8 Accounting

KEY TERMS

accounting financial statements generally accepted accounting principles (GAAPs) fiscal year fundamental accounting equation net worth balance sheet assets accounts receivable accounts payable owner's equity income statement income expenses

trend

Specific Expectations

After studying this chapter, you will be able to

 describe how effective accounting and financial statements contribute to the success of a business

In this chapter you will learn how accounting enables a business to measure its financial performance. All businesses in Canada are expected to keep their financial records according to generally accepted accounting principles so that the records can be read and understood by people who are not involved with the business. These financial records or statements are created using the fundamental accounting equation, which ensures that all financial transactions of the business are accounted for. The two key financial statements are the balance sheet, which shows the present financial worth of a business, and the income statement, which shows how much money the business has earned during a given period. Owners, managers, investors, lenders, and governments rely heavily on financial statements to assess the value and performance of a business. In recent years, accounting software has reduced the amount of time required to produce financial statements.

Marie-Celeste and Accounting

Marie-Celeste, owner of The Hair Port, was hearing a lot of different opinions about what she should do with her business. The more she heard, the more confused she felt.

It all started on a quiet Tuesday morning in January. Marie-Celeste was sorting the mail. A semi-annual newspaper from the Board of Education featured an announcement that might have a major impact on her business. She showed the notice to her employee Selvana and to Ravi, the sales representative from Professional Beauty Supplies Ltd.

"It says here that the Board is proposing to expand Eastern Collegiate this summer, she explained. "They can finally afford to close the Portable High School. Three hundred more students will come here."

Selvana immediately understood what this news meant for the Hair Port. Eastern Collegiate, across the street, had over 700 students. The collegiate accounted for about 60 percent of the Hair Port's business.

"You'll need more help, " Selvana replied, "My cousin finishes his apprenticeship this summer. He's talented and you'd like him."

"You will end up buying over \$1000 worth of supplies each month, which means that you will qualify for our lowest wholesale prices," Ravi pointed out. "Your business will be more profitable, based on that fact alone!"

A customer spoke up. "You don't have enough chairs or sinks as it is, Marie-Celeste! Even now, when my daughter comes here to get her hair done before a big social event, she has to wait an hour. Either she gets her hair done during her spare at 2:00 p.m. or she arrives really late at the dance. Then she gets home late and— "

The phone rang. Marie-Celeste's sister Jeanne, who had also read the notice, phoned to suggest that Marie-Celeste should get a bigger sign. She had read in a business publication that a bigger sign had helped a hairdressing business in Fort Frances.

Figure 8-1 Business owners face dilemmas. Most business opportunities come with a price. Is it worth paying? The businesses past performance, as shown by its records, is a good place to start looking for the basic information.

| - Increase in potential = opportunity, mayb |
|---|
| - (But what steps should I take?) |
| - More chairs, sinks? |
| - Get bank loan to finance expansion? |
| - Hire another employee? |
| - Buy more supplies? |
| - More advertising? |
| - Take on a partner? Who? |
| |
| |

Uncle Emile phoned too. He had heard the news and was convinced that The Hair Port should expand. He suggested that Marie-Celeste should take on a business partner. If a partner bought into the business, she could use the partner's money for the cost of expansion. She would not need a bank loan.

Marie-Celeste was glad that people were taking the time to tell her what they thought. The information she was receiving was interesting and useful. But it did not add up to answers to her key questions.

The Eastern expansion project created a dilemma for her business. She would need to expand her salon to cope with increased business, especially during social events. But where would she get the money? Should she take on a business partner? Or should she get a bank loan? What if she expanded the salon and the Board's expansion project got delayed? Would that be a disaster or only a minor setback?

Would there really be enough extra business to justify hiring Selvana's cousin? She did not want to hire him and then let him go.

Professional Beauty Supplies' lower prices for high-volume customers were attractive. But if Marie-Celeste took a bank loan, she needed to set her own prices correctly, so that she could pay off the loan but keep her customers.

She wasn't sure that she needed a bigger sign. However, Jeanne was right about her main idea. The salon's advertising budget should be increased, to convince new students to try the Hair Port. She could offer a temporary discount too. But how would that affect paying off the bank loan?

She respected Uncle Emile's opinion. He had succeeded in business and retired on a comfortable income. But his business had been a gas station/lunch counter. Would the same ideas work for a hair salon?

That evening, as Marie-Celeste was sweeping up, she began to see where the answer lay. "I've heard lots of opinions. But there is only one solution. I must study the financial records of my business. Those accounting records will provide me with a lot of the information I need to make the right decisions."

Why do you think Marie-Celeste expects to find some answers by studying the accounting records of her business? In what ways might those answers differ from the opinions she has been hearing?

How Effective Accounting Contributes to Business Success

Accounting is the system used by an organization to keep a record of all the money that comes in and goes out. Payments received from customers, wages paid to employees, and the purchase of a computer are all recorded. Even the cost of the pizza and pop that the company orders for employees who work late must be recorded.

However, accounting is more than a written record of how money is received or spent each day. Accounting records are kept accord-



Figure 8-2 Most civilizations have used accounting records in business. The ancient Egyptian scribe prepared accounts on papyrus (paper made from rushes) with a calamus (a reed pen). In an account from a picture in the tomb of Chnemhotep we are told, "Minute care is not only taken in the case of large amounts, but even the smallest quantities of corn or dates are conscientiously entered." Is keeping careful track of even the smallest quantities the most effective way to do accounting?

ing to strict principles and rules. The same principles and rules are used by all businesses. This fact has two important results:

- A person who is not involved with a business can understand key aspects of its financial activities or performance by studying the company's accounting records (books).
- A person can use accounting records to compare the financial activities or performance of different types of businesses, such as a pizza franchise and a music store.

