

3

Income Statements (P&Ls)

INSIDE THIS CHAPTER

- The Importance of Income Statements
- The Income Statement Format
- Reading the Income Statement



CHAPTER LEARNING OBJECTIVES

After completing this chapter, you should be able to:

- Explain the purpose of an income statement.
- Identify the three major types of financial information included in an income statement.
- Identify operating costs as controllable, noncontrollable, fixed, variable, or semivariable.
- Explain how managers read and analyze an income statement.

KEY TERMS

accounting period, p. 58	fixed costs, p. 67	noncontrollable costs, p. 66
beverage cost percentage, p. 64	food cost percentage, p. 64	payment terms, p. 57
budget, p. 70	gross profit, p. 64	prime cost, p. 65
controllable costs, p. 66	income statement, p. 54	profit and loss (P&L) report, p. 54
cost of sales, p. 63	investor, p. 56	revenue source, p. 61
cost of sales percentage, p. 64	lender, p. 56	semivariable costs, p. 67
expense timing, p. 65	net earnings, p. 70	variable costs, p. 67

CASE STUDY

“Well, will we get our bonuses this month or not?” asked Marco, the assistant manager at the Waterfalls Grill. He was talking to Kayla, the establishment’s manager.

Both Marco and Kayla were paid a monthly salary. However, if their operation achieved monthly financial targets established by the owners, then Kayla and Marco qualified for bonuses. It was one day from the end of the month, and Marco was getting anxious.

“We’ll hit our targeted revenue numbers,” replied Kayla, “but I’m not sure about our costs. I hope we did well on those, but I just don’t know the totals on all of our expenses yet. So I can’t tell for sure if we’ll hit our profit target.”

1. Why do you think owners would tie their managers’ compensation to their ability to achieve targeted revenue, expense, and profit goals?
2. How frequently do you think managers should be informed about the financial performance of the operations they are managing? What will happen if they are not informed?

THE IMPORTANCE OF INCOME STATEMENTS

Owners and managers of restaurant and foodservice operations want to regularly assess the financial status of their business. They seek answers to three important questions:

- What is the amount of revenue being achieved?
- What is the level of expense being incurred?
- What is the amount of profit being achieved?

Managers of nonprofit restaurant and foodservice operations such as those in hospitals, nursing homes, schools, and colleges have the same concerns about their own financial performance.

Recall the profit formula from chapter 1:

$$\text{Revenue} - \text{Expense} = \text{Profit}$$

From the profit formula, it is easy to see that managers must be concerned about revenue and expense if they are concerned about their profit.

The **income statement** is the financial report that details an operation's revenue, expense, and profit for a specific time period. The income statement is commonly referred to by several other terms:

- The statement of income
- The statement of income and expense
- The profit and loss (P&L) statement
- The monthly (or annual) summary of income and expense

Of the several alternative terms for an income statement, the **profit and loss (P&L) report** is one of the most popular among nonaccountants. Many accountants prefer to use the terms *statement of income* or *income statement*. Each of these terms will be used in this book to refer to the same report.

The best way to see at a glance how an operation is performing financially is by reading and analyzing its income statement. An income statement provides a snapshot of the operation's financial activity for a specific period of time, such as one month.

Income statements also provide financial data used to create other financial documents. Additionally, managers use income statements to analyze trends and identify areas for improvement. In simple terms, an income statement is a compilation of sales and cost information for a specific period of time. It shows whether an operation has made or lost money during the time period covered by the report. When this information is known, better business decisions can be made by individuals and organizations. The financial

Manager's Memo

It is a mistake to think that nonprofit means there is no concern for revenue and expense levels. Managers of nonprofit facilities such as those in hospitals, schools, and military bases know that revenue must consistently exceed expenses. Otherwise, no money will be available for the replacement of worn-out equipment or the remodeling of kitchen or dining facilities.

Some operations are subsidized by the nonprofit entity managing the foodservice. Because of this, it might appear that managers of these operations do not have to face financial pressures. In fact, because nonprofit restaurant or foodservice operations often work on very tight budgets, controlling expenses and optimizing revenue are especially critical management tasks in these operations.

information presented in income statements is of great interest to four groups:

- Managers
- Owners
- Investors
- Others, including creditors, lenders, and employees

Managers

The best restaurant and foodservice managers are professionals who care very much about the quality of their work. When food is well prepared and properly served (*Exhibit 3.1*), customers are attracted and revenues typically increase. When food-production and service costs are well managed, expenses stay within the estimated levels. When revenues are optimized and costs are managed, profits are generated.

Income statements detail an operation's revenue, expense, and profit. Many managers see these financial statements as a score card for assessing their own managerial performance. The performances of managers, as measured by the financial results contained in the income statements of the operations or establishments they run, are often used to determine pay. In addition, bonuses and other financial incentives are often tied to the financial results of an operation as reported in its income statement.

In many companies, job promotions are based in large part on a manager's performance as measured by the income statement. Income statements are very important in the careers of professional restaurant or foodservice managers. The ability to read and analyze them is an essential skill.

Owners

While the managers of restaurant and foodservice operations are keenly interested in the financial performance of their businesses, the owners of the businesses are usually even more interested. Whether sole proprietors, partners, or corporations, business owners are interested in key pieces of information contained in the income statement:

- Did the business make a profit?
- Did the profits achieved by the business reach the targets that were established for them?
- Are profits increasing when compared to earlier time periods?
- Are profits decreasing when compared to earlier time periods?

Exhibit 3.1



THINK ABOUT IT ...

Managers who attain superior financial performance typically earn higher pay.

Would you pay more for managers who consistently achieve the financial goals that you set? What would happen if you did not pay them more?

THINK ABOUT IT ...

Before investing in an establishment, would you want to first know how profitable it was?

If you decided to make the investment, how often would you want to read a report on the profits?

**RESTAURANT TECHNOLOGY**

Many business owners use their Web sites to attract investors by posting financial information taken from their income statements. This is especially the case with businesses that are owned by corporations, because these organizations issue stock as a way of raising money to fund future growth.

When information taken from income statements is posted for all to see, it is especially important that the information is clear, accurate, and easy to read. The consistent use of GAAP (see chapter 1) is especially critical when using advanced technology communication devices for the posting of important financial information.

Owners are also interested in the revenue and expense portions of an income statement because these areas directly impact profits. If revenue levels do not reach their targets, it may be difficult or impossible to reach profit goals. Similarly, if expense levels exceed the targets established for costs, it may not be possible for the business to reach targeted profit levels.

