as public companies are—you ask the owner if you could review the financial statements prior to accepting the job. The owner refuses and says that only the firm's accountant and banker are allowed to see the statements. What could you say that might persuade the company's owner to share financial information with employees?

- 7. You've been appointed treasurer of a local not-for-profit organization. You would like to improve the quality of the organization's financial reporting to existing and potential donors. Describe the kinds of financial statements you would like to see the organization's accountant prepare. Why do you think better-quality financial statements might help reassure donors?
- 8. Adapting the format of Figure 16.6, prepare on a separate sheet of paper your personal cash budget for next month. Keep in mind the following suggestions as you prepare your budget:
 - a. *Cash Inflows*. Your sources of cash would include your salary/wages, gifts, scholarship monies, tax refunds, dividends and interest, and income from self-employment.
 - b. *Cash Outflows*. When estimating next month's cash outflows, include any of the following that may apply to your situation:
 - i. Household expenses (mortgage/rent, utilities, maintenance, home furnishings, telephone/cell phone, cable TV, household supplies, groceries)

- ii. Education (tuition, fees, textbooks, supplies)
- iii. Work (transportation, meals)
- iv. Clothing (purchases, cleaning, laundry)
- v. Automobile (auto payments, fuel, repairs)
- vi. Insurance (life, auto, homeowner's, renter's, health, and dental)
- vii. Taxes (income, property, Social Security, Medicare)
- viii. Savings and investments
- ix. Entertainment/recreation (health club, vacation/travel, dining, movies)
- x. Debt (credit cards, installment loans)
- xi. Miscellaneous (charitable contributions, child care, gifts, medical expenses)
- c. Beginning Cash Balance. This amount could be based on a minimum cash balance you keep in your checking account and should include only the cash available for your use; therefore, money such as that invested in a 401(k) retirement plan should not be included.

Case 16.1

Accounting Gets More Family Friendly

More than half of all accountants and auditing professionals today are women, according to the American Institute of Certified Public Accountants (AICPA). A generation ago, women represented less than half of the profession, but with more than half of all new accountants coming from the ranks of working females, including many with young children, the work-life balance at many accounting firms has been getting a big overhaul. The results are positive enough to land the profession's Big Four on *Working Mother* magazine's list of 100 best companies for working mothers for several years in a row.

To earn a place on the prestigious roster, Deloitte & Touche USA, PricewaterhouseCoopers, KPMG, and Ernst & Young had to stand out by offering family-friendly benefits such as flextime, compressed workweeks, job sharing, telecommuting, extended parental leave, backup child care, and adoption benefits. But they also provided other innovations such as women's networks and mentoring programs. Finally, they had to demonstrate that taking advantage of such benefits would not harm the career paths of their female accountants.

At Ernst & Young, for instance, more than 2,300 employees rely on flexible work schedules; more than 100 of them are partners, principals, and directors. "This demonstrates to all our people that it is possible to succeed personally and reach the highest levels of our organization," says the firm's director of gender equity and flexibility, "even for those trying to balance work and family." *Working Mother* saluted Deloitte for being "one of the organizations working to eliminate . . . bias against flextime workers by offering its working mother employees, not just flexibility, but advancement opportunities as well."

PricewaterhouseCoopers says fully half its new hires in the last twelve to fifteen years have been women. The firm believes that "work and life shouldn't be mutually exclusive" and that employees should not be judged for the choices they make about their personal priorities. About 6 percent of its accountants work part time, and their salaries and benefits are adjusted accordingly. Says the company's director of diversity and work/life, "It's a retention tool for high performers."

The push to make the demanding environment of public accounting, with its 70- and 80-hour workweeks, more adaptable to family needs isn't limited to the top-tier firms, however, and many benefits, such as free or subsidized breakfast and lunch, are intended for all employees, not just women and parents. At Plante & Moran, which has been a leader in instituting family-friendly benefits such as mentors for all employees, a dedicated runner was allowed a flexible schedule during tax season in order to train for a marathon, for instance.