There are two types of accounting: financial accounting and managerial accounting. Financial accounting is the subject of this chapter. It is the process of recording and analyzing information about the financial position of an organization. A company's financial *position* is its standing with its owners, including shareholders, and its creditors. Company management, shareholders, creditors, customers, suppliers, governments, financial analysts, and many others use the information created by financial accounting to make decisions about the company. You will learn more about this later in the chapter.

Managerial accounting is used within a company to help decide questions like what to charge for a new product or whether to enlarge a factory. The usefulness of both kinds of accounting depends on accurate financial records.

Accounting records are published in the form of *financial state-ments*. **Financial statements** are formal documents that use a standard



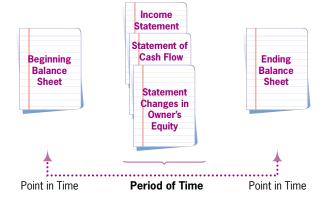
http://www.mcgrawhill.ca/links/exploringbiz

You can learn more about possible careers in accounting through the Canadian Institute of Chartered Accountants, Certified General Accountants Association of Canada, and the Society of Management Accountants of Canada.

format to provide the key information about a company's financial position. This chapter introduces two types of financial statement: the balance sheet and the income statement.

rate financial statements, is the best way to ensure that a good business remains profitable. It is also the first step towards helping a struggling business recover. The struggling business can identify and deal with problems before it's too late.

Previewing Financial Statements



Generally Accepted Accounting Principles

The **Generally Accepted Accounting Principles** or **GAAPs** are the guidelines developed by professional accountants for the way accounting records and financial statements are prepared. These guidelines ensure that financial information is presented in a standard form so that organizations' performance may be understood and compared. Here are some key GAAPs.

Figure 8-3 The balance sheet shows an organization's total worth on a certain date (a point in time). The income statement shown here updates the balance sheet by adding net income (or subtracting in case of net loss). The two other documents shown, the statement of cash flow, and the statement of changes in owner's equity assist in preparing the income statement or the balance sheet.

Business entity concept

The finances of the business are kept separate from those of its owner. For example, Wanda Kowalchuk, owner of Kowalchuk's Interior Design, buys many items of furniture to resell through her business. These purchases are business transactions. But when she bought a sofa bed for her own apartment, she did not treat the purchase as a transaction of her business. Her sofa bed is a personal possession, not a business asset. It does not appear in her business's books.

Time period concept

An accountant uses time periods of equal and appropriate length to measure the financial health of a business. For example, Gracie-Ann's Ski and Swim Wear showed a big profit in the winter and the summer. But the business barely covered its expenses in the spring and fall. An accountant will prepare financial statements that show the whole business year, not just the profitable seasons.

Cost principle

The actual cost of a business purchase is recorded as the cost in the books. For example, Bobby Fuller, owner of Bobby's All-Star Renos, got a great deal on a truck. He paid only \$16 000 for a truck that would usually cost \$18 000. Which price is recorded in the books? An accountant would insist on recording \$16 000. For accounting purposes, the truck is assumed to have the financial value that Bobby actually paid.

Consistency principle

Accountants apply the same rules, methods, and procedures from one financial period to the next. For example, during a very warm year, Gracie-Ann's Ski and Swim Wear showed big losses from ski wear but big profits from swim wear. Can Gracie-Ann report only the swim wear results and pretend that she never even tried to sell ski wear? No, the consistency principle requires that she use the same reporting methods from year to year. Only if she decides to stop selling ski wear can she stop reporting its results.

Financial Statements

The purpose of financial statements is to provide accurate information on a regular basis, according to generally accepted accounting principles. Statements may be produced each week, month, or quarter, depending on the need. Sole proprietorships, which you learned about in Chapter 2, often produce statements only at the end of a year of business (a *fiscal year*).

The **fiscal year** or accounting year for an organization is a period of 12 consecutive months, at the end of which the business produces its annual financial statements.

Incorporated companies do not always use the calendar year for their financial year. For example, Kathy-Ann Leon, owner (sole shareholder) of Kathy-Ann's Guided Caribbean Tours, Inc., found December 31 an inconvenient date to end the financial year. She was nearly always out of the country at that time. She chose July 31, which is the off season for her business.

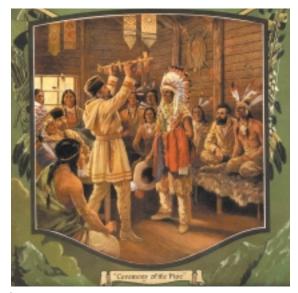


Figure 8-4 The accounting records of the Hudson's Bay Company, established in 1670, provide valuable information about Canadian business. For many years prior to Confederation, in what is now western Canada, people did not use currency. They used beaver pelts instead of dollars when they wanted to buy or sell items. A blanket was worth four beavers. For one beaver, you could get a brass kettle.

All business organizations—sole proprietorships, partnerships, and corporations—are required by law to produce financial statements, to verify income for income tax purposes. Canada Customs and Revenue Agency provides blank income statement forms that enable a self-employed person to construct an income statement. Private individuals or organizations that do not offer stocks or bonds to the public do not need to share financial information with anyone other than Canada Customs and Revenue Agency, the income tax gathering agency. There is one exception to this: a financial institution may ask for financial statements if a business is trying to borrow money. Public corporations must by law publish their financial statements because they issue stocks and/or bonds to the public.