Although the owner is the manager in some operations, in many others someone else manages the operation. When that is the case, income statements allow the owner to monitor the manager's performance on a regular basis without actually being in the operation.

Most, if not all, owners purchase and operate businesses with the intent of making a profit. In some cases, a business will not make a profit for a specific month or longer. Then the owners may have to supply additional money to keep the business operating until it is profitable. Income statements help owners estimate the amount of money they may be able to take out of a business from the profit it generates. Income statements can also help owners estimate the amount of money that may be needed by an unprofitable business to pay its bills until it is profitable enough to do so on its own.

Investors

In some restaurant and foodservice operations there are a number of investors. **Investors** supply money to a business. In most cases, investors supply the money to increase their own wealth. They want to receive more money than was initially invested in return for investing. Investors typically receive their money from the profits made by a business. Therefore they are keenly interested in the profits reported on the income statement.

Income statements provide information on profitability and operational efficiency. Investors want to see this information before they make their investments. For this reason many businesses prepare income statements not only annually, but on a monthly basis as well.

Others

Most investors actually invest with the hope that the money they supply to a business will be returned to them along with profits. **Lenders** supply money to a business with the legal requirement that the money, and any interest charged for it, be repaid on an agreed-upon schedule.

Lenders to restaurants and foodservice operations typically include banks, insurance companies, savings and loans, and credit unions. Other sources for borrowing often include friends or relatives. Regardless of the source of money, lenders who consider making a loan to a business will want to know if the loan can be repaid. Because the income statement shows the amount of revenue generated by a business minus the costs, readers of an income statement have a good idea of the remaining funds available for loan repayment.

If the information on an income statement shows large numbers of dollars available for loan repayment, lenders are more inclined to make loans to the business. If the income statement shows limited dollars available for loan repayment, lenders will be reluctant to make loans to the business.

Before a business has opened, it should develop a complete business plan. Lenders rely on the pro forma information in the operation's pre-opening business plan (see chapter 2) to help estimate the ability of the business to repay its loans on time. For that reason, pro forma forecasts of future income statements estimating revenue, expenses, and profits for a designated time period are an essential part of the financial plan.

In addition to having investors and lenders, most restaurant and foodservice operations will purchase products and services from suppliers that can extend credit to their business. For example, if an operation purchases food from a food supplier, it is common for the establishment to pay the invoice for the food delivered once or twice per month. During the period between when the food is delivered (*Exhibit 3.2*) and the food is paid for, the supplier has extended credit to the business. Before agreeing to extend credit to a business, the supplier will likely want to know a great deal about the ability of the business to pay its bills in a timely way.

Sharing income statements with potential creditors is one way for a business to establish its creditworthiness with its suppliers. When suppliers know a business is profitable, as demonstrated on its income statements, they are more inclined to extend credit. They are also more inclined to make payment terms as favorable as possible. **Payment terms** are the conditions under which a supplier will complete a sale. Typically, these terms specify the time period allowed to a business to pay the amounts due to the supplier.

Payment terms for those businesses that have not established creditworthiness may include payment in advance or payment on delivery. For those businesses that have used their income statements to help establish creditworthiness, the supplier may offer a deferred payment period of 30 days or even more.

Restaurant and foodservice suppliers will, in some cases, even vary the prices they charge managers for products and services. They base prices on their perceptions of a business's ability to pay its bills. For that reason, the income statement can provide valuable information that can actually help lower a business's costs.

While most operations do not share income statement information directly with their employees, they are directly affected by the information. This is because managers and owners make decisions about the amount of money available to pay employees, offer bonus programs, and provide employee benefits based on information contained in a P&L.

THINK ABOUT IT ...

Would you rather lend money to a business that was already open with a consistent history of profitable operation, or to a yet-to-be-open business with a business plan including forecasts of future profits? Why?

Exhibit 3.2



THE INCOME STATEMENT FORMAT

The income statement is formatted in a manner that exactly follows the profit formula:

$$\text{Revenue} - \text{Expense} = \text{Profit}$$

As a result, an income statement contains three major sections:

- Revenue
- Expense
- Profit

Remembering the order of information presented in an income statement is easy. When accountants prepare an income statement, they first list and add all revenue. They then list and subtract expenses from revenue to calculate profit. Income statements may be very brief or very detailed, but all follow the same basic format. The basic format of an income statement is presented in *Exhibit 3.3*.

Exhibit 3.3

BASIC INCOME STATEMENT FORMAT

	REVENUE
<i>Less (minus)</i>	EXPENSE
<i>Equals</i>	PROFIT

Note that *Exhibit 3.3* identifies what will be presented in the income statement. It is incomplete, however, because it does not address the time period from which the information was taken. To create an actual income statement, accountants must first determine the time period that the P&L will address.

Defining the Accounting Period

A P&L can provide summary financial details about an operation. However, the time period to be summarized must first be determined and clearly defined. The development of a P&L begins with the statement of the accounting period it addresses. An **accounting period** is any time period for which financial records are prepared. For example, an accounting period could consist of 12 months. Thus, a manager could create a P&L that summarizes revenue, expense, and profits achieved for the time period January 1 through December 31. The accounting period in this example is 1 year. However, any 12 consecutive months—for example, October 1 through September 30—is also an accounting period of 1 year. In fact, GAAP allows any 52-week consecutive period to be considered 1 year.

ANNUAL P&Ls

In nearly every case a restaurant or foodservice operation will want to prepare a P&L on at least an annual basis. This is because many business taxes are payable annually. Most often, taxes are based on achieved profit levels. As a result, the preparation and payment of personal or business taxes cannot be completed without information from the income statement. In addition to its use in the preparation of taxes, an annual P&L gives the establishment manager a summary of the overall performance in the previous 52 weeks.

To better understand the importance of an annual P&L, consider an establishment that operates in a busy ski resort area. The operation may be extremely busy and profitable during the ski season. In that time period, revenue will be extremely high. When the ski season ends for the year, however, the business may not experience the same revenue levels. By preparing an annual P&L the owners of this operation can assess how their business performed during its busiest and least busy times.

MONTHLY P&Ls

The main reason accountants prepare financial reports is so their readers can use them to make better business decisions. In most cases businesses prepare monthly P&Ls because the information contained in them is of critical importance to timely decision making (see *Exhibit 3.4*).