But there's no question that women are big beneficiaries of many innovative work/life perks, such as on-site day care, lactation rooms, free breast pumps for nursing moms, and reserved parking for pregnant employees. "We know it's critical that we have to do some of these things and do them right," says Pricewaterhouse. At KPMG, nearly half of front-line managers are female. Dara Bazanno, senior audit manager, juggles four children and a two-hour commute. "I live 140 miles from the office," she says, "and I would have had to quit five years ago, because I just can't afford 15 or 20 hours a week on the road given the number of hours we work." The home office KPMG set up for her makes it all possible.

At the same time, however, women's salaries for accounting and auditing jobs still lag behind those of men, running at only about 75 percent of men's pay nationwide, according to the U.S. Department of Labor. Women also enjoy a smaller share of nonfinancial benefits such as automobile allowances, stock options, bonuses, profit sharing, and overtime.

Some industry observers point out that even though fewer than one in five public accounting firm partners is a woman, women have entered accounting in larger numbers only within the last fifteen years or so, which means there are still fewer women than men with the experience to reach partner. One encouraging trend reported by the *Journal of Accountancy*, however, is that nearly a third of the partnership promotions made within the last three years went to women.

Questions for Critical Thinking

 Some critics of work-life programs say they disproportionately benefit women and parents. Do you think policies designed to retain valued employees can have a downside? Why or why not? If yes, what can companies do to minimize problems that can arise for other employees who aren't eligible for such benefits because they are male and/or single?

Long hours and crushing work flows created by the annual tax season are common fare for accountants. In what ways can accounting firms ease the burden on all employees at such times? How would such actions help improve the firms' performance?

Sources: Michelle Cater Rash, "Women Outpacing Men in Accounting," Birmingham Business Journal, accessed August 16, 2006, http://www.bizjournals.com;

Joyce Gannon, "Balancing a Lifestyle," Pittsburgh Post-Gazette, accessed August 16, 2006, http://www .post-gazette.com; "Ernst & Young LLP Marks Its Eighth Consecutive Year as One of the '100 Best Companies for Working Mothers," PR Newswire, accessed July 21, 2006, http://www.prnewswire.com; "Sarbanes-Oxley Requirements Boost Value of CMA Certification," PR Newswire, accessed July 21, 2006, http://www.prnewswire .com; "Working Mother 2005 100 Best Companies," accessed July 21, 2006, http://www.workingmother.com; Jena McGregor, "Balance and Balance Sheets," Fast Company, accessed July 21, 2006, http://www.fastcompany .com; Dona DeZube, "Perks Keep Public Accountants at Work," Monster.com, accessed September 23, 2005, http://monster.com.

Taking Account: The Little Guys

This video case appears on page 625. A recently filmed video, designed to expand and highlight the written case, is available for class use by instructors.

The Second City

Part 5 case

The Second City Theater Continuing Case Comedy, Theater, Technology: Where These Three Shall Meet

A comedy show requires only two things: performers and an audience. When you see the lights come up on the cast and hear the rock music played between scenes, it's clear that The Second City hasn't let technology get in the way of an authentically theatrical experience. In a recent interview, Bernie Sahlins, cofounder of Second City, attributed the company's success to its dedication as a live theater venue. Television, cinema, radio, and the Internet have inundated the American public. Part of Second City's charm is that the core of the theater will always remain on the stage. Monitoring its success in the modern world has, however, required technical strength. Its use of technology to manage information has built a digital evolution for Second City, and has also given its fast-paced comedy the power to move at lightning speed.

Information management at Second City is both systematic and improvised. The company monitors everything from the high volume of students coming through the Training Center to the profit margins of its productions. Handling this information in a way that can benefit decisions calls for some impromptu organization. The company responds to the particular needs of each branch, or division, when designing

appropriate technologies. Primarily, Second City has developed a series of databases that track figures and trends.