Personal Balance Sheet

A balance sheet is a statement of net worth. **Net worth** is the difference between what you *own* (assets) and what you *owe* (liabilities). It is some-

times called owner's equity or owner's capital. Preparing a personal balance sheet can help you understand the concept of net worth. On the following page is Michael Abramov's personal balance sheet (Figure 8-5). Because Michael's net worth is the difference between what he owns and what he owes, his balance sheet can be summed up in an equation:

Assets – liabilities = net worth.

Therefore, using the mathematical rule for transposing equations

Assets = liabilities + net worth.

This is called the **fundamental accounting equation** because accounting is based on it. Because it is an equation, the two sides must balance. In Michael's case, the balancing figure is seen to be \$2 675.00. When accounts do not balance, an error has been made. The accounts are said to be "out of balance." The error must be found and corrected.

Biz.Bites

Would accounting training help you get ahead in business? A study conducted by the Canadian Institute of Chartered Accountants' Market Research Department showed that 53% of the top 1000 companies chosen by Report on Business (ROB) magazine in 1999 have a chartered accountant in at least one of their top five positions. Why do you think companies do this?

Michael Abramov Balance Sheet June 15, 2001

| What Michael Owns (Assets) | | What Michael Owes (L | iabilities) |
|----------------------------|------------|------------------------------------|-------------|
| Savings account | \$275.00 | Owed to Dad for computer | \$500.00 |
| Clothes | \$600.00 | Owed to Ibrahim at school | \$20.00 |
| CDs | \$300.00 | Pledge to Read-a-thon | \$50.00 |
| Bicycle | \$500.00 | Total Liabilities | \$570.00 |
| Computer | \$1 000.00 | | |
| Total Assets | \$2 675.00 | Net Worth | \$2 105.00 |
| | | Total Liabilities and Net Worth | \$2 675.00 |

Figure 8-5 Michael
Abramov is a student in
Kingston, Ontario. This statement expresses the financial
value of his possessions, after
his debts are subtracted. It is his
net worth as of June 15, 2001.

Check Your Understanding

Knowledge/Understanding

- **1** What is a GAAP? Why is it important?
- **2** What is the fundamental accounting equation?

Thinking/Inquiry

3 A friend offers to let you invest in her company. She shows you a sales order book listing all the orders for her products. What financial information does her sales order book not tell you? Why do you need this information in order to make a decision?

Communication

- **4** Assume that you are a business advice columnist. You have received emails asking for advice on how the generally accepted accounting principles apply to the following situations. In each reply, identify the generally accepted accounting principle that governs the business situation.
 - Help! I own Unique China and Gifts in Barrie. I recently attended an
 estate auction. I found two boxes of great antique china. No one else at
 the auction knew their value, so I got them for \$20! Why won't my
 accountant enter them in my books at \$1200 when I know that I will
 probably find a client who will pay that much? Baffled in Barrie

Skills Appendix

problem solving

- Hi, I'm Toula Karalambos. I own Toula's Blossoms Flower Shoppe in Pembroke. I got a great deal on a flowering tree for my apartment's sun parlour when I attended the Tropics North exhibition hosted by a supplier. That was a business event. So is this a business transaction? I'm not sure. – Puzzled in Pembroke
- Hey, I started my part-time snow ploughing business on October 1, but that turned out to be a big mistake. The year was unusually warm so no snow fell until December 15. Why won't my accountant agree to ignore the ten weeks when there was no snow? If I could get her to agree to move the date, my business would look a lot more profitable to the bank. – Mystified in Meaford

Application

5 Develop a personal balance sheet for yourself. Include only assets (things you own) that belong to you personally. Include only liabilities (debts) that you are expected to pay personally. Identify your net worth. Remember to include your name and the date.

The Balance Sheet for a Business

Your personal balance sheet shows your financial net worth on a given day. In business, a **balance sheet** is a financial statement that shows the company's assets, liabilities, and net worth (owner's equity) on a given date. Sometimes the balance sheet is referred to as the *statement of financial position*. It is a snapshot of a company's financial affairs at a single point in time. It is usually prepared on the last day of the month. A business owner, or other interested person, could compare the balance sheet with those of the previous months to determine whether the organization's assets or liabilities are growing.

A balance sheet is also prepared at the end of the financial year. That balance sheet can be compared with the balance sheets of previous years. Figure 8-6 shows a year-end balance sheet for a business, Fast Forward Computer Repair Services, a company owned by sole proprietor Chris Alexanderssen, who repairs home computers in her basement in Cornwall, Ontario.

Fast Forward Computer Repair Services Balance Sheet December 31, 2000

| Assets | | Liabilities | |
|---------------------|-----------|-----------------------------------|----------------------|
| Cash | \$ 7 400 | Accounts payable | \$ 1100 |
| Canada Savings Bond | 1 000 | Loan payable | 5 100 |
| Supplies | 3 600 | Total liabilities | 6 200 |
| Office funiture | 2 000 | | |
| Equipment | 7 000 | Owner's Equity | |
| Motor vehicle | 20 000 | C. Alexanderssen, Capital | <u>34 800</u> |
| Total assets | \$ 41 000 | Total Liabilities and Owner's Equ | ity <u>\$ 41 000</u> |

Figure 8-6 Like all balance sheets, Fast Forward's sheet lists the types and dollar amounts of assets and liabilities, and the owner's equity as of a specific date. Recall that in the fundamental accounting equation, assets = liability + owner's equity.