Knowing about the precise amount of revenue generated in a month helps managers address key operational questions:

- Did monthly revenue levels reach the levels predicted?
- Is revenue increasing when compared to prior accounting periods?
- Is revenue decreasing when compared to prior accounting periods?

In restaurant and foodservice operations serving alcohol, additional questions can be addressed:

- What was the amount of food revenue achieved?
- What was the amount of alcoholic beverage revenue achieved?
- What proportion of total revenue was contributed by food sales?
- What proportion of total revenue was contributed by alcohol sales?

Managers must know about their sales levels, but knowing about the costs of operating a business in a specific month also helps address key operational questions:

- How much was spent for food and beverages during this accounting period?
- How much was spent for labor during the period?
- How much was spent for all other expenses during the accounting period?
- What were the total monthly costs of operating the business?
- Did monthly expenses exceed estimated levels?
 - If so, in what specific areas did expenses exceed estimates?
 - If not, in what specific areas were expenses lower than expected?

THINK ABOUT IT ...

Food and beverage operations near ski areas or beaches are examples of businesses that experience wide fluctuations in monthly revenue.

What are other examples of operations that likely experience similar wide variations in monthly revenue?

Exhibit 3.4



Knowing revenue and expense is important, but knowing the amount of profit, or loss, achieved in an operation helps owners better understand and address key issues:

- What were the profits for this accounting period?
- What percentage of revenue did the profits represent?
- Did profits achieve estimated levels?
- Are profits increasing compared to prior accounting periods?
- Are profits decreasing compared to prior accounting periods?
- Are profits sufficient to allow the business to pay its bills as they come due, or must additional funds be acquired?
- How much, if any, money can be taken from the business for use by the owners of the business?

The answers to questions of these types can be addressed by both monthly and annual P&Ls. Preparing summary financial information on a monthly basis versus only on an annual basis gives owners and managers timelier and more detailed financial facts. In nearly all cases, this helps improve decision making.

Exhibit 3.5

GAS COSTS (MONTHLY P&L APPROACH)

Month	Monthly Cost	Daily Cost
February	\$2,800	\$100
March	3,100	100
April	3,000	100

P&Ls FOR OTHER ACCOUNTING PERIODS

Increasingly, some operations prefer to create income statements that address a 28-day period. Proponents cite the advantages of having equal four-week time periods from which to make decisions. To better understand the advantages, consider the manager who is concerned about costs related to the usage of natural gas for cooking in the kitchen. See *Exhibit 3.5* to review the manager’s findings.

From the monthly expense data it appears the cost of gas fluctuates. The cost of gas increased in March when compared to February costs; but April costs decreased when compared to March. Note that the daily cost of gas, however, did not change. The change in monthly cost reflects the fact that February has 28 days, while March has 31 and April has 30. Using 28-day accounting periods, the gas usage for each period would have been reported as \$2,800. This makes it easier to detect real changes in revenue or expenses, rather than changes that occur only because the lengths of months vary.

A second reason for increased popularity of the 28-day accounting period is related to the specific days in the week. Each 28-day accounting period has the same number of weekdays and weekend days, as well as the same number of Mondays, Tuesdays, Wednesdays, and so on. This can be important for those businesses that wish to compare P&L results from two accounting periods, but want to ensure that each has equal numbers of Friday and Saturday nights.

Some restaurant and foodservice managers prepare quarterly (three consecutive months) P&Ls. Others prepare weekly income statements and some even estimate P&L results on a daily basis. In most cases such rapid estimates lack accuracy. This is because they would not include the detailed expense-related information needed to produce a precise P&L using GAAP. They may, however, prove useful in some cases.

Regardless of the accounting period addressed by a P&L, that time period should be clearly stated near the top of the report. This helps the reader easily identify it before the document is reviewed.

Accounting for Revenue

After determining the accounting period to be addressed in an income statement, the revenue generated in that time period is identified. *Exhibit 3.6* is an example of an income statement prepared for Richter's Steak House, an establishment that serves both food and alcoholic beverages. Note that it is a monthly P&L and the time period it addresses is 4/1/2012 to 4/30/2012.

Recall that many restaurant and foodservice professionals may use the terms *income*, *revenue*, and *sales* interchangeably. Some even use the term *sales revenue*.

In *Exhibit 3.6* sales for the period are listed first, and they consist of \$80,000 in food sales and \$20,000 in beverage sales. These two figures are then added to yield total sales of \$100,000.

Sales:	
Food	\$ 80,000
Beverage	<u>20,000</u>
Total sales	\$100,000

In this operation two revenue sources are shown. A **revenue source** is a distinct area, for example a bar or dining room, in which sales are generated. A revenue source can also be the sales generated by a specific product, for example food or gift cards. In general, the more revenue sources identified on an income statement, the greater the detail provided about the business's sales production.

Exhibit 3.6

RICHTER'S STEAK HOUSE P&L FOR THE PERIOD: 4/1/12 TO 4/30/12

SALES	
Food	\$ 80,000
Beverage	20,000
Total Sales	\$100,000
COST OF SALES	
Food	\$ 32,000
Beverage	5,000
Total Cost of Sales	\$ 37,000
LABOR	
Management	6,000
Staff	20,000
Employee benefits	4,000
Total Labor	\$ 30,000
Prime Cost	\$ 67,000
Other Controllable Expenses:	
Legal/accounting	500
Music and entertainment	5,000
Marketing	250
Utility services	2,000
General and administrative	4,050
Repairs and maintenance	2,000
Total Other Controllable Expenses	\$ 13,800
Controllable Income	\$ 19,200
Noncontrollable Expenses:	
Rent	\$ 5,700
Depreciation	3,500
Licenses/permits	100
Leases	2,000
Total Noncontrollable Expenses	\$ 11,300
Operating Income	\$ 7,900
Interest expense	800
Other (income) expense	200
Income Before Income Taxes	\$ 6,900

Exhibit 3.7



In the restaurant and foodservice industry there are many commonly identified sales areas and revenue sources:

- Distinct dining areas (in operations with more than one dining area)
- Banquets
- Catering
- Drive-through
- Carryout
- Delivery
- Lounge or bar (*Exhibit 3.7*)
- Bakery
- Gift shop
- Gift certificates and gift cards
- Merchandise, such as T-shirts, caps, and souvenirs

The Uniform System of Accounts for Restaurants (USAR) provides a list of suggested revenue sources for use by managers preparing income statements. Those preparing income statements must list all of the revenue generated by each revenue source during the accounting period addressed by the P&L. They must also include all revenue sources.