As the audience shuffles into Chicago's Mainstage theater on a Friday night, or fills up the e.t.c. stage for an edgier night of satire, the company keeps track of its market. Audience View is a brand new database system that monitors ticketing for the company. This helps the company see trends in seasonal and weekly purchase ratios. This type of database can calculate the success of certain revues over time and give the company a perspective on its earnings. The theater occasionally decides to react to sold-out nights by producing additional shows to meet demand.

Rob Chambers, director of the Training Center, uses software that organizes hundreds of students throughout dozens of classes. Keeping an eye on the popularity of certain classes helps Second City decide how to expand its curriculum. It has developed its own databases for the Training Center to keep the software accessible to the staff and suitable for its program. Because the Training Center has attracted a body of contributors who train, work, teach, and perform for the company, Second City created an informal intranet.

A large e-mail list updates the e-community on shows, tuition updates, new class offerings, and links to new material on the Second City Web site.

Second City's Web site has become one of its most innovative tools for external marketing and gathering information. Using a variety of broadband technologies, http://www.secondcity.com is the modern media center for the company. To compete in the digital age, Second City has partnered with media distribution agencies that help it maximize its impact in the market. The theater has always created an impressive amount of comedy entertainment material. Up-to-date information systems release this creative content to a younger, electronic audience. Among other features, the Web site showcases interviews with alumni, clips from shows, Training Center information, theater history, hiring information, and a new series of podcasts that the company hopes will bring some direct revenue for the site. Second City monitors how many hits the site gets and for which pages. This helps it make decisions about what creative material to put on the Web, how and when to update the site, and which offerings seem to get the most attention. Working with leading Internet

media agencies, Second City uses its Web site as a forerunner for creative advances in the company.

Excited by the new frontier, Second City's Kelly Leonard reports that "technology becomes an increasingly prominent part of The Second City business every year." Second City is currently looking for an IT director who can integrate recent tech advances in the company throughout the organization. The company benefits from technical savvy even in its communications branch. Electronic prowess is an important tool for the branch, which provides Fortune 500 companies with modern, interactive consultation services. When working with a technically adept client, Second City must be able to communicate effectively. If asked to do a piece on a recent computer-virus-related disaster, the ensemble must even know now to use the correct technical jargon to make light of whatever has been "bugging" the client.

Second City has its own

accounting department and also uses an outside firm. It strives to keep ticket prices under the traditional price of Equity (the theater actors' union) costs. However, Second City has realized, after analyzing its accounting data, that in order to thrive when demand is high, it can easily sell tickets at a higher price for weekend shows without any frustration from its customers. Classes at the Training Center are around the cost of similar services in the entertainment or arts industry.

Managing all the information that travels through Second City's doors is a big job. Though it is growing and already uses information technology in many ways throughout the company, Second City has seen the rising importance of having one person in charge of all electronic business systems. Until they find an information director, SC has the advantage of being a small organization in which information systems have been designed with its

specific needs in mind. Second City will continue to explore the benefits of information management as its Web site and theaters attract the increasingly computer-proficient consumer. As long as improvisation is the heart of the matter, no Second City techie will ever feel too far from home.

QUESTIONS

- What makes Second City stand out as a technically integrated organization?
- 2. What is Second City's primary management information system? Do you think this is the most effective system for this company?
- 3. What challenges face Second City in the modern computerized age?
- 4. In what ways is Second City on the cutting edge of technology? In what ways does it still have to grow?