Assets

Assets are anything the company owns that has a dollar value. The purpose of assets is to earn income for the company. Studying Figure 8-6, note the assets Fast Forward owns: Cash, Canada Savings Bond, Supplies, Office furniture, Equipment, and Motor vehicle. Each has a dollar value and therefore all are considered assets of Fast Forward.

For convenience, assets are subdivided into several categories, as follows:

Current Assets are cash or any asset that can quickly be turned into cash, usually within a year. Cash includes cheques. It also includes the Canada Savings Bond because the bond can be cashed within the year.

Accounts receivable is the most important current asset of many companies. Accounts receivable is money for which a company has billed its customers, but has not yet received. Accounting rules require the company to assume that this sum will be paid. Therefore, accounts receivable is treated as an asset, even though the company has not yet received the cheques.

Then why do you not see Accounts receivable in Figure 8-6? When Chris Alexanderssen started Fast Forward, she marketed mainly to private individuals. She insisted on customers paying her by cash or cheque when their computers were repaired. Therefore, the balance sheet for 2000 shows no Accounts Receivable.

In the summer of 2001, however, Fast Forward started servicing small businesses. It began billing customers, using *invoices*. These invoices listed the services Fast Forward had provided, requesting that the customer pay the agreed amount within 30 days. Therefore, the balance sheet for 2001 shows an asset called Accounts Receivable, right under cash. See Figure 8-7 on the following page.

Fast Forward Computer Repair Services Balance Sheet December 31, 2001

Figure 8-7 Fast Forward keeps detailed records of accounts receivable—the money that customers owe to the business. But only the total amount appears on the balance sheet.

| _ | | |
|---------------------|-----------|--|
| Assets | | Liabilities |
| 000Cash | \$ 7 400 | Accounts payable \$ 3 100 |
| Accounts receivable | 16 000 | Loan payable 5 100 |
| Canada Savings Bond | 1 000 | Total liabilities 8 200 |
| Supplies | 6 600 | |
| Office furniture | 3 000 | |
| Equipment | 6 000 | Owner's Equity |
| Motor vehicle | 14 000 | C. Alexanderssen, Capital 45 800 |
| Total assets | \$ 54 000 | Total Liabilities and Owner's Equity \$ 54 000 |

Liabilities

Liabilities are debts owed by an organization or person to another organization or person. The most common liability is *accounts payable*. **Accounts payable** is the money that the business owes to other businesses that supply it with services.

Fast Forward keeps detailed accounting records of the money owed to suppliers. But, just as you observed for accounts receivable, these individual accounts payable records do not appear on the balance sheet. Only the total amount owed to all creditors of a certain type is listed on the balance sheet.

Liabilities, like assets, are divided into different types.

Current liabilities. Accounts payable is called a current liability, which means that it must be paid within a year.

Web Connect

http://www.mcgrawhill.ca/links/exploringbiz

The financial statements of publicily traded Canadian companies are available through the System for Electronic Document Analysis and Retrieval (SEDAR). Identify a company that has been making news headlines recently and find its financial statements. www.sedar.com

Long-term liabilities. A debt or portion of a debt that does not have to be paid within a year is a long-term liability. When Chris Alexanderssen started Fast Forward in January 2000, her brother gave her a loan of \$5100, telling her that she did not have to pay him back that sum for five years. Therefore, she can treat the loan as a long-term liability.

Owner's Equity

Owner's equity is the amount of money the owner invested when starting the business, plus any accumulated profits (or minus any accumulated

losses and money the owner takes out to live on (drawings)). If you recall the accounting equation, owner's equity is what is left over after the liabilities have been deducted from assets. For example, in 2001, Fast Forward had \$54 000 in assets and \$8 200 in liabilities. Therefore, it had equity, or net assets, of \$45 800. How does that compare with its owner's equity in 2000 (Figure 8-6)?

You can learn a number of things about Chris Alexanderssen's business by studying the balance sheets. You know what type of assets the business owns and how much it owes, short and long-term. But there are some things you cannot discover. For example, can you conclude that because the owner's equity has increased, the business is a good one to own? Remember, the business exists to earn income for its owner. How much income did Chris Alexanderssen take out of the business to live on? The balance sheet in Figure 8-7 does not tell you that. It tells you that the business grew in owner's equity by \$11 000 (from \$34 800 to \$45 800). But assume Chris took no money out of the business to live on, but rather worked at a job during the day in order to support herself? In that case, although the business has increased in value, it is not yet very successful. To tell us how profitable the business is to its owner we need another kind of statement: the income statement. The next section deals with the income statement.

Biz. Bites

If the organization is a corporation, instead of "owner's equity," you will see "shareholders' equity" on the balance sheet. The shareholders own the company. Their equity includes common stock and retained earnings.

Check Your Understanding

Knowledge/Understanding

- 1 Under what circumstances would Accounts Receivable not appear on a balance sheet?
- 2 What does Cash mean on a balance sheet? Is Cash a Liability or an Asset?

Thinking/Inquiry

3 The balance sheet can tell us a good deal about a business. What can it tell us? What does it not tell us?

Communication

4 Sarkus Markarian owns a small building supply firm. He has asked you to explain to him whether the following items should be on his balance sheet. Provide an oral explanation, stating whether the item is an asset, a liability, or not part of the business.