Exhibit 3.8

DETAIL FROM RICHTER'S STEAK HOUSE P&L FOR THE PERIOD: 4/1/12 TO 4/30/12

Sales		Sales Percentage
Food	\$ 80,000	80%
Beverage	20,000	20
Total Sales	\$100,000	100%

PERCENTAGES

Some income statements list the percentage of revenue generated by each revenue source in addition to the source's monetary contribution. *Exhibit 3.8* shows the percentage of revenue generated by food sales and by beverage sales for the Richter's Steak House P&L.

To calculate the sales percentage of a revenue source the following formula is used:

$$\frac{\text{Sales contributed by revenue source}}{\text{Total sales}} = \text{Sales percentage}$$

For *Exhibit 3.8* the calculations are:

$$\frac{\$80,000}{\text{Food sales}} \div \frac{\$100,000}{\text{Total sales}} = \frac{80\%}{\text{Sales percentage}}$$

And

$$\frac{\$20,000}{\text{Beverage sales}} \div \frac{\$100,000}{\text{Total sales}} = \frac{20\%}{\text{Sales percentage}}$$

Note that the sum of the sales percentages for all revenue sources will always equal 100%. In this example:

$$\begin{array}{rcccl}
 80\% & + & 20\% & = & 100\% \\
 \text{Food sales} & & \text{Beverage sales} & & \text{Total sales}
 \end{array}$$

Managers are often interested in sales percentage figures because it helps them better understand the popularity of various sources from which their revenue is generated.

To illustrate, consider the manager whose operation offers delivery service. As a result, Delivered Meals is designated as a revenue source when the operation's income statement is prepared. In the first months of offering the service, the sales percentage for Delivered Meals was very low; less than 5 percent. However, it has increased each month. As the manager continually monitors the sales percentage for Delivered Meals he or she will have a better understanding of the proportion of sales that can be attributed directly to this new service.

Accounting for Expenses

Cost of sales is the industry term for the food and beverage product expense incurred in the generation of sales. For example, if an operation generated \$5,000 in food revenue and the amount of food products required to generate those sales was \$1,000, then the *cost* of the sales for food would be \$1,000.

As can be seen back in *Exhibit 3.6*, total cost of sales consists of the costs incurred for food (\$32,000) and for beverages (\$5,000). Total cost of sales is \$32,000 + \$5,000, or \$37,000.

Most managers are interested in knowing their food cost percentage and their beverage cost percentage, as well as their overall cost of sales percentage. *Exhibit 3.9* shows how the income statement would be prepared to provide such information.

Exhibit 3.9

DETAIL FROM RICHTER'S STEAK HOUSE P&L FOR THE PERIOD: 4/1/12 TO 4/30/12

Sales		Sales Percentage
Food	\$ 80,000	80%
Beverage	20,000	20
Total Sales	\$100,000	100%
Cost of Sales		Cost of Sales Percentage
Food	\$ 32,000	40%
Beverage	5,000	25
Total Cost of Sales	\$ 37,000	37%



MANAGER'S MATH

Ilze operates her own bakery. She sells breads, cakes, and cookies. Ilze has prepared her January income statement and wants to include the sales percentage generated by each of these three revenue sources.

Ilze's Bakery Sales: January This Year

Sales		Sales Percentage
Bread	\$36,000	_____ %
Cakes	18,000	_____
Cookies	6,000	_____
Total Sales		100%

1. What was the total amount of sales generated by Ilze's bakery in January?
2. What was the sales percentage contributed by bread sales?
3. What was the sales percentage contributed by cake sales?
4. What was the sales percentage contributed by cookie sales?

Answers: 1. \$60,000; 2. 60%; 3. 30%; 4. 10%

A **food cost percentage** is the proportion of food sales spent for food expense.

The formula for a food cost percentage is:

$$\text{Cost of sales (food)} \div \text{Food sales} = \text{Food cost percentage}$$

In this example:

$$\begin{array}{rcccl} \$32,000 & \div & \$80,000 & = & 40\% \\ \text{Cost of sales} & & \text{Food} & & \text{Food cost} \\ \text{(food)} & & \text{sales} & & \text{percentage} \end{array}$$

A **beverage cost percentage** is the proportion of beverage sales spent for beverage expense.

The formula for a beverage cost percentage is:

$$\text{Cost of sales (beverage)} \div \text{Beverage sales} = \text{Beverage cost percentage}$$

In this example:

$$\begin{array}{rcccl} \$5,000 & \div & \$20,000 & = & 25\% \\ \text{Cost of sales} & & \text{Beverage} & & \text{Beverage cost} \\ \text{(beverages)} & & \text{sales} & & \text{percentage} \end{array}$$

A **cost of sales percentage** is the proportion of total sales spent for the products used to create the sales.

The formula for a cost of sales percentage is:

$$\text{Total cost of sales} \div \text{Total sales} = \text{Cost of sales percentage}$$

In this example:

$$\begin{array}{rcccl} \$37,000 & \div & \$100,000 & = & 37\% \\ \text{Total cost} & & \text{Total} & & \text{Cost of sales} \\ \text{of sales} & & \text{sales} & & \text{percentage} \end{array}$$

Managers are interested in various cost of sales percentages. Cost of sales percentages help them better understand the efficiency with which products purchased generate sales. To illustrate, consider the manager whose operation has established a target food cost percentage of 35 percent. When the income statement is prepared, the manager discovers the food cost percentage actually achieved was 40 percent. In this situation the manager would want to determine why the operation's actual food cost percentage exceeds the cost target.

Some managers also list gross profit on the P&Ls they prepare. **Gross profit** is the amount of revenue remaining after the costs of food and beverages have been subtracted from sales. Using the numbers in *Exhibit 3.9*, gross profit from food would be \$48,000:

$$\begin{array}{rcccl} \$80,000 & - & \$32,000 & = & \$48,000 \\ \text{Food sales} & & \text{Cost of sales (food)} & & \text{Gross profit} \end{array}$$

THINK ABOUT IT . . .

Most managers calculate their food and beverage cost percentages separately. Why do you think they do so?

What information would they be lacking if they did not calculate these two cost percentages separately?