Part 5: Launching Your Information Technology and Accounting Career

Part 5, "Managing Technology and Information," includes Chapters 15 and 16, which discuss using computers and related technology to manage information and accounting and financial statements. In Chapter 15, we profiled well-known technology companies such as Google and Oracle, as well as a host of smaller organizations, such as Great Harvest Bread Company and Singapore's Nanyang Technological Univer-

sity, that use computer technology to manage information. In Chapter 16, you read about giant accounting firms such as Ernst & Young and a variety of public and private organizations, large and small, that generate and use accounting data. These examples illustrate that all organizations need to manage technology and information. And with the complexity and scope of technology and information likely to increase in the

years ahead, the demand for accounting and information systems professionals is expected to grow. According to the U.S. Department of Labor, employment in occupations such as accounting, computer support specialists, and systems administrators is expected to grow faster than the average for all occupations in the next decade. In addition, recent graduates with bachelor's degrees in accounting and information systems have among the highest average starting salaries of all business graduates. The most recent survey from the National Association of Colleges and Employers listed the average starting salary for graduates with bachelor's degrees in accounting at more than \$43,000 per year; starting salaries for those with undergraduate degrees in information systems averaged around \$45,000.2

What types of jobs are available in information systems and accounting? What are the working conditions like? What are the career paths? Information systems and accounting are both fairly broad occupations and encompass a wide variety of jobs. In some cases you'll work in the accounting or information systems department of a business such as Procter & Gamble or Shell. In other cases, you'll work for a specialized accounting or information systems firm, such as PricewaterhouseCoopers or IBM, that provides these services to governments, not-for-profit organizations, and businesses.

Accounting and information systems are popular business majors, and many entry-level positions are available each year. For instance, many accounting graduates start their careers working for a public accounting firm. Initially, their job duties involve auditing or tax services, usually working with more senior accountants. As their careers progress, accounting graduates take on more and more supervisory responsibilities. Some may move from public accounting firms to take accounting positions at other organizations. Many accounting and information systems graduates spend their entire careers in these fields, while others move into other areas. People who began their careers in accounting or information systems are well represented in the ranks of senior management today. Let's look briefly at some of the specific jobs you might find after earning a degree in accounting or information systems.

Public accountants perform a broad range of accounting, auditing, tax, and consulting services for their clients, which include businesses, governments, not-for-profit organizations, and individuals. Auditing is one of the most important services offered by public accountants, and many accounting graduates begin their careers in auditing. Auditors examine a client's financial statements and accounting procedures to make sure they conform with all applicable laws and regulations. Public accountants either own their own businesses or work for public accounting firms. Many public accountants are certified public accountants (CPAs). To become a CPA, you have to meet educational and experience requirements and pass a comprehensive examination.

Management accountants work for an organization other than a public accounting firm. They record and analyze financial information and financial statements for their organizations. Management accountants are also involved in budgeting, tax preparation, cost management, and asset management. Internal auditors verify the accuracy of their organization's internal controls and check for irregularities, waste, and fraud.

Technical support specialists are troubleshooters who monitor the performance of computer systems; provide technical support and solve problems for computer users; install, modify, clean, and repair computer hardware and software; and write training manuals and train computer users

Network administrators design, install, and support an organization's computer networks, including its local area network, wide area network, Internet, and intranet systems. They provide administrative support for software and hardware users and ensure that the design of an organization's computer networks and all of the components fit together efficiently and effectively.

Computer security specialists plan, coordinate, and implement an organization's information security. They educate users about how to protect computer systems, install antivirus and similar software, and monitor the networks for security breaches. In recent years, the role and importance of computer security specialists have increased in response to the growing number of attacks on networks and data.

Career Assessment Exercises in Information Systems and Accounting

- 1. The American Institute of Certified Public Accountants is a professional organization dedicated to the enhancement of the public accounting profession. Visit the organization's Web site (http://www.aicpa.org). Review the information on CPA standards and examinations. Write a brief summary on what you learned about how to become a CPA.
- Assume you're interested in a career as a systems administrator. Go to the following
- Web site: http://www.sage.org. Prepare a brief report outlining the responsibilities of a systems administrator, who hires for these positions, and what kind of educational background you need to become one.
- 3. Identify a person working in your local area in the accounting field and arrange an interview with that person (your college career center may be able to help you). Ask that person about his or her job responsibilities, educational background, and the best and worst aspects of his or her job as an accountant.