Skills Appendix

oral presentation

- Stock of sand, cement, bricks, valued at \$30 000
- Sarkus's pet dog Snap (his presence often prevents theft of materials)
- \$2 250 owing from a customer for work completed
- Cash in hand, \$1 400
- \$2 500 owing to Aunt Anna, who says that Sarkus need not repay her for four years
- Ticket for charity draw given to Sarkus by a grateful customer

Application

- **5** If assets are \$15 000 and liabilities are \$3 475, what is the owner's equity?
- 6 If owner's equity is \$52 900 and assets are \$100 000, what are the liabilities?
- 7 If liabilities are \$33 782 and owner's equity is \$17 619, what are the assets?

The Purpose of the Income Statement

The **income statement** is the financial statement that reports a business's income and expenses for a fiscal period. A fiscal period is a period of time over which the earnings of a business can be measured. It tells you the company's profit or loss during that period. It is sometimes called the *profit and loss statement*, the *statement of income and expenses*, or the *statement of earnings*. Commonly chosen fiscal periods for the income statement are a month, a quarter, or a year. An annual income statement is required for income tax purposes.

Income (sometimes called revenue) can be earned by the business from a variety of sources, including sale of goods, services, rent, fees, interest payments on savings or bonds, royalty payments, or dividends from stock held. For a not-for-profit organization, government grants and private donations may be the main sources of income.

Expenses are the money the business has spent in order to produce income. The most common expenses include employees' salaries and benefits, rent, daily operating costs, and the cost of supplies used to generate sales or service fees.

What is the difference between expenses and liabilities? The main difference is this: Expenses have already been paid. Liabilities have not. Expenses appear on the income statement because they must be subtracted from the income earned during a given period, in order to get a

Biz.Bites

A quarter is three consecutive months, January–March, April–June, July–September, and October–December. Businesses commonly report their "quarterly" earnings using these time periods.

true picture of a business's profits. Liabilities appear on the balance sheet because they are a claim by creditors against the value of the business itself until they are paid.

The income statement helps to answer the question that was not answered directly by the balance sheet in Figure 8-7. How profitable is the business to its owner? Figure 8-8 shows a simplified income statement for Fast Forward.

Fast Forward Income Statement For Year Ended December 31, 2001

| Income Computer repair income Interest income (Canada Savings Bond) Total Income | \$ 58 940.53 \$ 35.00 | \$ 58 975.53 |
|--|--------------------------|--------------|
| Expenses | | |
| Advertising expense | \$ 3 024.75 | |
| Bank charges | \$ 234.25 | |
| Conference and trade show expense | \$ 2 135.00 | |
| Delivery expense | \$ 3 018.63 | |
| Equipment maintenance | \$ 487.23 \$ 301.87 | |
| Maintenance expense | \$ 301.87 | |
| Motor vehicle operating expense | \$ 6 087.23 | |
| Professional association membership | \$ 200.00 \$ 2 927.31 | |
| Supplies expense | \$ 2 927.31 | |
| Telephone | \$ 1 523.23 | |
| Total Expenses | | \$ 19 939.50 |
| Net Income | | \$ 39 036.03 |

Figure 8-8 The income statement, like the balance sheet, gives a total for each category. Detailed documents and accounting records support these figures.

What the Income Statement Tells You

As you can see, the net income of the business is the total income minus the total expenses. It looks as though Fast Forward provided a reasonable income for Chris during this period, considering that the business is only two years old. She can take out enough income to live on (\$28 036.03) and still leave \$11 000 in the business to help it grow. The income she takes out is called *drawings*.

Notice the type and amount of Fast Forward's expenses. You can learn important things about a business by studying its income statement's

expenses. For example, notice how much Fast Forward spends on delivery expense. Fast Forward's delivery expense is high because Chris frequently uses expensive "rush order" services. Perhaps if she forecast her need for replacement parts for clients' computers more accurately, she could economize on delivery expense.

Income statements can help forecast the future of a business. Notice the item called "Maintenance expense." Chris assigns a portion of her household expenses to her business. That is because she works from her own basement. She can operate the business much more cheaply that way. Her income statement tells you that her business is profitable mainly because she has kept her expenses down. But if she decided to move her business downtown, she would face a great increase in her expenses, including office rent and business taxes.

Figure 8-9 shows what might have happened if she had decided to move to a fashionable business centre in 2001, her second year in business. Assume that she did the same amount of business.

Fast Forward Income Statement For Year Ended December 31, 2001

| | Total |
|-----------------------------|------------------------|
| Figure 8-9 Here | Expe |
| what would happen if Fast | Adver |
| Forward rented a luxury | Bank |
| office in the year 2001. | Confe |
| The company is showing a | Delive |
| net loss for the year, dis- | Equip Motor |
| played as the amount in | Office |
| brackets. Fast Forward | Profe |
| cannot afford a fashion- | Suppl |
| able office at its current | Telepl Total |
| level of business. | Net I |

| Income Computer repair income Interest income (Canada Savings Bond) Total Income | \$ 58 940.53 \$ 35.00 | \$ 58 975.53 |
|--|--------------------------|--------------|
| Expenses | | |
| Advertising expense | \$ 3 024.75 | |
| Bank charges | \$ 234.25 | |
| Conference and trade show expense | \$ 2 135.00 | |
| Delivery expense | \$ 3 018.63 | |
| Equipment maintenance | \$ 487.23 | |
| Motor Vehicle expense | \$ 6 087.23 | |
| Office expense | \$ 40 301.87 | |
| Professional association membership | \$ 200.00 | |
| Supplies expense | \$ 2 927.31 | |
| Telephone | \$ 1 523.23 | |
| Total Expenses | | \$ 59 939.50 |
| Net Income | | (\$ 963.97) |
| | | |

The income statement updates the balance sheet. The net income Chris leaves in the business (Figure 8-8) will increase the assets and the owner's equity on the balance sheet at the same time. In the case of net loss (Figure 8-9), the net loss will decrease both the assets and the owner's equity. In either case, the balance sheet will still be in balance.