Gross profit from beverages would be \$15,000:

$$\begin{array}{rcl}
 \mathbf{\$20,000} & - & \mathbf{\$5,000} & = & \mathbf{\$15,000} \\
 \text{Beverage} & & \text{Cost of sales} & & \text{Gross} \\
 \text{sales} & & \text{(beverages)} & & \text{profit}
 \end{array}$$

Total gross profit would be \$63,000:

$$\begin{array}{rcl}
 \mathbf{\$100,000} & - & \mathbf{\$37,000} & = & \mathbf{\$63,000} \\
 \text{Total} & & \text{Total cost} & & \text{Gross} \\
 \text{sales} & & \text{of sales} & & \text{profit}
 \end{array}$$

Of course, restaurant and foodservice operations incur a large number of expenses in addition to food and beverage expenses. These are listed on the income statement after cost of sales.

Because labor costs are a very large expense in most operations, they are usually listed immediately after costs of sales. Management costs are listed first, followed by staff costs, then employee benefits. As shown previously in *Exhibit 3.6*, these labor costs are then summed to arrive at total labor costs.

Prime cost is the sum of food costs and labor costs. The USAR recommends that prime costs in an operation be listed as indicated in *Exhibit 3.6*.

On the Richter's Steak House P&L prime cost is calculated as:

$$\begin{array}{rcl}
 \mathbf{\$37,000} & + & \mathbf{\$30,000} & = & \mathbf{\$67,000} \\
 \text{Total cost} & & \text{Total} & & \text{Prime} \\
 \text{of sales} & & \text{labor} & & \text{cost}
 \end{array}$$

EXPENSE TIMING

To be accurate an income statement must list all of an operation's expenses.

Expense timing refers to the proper method of reporting those expenses. Those managers using the cash accounting method (see chapter 1) recognize and record business expenses as they are paid. But when using the accrual accounting method, expenses are matched with the revenues they have generated rather than with the time when the expenses are paid.

Expense timing is an important issue for most managers because most restaurants and foodservice operations use the accrual method of accounting. When using accrual accounting, some of an accountant's decisions about how to best record the time of expenses are easy. For example, if a case of lettuce is purchased and used in the same month, it is easy to see that the cost of the lettuce is an expense that should be recorded as paid in the month the lettuce was purchased and used. Similarly, costs such as salaries paid to managers in a specific month should be reported on that same month's income statement.



MANAGER'S MATH

A manager prepared the sales and the food and beverage expense portions of an income statement for last month.

Last Month

	Sales	Sales Percentage
Food	\$ 60,000	75%
Beverage	20,000	25
Total Sales	\$80,000	100%

	Cost of Sales	Cost of Sales Percentage
Food	\$ 20,000	%
Beverage	4,000	%
Total Cost of Sales	\$	%

1. What was the total cost of sales for this month?
2. What was the food cost percentage for this month?
3. What was the beverage cost percentage for this month?
4. What was total cost of sales percentage for this month?

(Answers: 1. \$24,000; 2. 33.3%; 3. 20.0%; 4. 30.0%)

In other cases, decisions about how to best record the time of expenses are complex. For example, assume that a manager receives an operation's utility bill on May 15 for the prior month of service. Should the bill be recorded as a utility expense for May or for April? To be most accurate, the bill might be recorded as an April expense because that is when the cost was actually incurred. Taking that approach, however, would delay the preparation of the operation's April income statement until the bill was received in May. The accuracy gained by such an approach would likely be more than offset by the disadvantages of waiting several weeks to receive the utility bill and prepare the P&L.

In this example, GAAP allow the manager to charge the April utility bill to May expense. Similarly, in April, the operation's March utility bill would be timed as an April expense. In all cases, those preparing income statements seek to time expenses as closely as possible to the period in which they generated revenue.

EXPENSE CLASSIFICATION

Costs can be categorized, or classified, in several different ways. Expense classification is used when preparing budgets (see chapter 4) and when preparing income statements. The foodservice industry classifies expenses as controllable, noncontrollable, fixed, variable, and semivariable costs.

One main reason for classifying costs is to differentiate between those costs that management can control and those over which management has little or no control. Identifying and understanding these different types of costs help managers better interpret cost-related information and make better financial decisions.

One of the most common methods of classifying expenses is to categorize them as either controllable costs or noncontrollable costs. These are exactly what their names imply. **Controllable costs** are those costs that management can directly control. **Noncontrollable costs** are those costs over which management has little or no control.

Food cost is an example of a controllable cost. Management can use standardized recipes or exercise standard procedures for portion sizes, and for pricing. For example, if the cost of chicken increases and no action is taken, the operation's food cost will increase. At this point, management can raise the selling price of all chicken entrées, reduce portion sizes, or eliminate chicken from the menu. By taking action, management seeks to exercise some *control* over the effect of the increased cost of chicken.

Another example of a controllable cost is labor cost. By changing the number of hours worked by employees and thus the amount they are paid, a manager can affect labor costs (see *Exhibit 3.10*). For example, suppose an

establishment's sales decline and no action is taken to reduce the amount spent for workers. Then worker-related cost as a percentage of sales will increase. By reducing the number of hours worked by employees, this percentage could be brought back to targeted levels.

It should be pointed out, however, that in exercising these options, management must always think about the impact on customers. If the selling price of chicken entrées is increased too much, or if too many server hours are removed from a work schedule, customers may respond negatively to the higher prices or the reduced service levels.

Rent is an example of a noncontrollable cost. Once a lease has been negotiated, and the monthly payment amount for it has been determined, management has no control over the cost of rent. Another example is license fees. Management has no control over the rate charged for liquor or other licenses.

In addition to being classified as either controllable or noncontrollable, costs can also be expressed as fixed, variable, or semivariable. This group of expense classifications is based on each cost's relationship to sales volume. In other words, does a cost increase or decrease as revenue increases or decreases?

Fixed costs remain the same regardless of sales volume. Insurance is an example of a fixed cost. After insurance policies have been negotiated, the cost remains the same throughout the term of the policy. For example, if the cost of insuring the business is \$1,000 per month, it will remain at \$1,000 every month. If the establishment has sales of \$10,000 one month, \$20,000 the next month, and \$15,000 the following month, then the insurance cost remains the same. It does not change when sales levels change.

Variable costs are those costs that go up and down as sales fluctuate, and do so in direct proportion. An example of a variable cost is food cost. As sales go up, more food is purchased to replenish supplies and as sales go down, less food is purchased. If adequate controls are in place and there is little waste or theft, the amount of food used is in direct proportion to sales.

Semivariable costs go up and down as sales fluctuate, but not in direct proportion. Semivariable costs are made up of both fixed costs and variable costs. An example of a semivariable cost is labor. Labor is composed of both management and staff costs.

Exhibit 3.10





MANAGER'S MATH

Managers calculate product cost percentages based on the revenue the products generate. Remember, for example, that a food cost percentage is calculated as follows:

Cost of sales: Food ÷ Food sales = Food cost percentage

Non-food and beverage product cost percentages are calculated based on *total* sales. These expense percentages are calculated as follows:

Expense ÷ Total sales = Expense percentage

Some managers list expense percentages on their income statements as well as the actual amount of the expense. Calculate the expense percentage for each cost listed. Then answer the questions that follow.

	Sales Amount	Expense	Expense Percentage
Food sales	\$15,000		
Beverage sales	<u>5,000</u>		
Total sales			
Cost of sales food		\$4,000	_____ %
Cost of sales beverages		1,375	_____
Marketing		150	_____
Rent		1,750	_____
Salaries and wages		3,500	_____
Utility services		300	_____
Insurance		125	_____

1. What was the operation's food cost percentage?
2. What was the operation's beverage cost percentage?
3. What was the highest cost controllable expense?
4. What was the highest cost fixed expense?
5. What was the highest percentage non-food or beverage controllable cost?

(Answers: 1. 26.7%; 2. 27.5%; 3. Cost of sales food; 4. Rent; 5. Salaries and wages)

Exhibit 3.11

AREAS OF OPERATING EXPENSE FROM RICHTER'S STEAK HOUSE P&L

Total cost of sales	\$37,000
Total labor	30,000
Total other controllable expenses	13,800
Total noncontrollable expenses	11,300
Interest expense	800
Other (income) expenses	200

Managers are normally paid a salary. Their salary remains the same regardless of the operation's sales volume. If the general manager, assistant manager, and chef are collectively paid \$200,000 in salaries per year, they will receive that amount regardless of whether the establishment brings in \$1,000,000 or \$1,300,000 in revenue per year. Thus, management's salary in this example is a fixed cost.

In most cases, however, staff members such as servers are paid an hourly wage. The workers are scheduled according to anticipated sales. As a result, the cost of hourly employees most often goes up as sales go up and goes down as sales go down. If proper scheduling is used, the cost will go up and down in direct proportion to sales levels. Overall labor cost is considered a semivariable cost because there is a fixed cost component, the management's salary, as well as a variable cost component, the hourly workers' wages.

In some cases managers can experience crossover when classifying costs. Variable and semivariable costs are usually controllable costs. Fixed costs are typically noncontrollable costs. For example, if an operation has a monthly lease payment that is negotiated at \$3,000 per month, the cost is fixed. It does not vary according to sales, neither increasing as sales go up nor decreasing as sales go down. It will always remain at \$3,000.

If, on the other hand, the lease is negotiated at 6 percent of sales, then rent is a variable cost. The dollar amount will go up as sales go up and down as sales go down. In yet other cases, a lease may call for a monthly payment of \$1,000 plus 3 percent of sales. Then rent is a semivariable cost. The \$1,000 is paid regardless of sales volume, making it a fixed cost. The variable part of the cost comes from the 3 percent of sales, which increases or decreases as sales go up or down.

GAAP allow accountants some flexibility in the expense classifications used to report information on an income statement. The P&L for Richter's Steak House shown earlier in the chapter (see *Exhibit 3.6*) classifies operating costs in six main areas, as detailed in *Exhibit 3.11*.

Recall from the P&L that the total sales were \$100,000. As shown in *Exhibit 3.11*, the sum of all reported expenses was \$93,100:

$$\begin{array}{rcccccccc}
 \$37,000 & + & \$30,000 & + & \$13,800 & + & \$11,300 & + & \$800 & + & \$200 & = & \$93,100 \\
 \text{Total} & & \text{Total} & & \text{Total other} & & \text{Total} & & \text{Interest} & & \text{Other} & & \text{Total} \\
 \text{cost of} & & \text{labor} & & \text{controllable} & & \text{noncontrollable} & & \text{expense} & & \text{(income)} & & \text{expenses} \\
 \text{sales} & & & & \text{expenses} & & \text{expenses} & & & & \text{expenses} & &
 \end{array}$$

As a result, the income before income taxes was \$6,900:

$$\begin{array}{rcccc}
 \$100,000 & - & \$93,100 & = & \$6,900 \\
 \text{Total sales} & & \text{Total expenses} & & \text{Income before income taxes}
 \end{array}$$

The Richter's Steak House P&L follows the USAR suggested format for income statements. Managers and owners can choose to use this format or other formats they find most helpful. In all cases, however, it is of the utmost importance that managers list all of the sales achieved, and all of the operating expenses incurred in their businesses for the accounting period indicated on the income statement.

Accounting for Profits

Managers also calculate their income before income taxes on the P&L. This amount, located at the bottom of the income statement, is also commonly referred to by managers as “profit” or “the bottom line.”

If sales are higher than operating costs, then the operation will have a positive income before income taxes. Conversely, if the total costs of operating the business for the accounting period were higher than total sales, then the business operated at a loss and will have a negative income before income taxes. This condition is also known as operating “in the red.” This terminology is due to the fact that accountants often print losses in red, or use some other special identifying technique, such as minus signs or brackets, to report the amount of negative income before income taxes, or loss, on an income statement. Profits earned in most businesses are subject to income and other taxes (see *Exhibit 3.12*).

Exhibit 3.12

TYPES OF TAXES

Taxes Due from the Operation

- **Income taxes.** These can be federal, state, or local.
- **Property taxes.** Real property taxes can be a major expense and may be imposed by state or local jurisdictions. They are based on the assessed value of the property.
- **Personal property taxes.** This could include such categories as kitchen equipment and improvements; small wares such as china, glassware, and dining room equipment; and construction in progress.

Taxes Collected by the Operation on Behalf of the Government

- **Sales taxes.** Most states have some sort of sales and use tax. Although it is paid by customers, it is collected by sellers.
- **Payroll taxes.** These can be considered in two categories. One is tax money withheld from employees' paychecks and then paid to the government by the employer. These taxes are also paid by the employee. The other payroll taxes include federal unemployment insurance, workers' compensation, and unemployment compensation.

When all business taxes due have been subtracted from an operation's income before income taxes the resulting amount is referred to as net earnings. **Net earnings** are the amount of after tax income earned by a business during an accounting period.