Analyzing a Trend

Marie-Celeste's hair salon, The Hair Port, had a busy April. The students' council of a nearby high school held a big graduation dance and other social events as well. Many students who attended sported very flashy hairstyles that cost an average of \$50. When she tallied up the receipts on Saturday night, she found that the net income for the month of April 2001 was \$7 750 (income of \$12 850 minus expenses of \$5100). That's not a bad profit for one month. Would you advise Marie-Celeste to expand her business based on that profit?

Chances are, you will want to know first what her profits are like in the summer, when the school is closed and no dances are held. Marie-Celeste must pay her rent, her business taxes, and her two employees whether she gets business or not. In July 2001, she took in only \$5 000 but she still had to spend \$4610 for a profit of only \$390. Does this mean her business is failing? Should she close her salon?

Like most business people, Marie-Celeste knows that income goes up and down from month to month, but many expenses are fixed. Before making decisions, she assesses her financial results over longer periods of time than one year. Figure 8-10, for example, shows the five-year trend of Marie-Celeste's business. A trend is a business pattern over time. Based on what you see here, do you think she should add another two salon chairs and hire a part-time person?

Check Your Understanding

Knowledge/Understanding

- 1 Identify four common sources of income for a business.
- **2** Explain the difference between expenses and liabilities.

Biz.Bites

The Industrial Revolution in the 19th century created a need for accounting methods that could handle the information needs of mass production in factories. Owners of the companies realized that no one person knew everything that was going on from day to day. Therefore accounting and financial statements became very important.

| Hair Port Net Income for the Year | | |
|-----------------------------------|-----------|--|
| 1997 | \$37 001 | |
| 1998 | \$38 237 | |
| 1999 | \$27 093* | |
| 2000 | \$39 344 | |

^{*} The school was closed from January through March due to a gas leak.

\$40 272

2001

Figure 8-10 Users of financial statements pay attention to the notes at the bottom of the statement. They usually contain important information. What does the note at the bottom of Figure 8-10, in relation to the figures, add to your understanding of Marie-Celeste's business?

Thinking/Inquiry

3 Based on what you have learned so far, would Fast Forward gain any benefits from operating from an office rather than the owner's basement? What benefits?

Communication

4 Marie-Celeste Camero, owner of the Hair Port has expressed the view that "The business has been growing steadily every year except for the year of the gas leak. Really, I should get about \$20 000 in financing and expand the business!" Draw a line graph of The Hair Port's income trend over five years, plotting the net income against the year (Figure 8-10). Assume an average inflation rate of 3% per year. How much has the business grown when inflation is factored in? Write a memo to Marie-Celeste Camero to accompany the graph, explaining what it shows. Should Marie-Celeste go into debt to expand the size of her salon, on the grounds that her income is increasing? Explain your opinion.

Application

6 Calculate your personal income statement for last month. Use the heading format shown in Figure 8-8. Under Income, list the money you received by sources of income (for example, allowance, babysitting, chores, part-time job, etc.) Under Expenses, list what you paid out of that sum by type of expense (for example, donations, gifts to others, snacks, transit tickets). Estimate amounts where necessary. What is your "net income" or "net loss"?

How Financial Statements Are Used

As you can see from what you have learned in this chapter, financial statements provide a great deal of information about a business. One thing that they provide is an accurate picture of how well—or poorly—a business earns income for its owners. As a result, the statements of businesses, whether large or small, are studied carefully by four main types of users: business owners and managers, investors, lenders, and government. Each group is looking for different things.

Skills Appendix

problem solving

Career Connect Actuary

Should young people pay higher car insurance rates? Should smokers pay higher life insurance rates? Is there a real difference in injury or sickness, or are these just unfair stereotypes?

Finding out the answers to questions like these is actually a job. The professional who looks for answers is called an actuary.

An actuary uses the mathematical theories of statistics and probability, current trends, and the principles of finance to predict the likelihood of illness, accidents, and catastrophes. Actuaries also formulate strategies for companies and governments to deal with these events.

For example, drivers under 25 suffer more collisions than older drivers because they have less experience. Smokers get more illnesses at an earlier age than non-smokers. These are facts, not stereotypes, so actuaries must set a higher price for insurance. But the price must still be fair. The actuary considers mortality rates, illness, injury, disability, and property loss to arrive at a fair price.

Actuaries calculate large, public risks as well as personal risks. Over 500 Canadian companies,

not-for-profit corporations, and governments employ actuaries. These organizations include railway companies, mining companies, workers' compensation boards, pension boards, investment firms, the Canadian Wheat Board, and Canada Customs and Revenue Agency.

All these different organizations have one thing in common: They need to know how to deal with changes or crises that are foreseeable but not preventable. For example, when 329 people died in the 1985 Air India bombing, an actuary was hired to calculate the lost future earnings of the victims, to compensate their relatives in court.

Becoming an actuary requires not only good math skills but the ability to understand a wide range of medical, legal, environment, and other issues. Actuaries continue to upgrade their knowledge and take exams long after they leave university. However, the good news is that actuarial science is one of the best-rated careers in North America. Actuaries often hold senior management positions in the firms that rely on their advice.