READING THE INCOME STATEMENT

Managers collect profit and loss data for their operations for a purpose. Investors, owners, and managers look carefully at these reports to determine the profitability of their operations. The reports are often used to judge the efficiency of an operation, to determine where costs have gotten out of line, and to make other key management decisions.

When reading income statements, managers typically analyze the reported sales, expense, and profit data using three important sources of information:

- Budgets
- Standards
- Historical performance

Budgets

Profit and loss reports are useful when comparing what is actually occurring to what was planned. The next chapter in this book addresses how managers prepare **budgets**: the financial plans for operating a facility during a future time period. When such plans have been previously developed, managers can compare their actual operating results against planned or targeted results. When reviewing income statement results against planned results, managers can find the answers to many important operational questions:

- Did total sales meet the planned revenue target?
- For which revenue sources did sales meet the plan?
- For which revenue sources did sales fail to meet the plan?
- Did total costs exceed planned expenses?
- In which specific expense categories did costs exceed planned expense?
- Did the operation reach its profit goals?

Any variation between actual results and planned results indicates that something unexpected has occurred. For instance, actual sales amounts might not be as high as were expected due to bad weather conditions or

emergency road repairs. It is easy to see how unforeseen conditions could affect sales.

Unexpected expenses, such as repairs to equipment, may cause costs to be higher than anticipated (*Exhibit 3.13*). Other causes of increased expense may not be so easily identified, and will have to be carefully investigated by the manager. In all cases, managers will want to know what caused the variation between expected and actual results. Then they can take the managerial actions needed to correct the problems and to improve the future operational performance of their businesses.

Standards

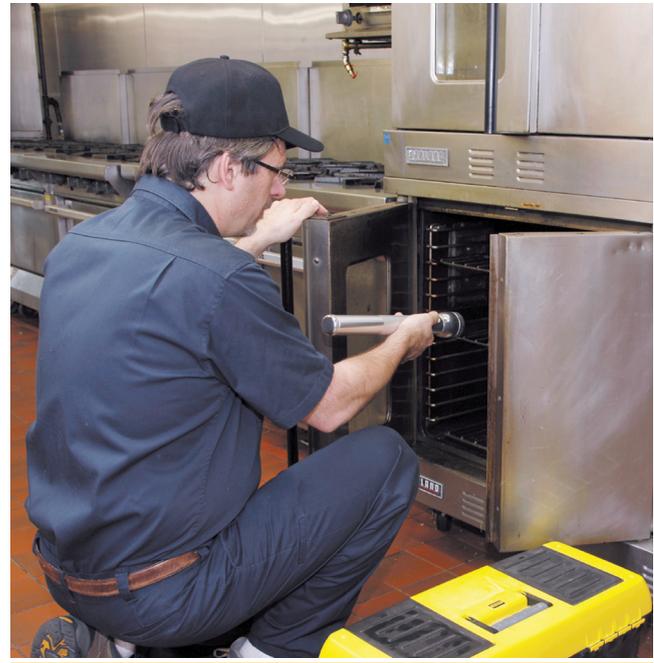
An operation may be part of a large company operating many similar restaurant or foodservice operations. Such an operation will likely have company standards against which the operation's financial performance can be compared.

Company standards are used as a guide for how an operation can and should be run. Standards often include goals for percentages of revenue coming from various revenue sources and costs of food and beverages. The amounts spent on controllable and fixed expenses can be addressed by company standards as well.

In some cases, industry-wide standards can be used to assess an operation's financial performance. These standards reflect accepted ranges for certain costs within the restaurant and foodservice industry. Such standards are not an exact measurement. It is important to make sure the values being compared actually fit the nature of an operation. For example, a fine-dining restaurant will have a higher percentage of labor costs than a takeout restaurant.

A fine-dining operation is one that offers guests the highest-quality food and full table service. If the fine-dining manager's goal is to have better service than any other establishment in the area, then that operation should expect to have labor costs that are higher than the industry standard.

Exhibit 3.13



Historical Performance

Another way to analyze the information on an income statement is to compare it with historical data from the same operation. This can be done for an individual operation or across multiple operations. Using historical performance as a means of evaluating an operation's financial performance is a good way to monitor seasonal revenue changes. It can also be used to remind managers of upcoming local events that had an effect on a previous year's sales.

In summary, an income statement is a compilation of sales and cost information for a specific period of time. The format of the statement may vary somewhat as may the terms used to describe its main parts. In all cases, a complete income statement accurately reports on three areas of financial performance during a specific time period:

1. Revenue
2. Expense
3. Profits

The income statement shows whether an operation made or lost money during the time period covered by the report. As a result, it is an incredibly important management tool. It helps managers gauge an operation's profitability and compare actual results to expected goals. Managers should carefully and periodically monitor the information contained in the income statement. Doing so will help managers identify areas where action must be taken to bring business operations in line with financial targets.

SUMMARY

1. Explain the purpose of an income statement.

Managers, owners, investors, and others have an interest in knowing about the revenue achieved, expenses incurred, and profits generated by a business during a designated period of time. The time period may be 28 days, a month, a year, or any other period that helps communicate the financial performance of a business. The income statement's purpose is to provide this key financial information to these groups so they can analyze it and, by doing so, make better business decisions.

2. Identify the three major types of financial information included in an income statement.

The three major categories of information listed on an income statement, also called a P&L, are sales (revenue), expenses (costs), and income before income taxes (profits). Sales may be reported as a single total or by revenue source. Expenses for food and beverage products sold are listed as are all other controllable and fixed expenses. Finally, pre-tax income achieved by the operation is listed.

3. Identify operating costs as controllable, noncontrollable, fixed, variable, or semivariable.

Controllable costs are those operating expenses that management can directly control. They are different from noncontrollable costs: those expenses over which management has little or no control. Food cost is an example of a controllable cost. Labor is another example of a controllable cost. For example, by varying the number of workers scheduled, a manager can directly affect, or control, the amount spent for labor. Noncontrollable costs are those which management has little ability to change. Rent is a noncontrollable cost because, after a lease is signed, the amount to be paid for rent cannot normally be changed during the period of the lease.

A fixed cost is an expense that remains the same regardless of sales volume. Insurance is an example of a fixed cost because that expense does not change when sales levels change. Additional examples of fixed expenses can include loan payments, license fees, and rent. Variable expenses change as volume levels change. Food is a variable expense because, as an operation's food sales increase, the amount spent by the operation for food will also increase. Semivariable costs change as sales volume changes, but not in direct proportion.