ACTIVITIES

- 1 What do all the organizations that hire actuaries have in common?
- 2 What questions might a railway company ask an actuary to research?
- 3 During the 20th century, Canadian life expectancy increased from 61 for women and 59 for men in 1920-22 to 81 for women and 75 for men in 1990-92 (see Figure 9-16). With a partner, brainstorm questions that the following types of organizations might ask actuaries about how this trend affects them: (a) Life insurance (b) Government health insurance (c) Government pension plan (d) Private pension plan (e) Workers' compensation board (f) Travel insurance

Biz.Bites

Auditing is the examination of the financial data, accounting records, business documents, and other documents to determine the accuracy of an organization's financial statements. An independent accountant usually conducts an audit.

Business Owners and Managers

Business owners and managers need accurate information to make decisions for the business. They might ask

- Is our income high enough? Are we charging enough for our goods or services?
- Should we add a line of business—sales, perhaps, as well as service?
- Are our expenses reasonable? Can any be reduced?

Chris Alexanderssen, for example, decided to market to small business as well as to private individuals. What difference did that decision make to the growth of her company? Compare Figures 8-6 and 8-7. Was it a wise decision? The figures on the balance sheets show whether the company grew as a result. She also spent \$6087.23 on the operating costs of her company van in 2001 (see Figure 8-8). Would a different model cost significantly less to operate? The figures on the income statement provide a basis for research when she must buy a new van.

By examining the balance sheet and the income statement from one fiscal period to the next, owners and managers can compare company performance, and note the changes that have occurred. They can respond to trends. For example, if expenses have risen but prices have not, income will be lower. If the company cannot reduce its expenses, it may have to raise prices.

Comparing statements from year to year can also identify situations that are not really a trend. The Hair Port experienced a business problem in 1999 (see Figure 8-10, note), but it was clearly not a trend.

Investors

Investors need financial statements as much as owners do, perhaps more. For example, Marie-Celeste works in her business and knows when the busy times can be expected. Because she has set her prices carefully, she knows that when the salon is busy, the business is earning a good income. Her uncle Emile, however, is in a different position. He is considering investing some retirement money by becoming a partner in her business, but he knows nothing about hairdressing. He would therefore be a "silent partner," providing only capital. He believes that The Hair Port is a good business opportunity because the school board has decided to increase the high school's enrollment by 300. His investment would enable The Hair Port to add more chairs and staff. But is

the business profitable now? If not, he might lose his money by investing in it. Financial statements can answer his questions.

Lenders

If Uncle Emile was not able to invest in Marie-Celeste's business, she might try to get a loan from a bank in order to expand. The bank manager will then ask to see her financial statements. Banks and other lenders need to know that they will be repaid by a business that owes them money. The income statement will show a lender if a business is producing enough income to pay the debt. The balance sheet shows lenders how much the business owes others and whether any assets could be sold, if necessary, to pay the debt.

Government

Much of the financial information prepared by a business is for income tax purposes. All individuals and businesses, with the exception of non-profit organizations, pay income taxes on their earnings. The government checks an organization's financial statements to make sure that all income has been reported and that all expenses claimed were allowable. In addition, the financial statements show the government what the business owns and owes, because these items affect the amount of income tax the business pays.

The four groups listed above seek accurate, specific information to help them make decisions. Large organizations have accounting departments to ensure that information is accurate. By contrast, small business owners sometimes have a hard time learning to prepare financial statements themselves. However, computer accounting programs, which you will learn about in the next section, can assist small businesses as well as large ones to ensure that information is accurate.

Computers and Accounting

Preparing financial statements became much quicker and easier with the widespread introduction of computer technology.



Figure 8-11 Many accounting programs are aimed at small business. How is this Web page designed to make accounting look easy if you use the advertised system?

One advantage of computer accounting is that it reduces errors, mainly in two ways:

- Computers do not make arithmetic errors, which is a common cause of the accounts being out of balance in a manual system.
- A computer accounting program will not permit the user to enter a transaction that puts the fundamental accounting equation out of balance. For example, if Marie-Celeste adds \$673.71 to her Supplies account, her program will prompt her to either deduct the same amount from the Cash (Asset) account if she paid by cash or cheque, or add to the Liabilities account if she bought on credit. The software program will insist on balancing the accounting equation before accepting the transaction.

Computer accounting systems do not prevent every possible mistake. Marie Celeste might accidentally place hairdressing supplies in the Equipment account instead of the Supplies account. The software might accept this because the accounting equation will still balance as long as payment is recorded in the correct way. However, that does not mean that nothing is wrong. The picture of the business's assets is now inaccurate. A mistake like this will most likely be discovered when the financial statements are being prepared at the end of the year. Marie-Celeste will realize when she studies her assets on the balance sheet that she did not buy a new piece of equipment for \$673.71. A search through the paid invoices will reveal what the \$673.71 really paid for. Then the accounts will be adjusted correctly.

Another advantage of computer accounting systems is that they can provide immediate accounting information. For example,

when all the transactions for a fiscal period are entered, the program can automatically print out the income statement and balance sheet. Some programs also enable the user to automatically reconcile a bank account if access to the account is available via the Internet. Others automate tax preparation. Many programs allow the user to construct pie charts or other graphics that illustrate business performance or trends.

Web Connect

http://www.mcgrawhill.ca/links/exploringbiz

Go to the sites of accounting software companies whose products are commonly used in small business. Identify features of business record-keeping and accounting that the system automates. Identify ways in which each site's material makes accounting look easier if you use the advertised software system.