4. Explain how managers read and analyze an income statement.

Managers analyze an income statement by carefully reading the financial information provided in each of its revenue, expense, and profit sections. This information can then be analyzed by comparing it to three different sources of available data. One comparison that is most often made is an operation's actual performance to its planned or budgeted performance. Differences can be investigated to determine the managerial actions that must be taken to bring actual performance back in line with planned performance. Additional comparisons can be made to company standards, or to industry-wide data that can be used as a standard or goal. Managers can also compare current P&L performance to historical P&L performance of the same operation. They do so to identify seasonal trends and to monitor improvements or declines in their establishments' operating performances.

APPLICATION EXERCISE



The manager of Randy's Restaurant has just received an income statement report comparing the establishment's financial performance this year to last year's performance.

After reviewing the report on the following page, answer the questions that follow to help the manager better understand the operation and its financial performance.

RANDY'S RESTAURANT

SALES	This Year	Last Year
Food	\$ 750,000	\$ 690,000
Beverage	300,000	310,000
Total Sales	\$1,050,000	\$1,000,000
COST OF SALES		
Food	\$250,000	\$225,000
Beverage	80,000	83,000
Total Cost of Sales	\$330,000	\$308,000
LABOR		
Management	\$ 55,000	\$ 52,000
Staff	225,000	221,500
Employee benefits	85,000	83,500
Total Labor	\$365,000	\$357,000
Prime Cost	\$695,000	\$665,000
Other Controllable Expenses:		
Legal/accounting	\$ 1,750	\$ 1,690
Music and entertainment	12,000	11,500
Marketing	12,400	12,000
Utility services	18,000	17,500
General and administrative	12,500	12,000
Repairs and maintenance	15,000	13,500
Total Other Controllable Expenses	\$71,650	\$68,190
Controllable Income	\$283,350	\$266,810
Noncontrollable Expenses:		
Rent	\$95,000	\$95,000
Depreciation	6,000	6,000
Licenses/permits	500	450
Leases	2,500	2,500
Total Noncontrollable Expenses	\$104,000	\$103,950
Operating Income	\$179,350	\$162,860
Interest expense	18,000	19,000
Other (income) expense	500	500
Income Before Income Taxes	\$160,850	\$143,360

1. What was the difference between the operation's food sales this year from the previous year? Does this mark an improvement or a decline?
2. What was the difference between the operation's beverage sales this year from the previous year? Does this mark an improvement or a decline?
3. What was the difference between the operation's total sales this year from the previous year? Does this mark an improvement or a decline?
4. Did the operation spend more or less for food when comparing this year's expense to last year's expense? By how much?
5. Did the operation spend more or less for beverages when comparing this year's expense to last year's expense? By how much?
6. What was the amount of increase in management costs this year compared to last year?
7. What was the amount of increase in staff costs this year compared to last year?
8. What was the amount of increase in total labor costs this year compared to last year?
9. In what area or areas were this year's expense less than last year's expense?
10. What was the amount of profit made in the establishment this year? What was the amount of profit made last year?
11. Why do you think the operation's cost of sales food this year is higher than last year?
12. Why do you think the operation's cost of sales beverage this year is lower than last year?

REVIEW YOUR LEARNING



Select the best answer for each question.

1. An income statement is also commonly referred to as a(n)
 - A. P&L.
 - B. budget.
 - C. cash flow.
 - D. expense classification.
2. An operation's year-end income statement shows before tax profits of \$210,000. Revenues for the year were \$1,850,000. What were this operation's expenses for the year?
 - A. \$1,430,000
 - B. \$1,640,000
 - C. \$2,060,000
 - D. \$2,300,000
3. An operation's income statement shows total expenses of \$45,500 for a specific month. Before tax profits for the month were \$3,250. What was this operation's revenue for the month?
 - A. \$42,250
 - B. \$46,750
 - C. \$48,750
 - D. \$52,250
4. Why are a business's vendors interested in information contained in that business's income statement?
 - A. So they can arrange for the best time to make deliveries
 - B. To help the vendor secure future orders from the business
 - C. To assist in determining which products should be sold to the business
 - D. So they can make decisions about payment terms that should be offered

5. A manager's total revenue for an accounting period is \$150,000. Revenue from one of the operation's three revenue sources is \$30,000. What was the sales percentage of that revenue source?
 - A. 10%
 - B. 20%
 - C. 30%
 - D. 40%
6. What is an example of a controllable cost?
 - A. Rent
 - B. Insurance
 - C. Marketing
 - D. Loan payments
7. What is an example of a fixed cost?
 - A. Utility services
 - B. Salaries and wages
 - C. Licenses and permits
 - D. Repairs and maintenance
8. What is the formula for prime cost?
 - A. Total cost of sales – Total labor = Prime cost
 - B. Total cost of sales + Total labor = Prime cost
 - C. Total cost of sales – Controllable income = Prime cost
 - D. Total cost of sales + Controllable income = Prime cost
9. A manager's operation had an income before income taxes of \$2,000 in a month. Total expenses were \$18,000 in that month. What was the operation's total sales amount in that month?
 - A. \$20,000
 - B. \$25,000
 - C. \$30,000
 - D. \$35,000
10. A manager compares the revenue results for a 28-day P&L period to the results of the 28-day P&L report from the previous 28-day period. What source of information is the manager using to analyze the revenue portion of the current P&L statement?
 - A. Budget
 - B. Chain standard
 - C. Industry standard
 - D. Historical performance

**FIELD PROJECT**

Visit a local restaurant or foodservice operation to talk with the manager about the operation's income statement. During your visit ask the manager the following questions:

1. What is the name the operation uses for its income statement (e.g., income statement, P&L, or other name)?
2. Who prepares the report?
3. How often is the report prepared?
4. What is the term the operation uses to identify its revenue (e.g., revenue, sales, or income)?
5. How many different revenue sources are identified on the report?
6. What are the names of the major expense categories used to prepare the report (e.g., controllable, noncontrollable, variable, fixed, or some other classification)?
7. Are revenue and expenses also expressed as their percentage of sales?
8. What is the term used on the report to identify the operation's profits?
9. Who receives copies of the report?
10. Who is responsible for analyzing the data in the report?

Ask the manager to describe examples of how he or she uses information in the report to make operational decisions.