Specialized financial management software designed for specific types of businesses, for example, travel agencies, trucking companies, or restaurants, enable a company to keep its accounting records efficiently and effectively. However, general programs for all types of small business (see Figure 8-11) also have modules that can be customized, depending on the type of business.

This is an advantage for keeping records. For example, The Hair Port does not charge its customers for hairstyling supplies. The customer is charged a flat fee that includes the use of supplies. By contrast, Fast Forward orders parts for customers' computers and lists each installed part on the invoice at its cost price. Chris's labour is charged separately from parts. Because these two businesses use different pricing practices, they might choose to customize accounting software in different ways. However, the fundamental accounting equation remains the same for both businesses.

Some computer accounting functions may be critical to a particular business and others may just be extras. With accounting software, as with every other business purchase, the user must decide what functions are needed for the purpose of providing accurate accounting records.



"The business-recovery plan from our accountants - it just says make the sign bigger."

Figure 8-12 Accounting firms become very knowledgeable about the financial affairs of businesses that are their clients. As a result, they are often asked for advice on improving business performance. What do you think of the accounting firm's advice in this case?

Check Your Understanding

Skills Appendix

critical thinking

Skills Appendix

writing reports

Knowledge/Understanding

- 1 Name the four groups that seek information from financial statements.
- **2** Give an example of a mistake that computer accounting would not prevent. How might such a mistake be discovered?

Thinking/Inquiry

- **3** Would Uncle Emile be wise to become a partner in Marie Celeste's business, based on what you have learned?
- 4 If Uncle Emile became a partner in Marie Celeste's business, would his investment be recorded as part of the business's Liabilities or its Equity? Which account would increase if Marie Celeste borrowed expansion money from the bank instead? Which Asset account would increase in either case?

Communication

5 "Accounting principles are a waste of time. Now that computers do all the work, who needs to know the principles?" Roz declared. Based on what you have learned in this chapter, write a paragraph explaining how knowledge of accounting principles helps us to interpret business success and failure.

Application

6 Place your personel balance sheet and income statement in a spreadsheet and use the formulas to calculate them correctly.

Chapter Review

Points to Remember

- Accounting is the system used by an organization to record all the money that comes in and goes out.
- Financial statements are formal documents that use a standard accounting format to provide the key information about a company's financial position.
- The generally accepted accounting principles or GAAPs ensure that financial information is presented in a standard form.
- Assets are what a business owns; liabilities are what it owes.
- A balance sheet reports a business's assets, liabilities, and owner's equity.
- An income statement reports how much a business has earned during a fiscal period.
- Fiscal periods are reporting periods of an equal length that are reasonable for the type of business.
- An annual income statement is required for income tax purposes.
- Owners, managers, investors, lenders, and government need financial statements to understand a business's financial picture.
- Computers assist in preparing financial statements by automating the work and making accurate arithmetic easy.

Activities

Knowledge/Understanding

- **1** Describe the contribution that accounting information can make to business success.
- **2** Explain why the generally accepted accounting principles enable people who do not work in a business to understand its basic financial position.
- **3** Give the three categories of financial information on a balance sheet.
- **4** What is the relationship between the balance sheet and the income statement?

- **5** Why is it important to analyze a trend in the financial statements?
- **6** Name four groups who use financial statements and explain why each one seeks information.
- **7** Does customizing an accounting software program change the fundamental accounting equation?

Thinking/Inquiry

Skills Appendix

critical thinking

- **1** Why do business organizations depend on the fundamental accounting equation to understand their financial transactions? Why isn't it enough just to keep a record of all transactions?
- 2 The list below includes some names of accounts of a company, Rush Rush Delivery Service. Some are fixed assets, some are depreciable assets, and some are current assets. Some items are not assets at all. Some do not even belong on a balance sheet. List the items that are assets, and state which kind. If items are appropriate entries for a balance sheet, state what kind of entries they are.
 - Business building
 - · Cash at bank
 - · Cash in hand
 - Membership fee, Downtown Business Association
 - Telephone expense
 - Creditors
 - Debtors
 - Fixtures and fittings
 - · Office machines
 - Hydro bill
 - Rent from business tenant
 - Loan from Mary
 - Mortgage
 - Motor vehicles
 - Office supplies
 - Donation from the business to the United Way
 - Canada Savings Bond

Communication

1 Prepare to debate one side of the following proposition: "Business is really about imagination. Paying too much attention to accounting data can stifle a good idea." Use any examples you can find in the textbook or from other sources to strengthen your arguments.

Application

- 1 Assume you have \$200 to lend. Three students have approached you separately. Each wants to borrow the money to help start a summer lawn mowing business. The money would enable one of the students to add a lawnmower to the business and hire another student to help. Here is the basic information for each student:
 - a) Jonas's Lawn Care: Assets: Cash \$100, Supplies \$57.80, Lawnmower \$200, Bubblejet (for printing/designing flyers) \$200. Liabilities—short term: \$57.80. Owner's Equity: ?
 - b) Shiraz's Lawn Service: Assets: Cash \$1000, Bricks \$270.00, Supplies \$12.80, Lawnmower \$317.45. Liabilities—long term: \$317.45. Owner's Equity: ?
 - c) Liam's Lawns: Assets: Cash \$50, Flyers \$75.02, Rake \$10. Liabilities \$75.02 (to Speedy Flyers). Owner's Equity: ? *Note:* Can borrow neighbour's lawnmower, but only sometimes.

Construct a simple balance sheet for each of the students, showing the owner's equity. Studying the balance sheets, explain which of the students you would lend the money to and why. Assume that all three live in neighbourhoods where lawns are plentiful.