timing is especially crucial in revenue recognition: If revenue is recognized prematurely or is overstated, or the reverse, income will be a misleading gauge of management performance and corporate health.

Suppose Ashmont Cycles had a year-long, fixed-price contract to make bike repairs for 200 University of Massachusetts Boston students. It would be very misleading for the company to recognize all the revenue it would earn from the contract at the beginning of the year. This method would suggest that Ashmont Cycles had a very good first quarter, even though it was still obligated to perform repairs throughout the rest of the year. Again, it is crucial to look behind the financial statements at actual business transactions in order to see whether timing games that artificially boost revenue have been used.

Evaluation of periodic net income is a crucial part of most financial analyses. Completing this analytical task competently requires a thorough understanding of how a company generates revenue and of its revenue recognition policies, which in large part determine the timing and measurement of net income.

2.1.2 Typical Layout of Income Statement

While each company may adapt categorization of revenues and expenses as appro-priate, the statement of income's general format is as found in Exhibit 5.

EXHIBIT 5 General Income Statement

Sales	\$xxx
Less: cost of goods sold	(xxx)
Gross profit	xxx
Less: selling, general, and administrative costs	(xxx)
Operating income	xxx
Plus: other income	xxx
Less: other expenses	(xxx)
Income from continuing operations before income taxes	xxx
Less: income taxes	_
Income from continuing operations	xxx
Discontinued operations, net of tax	_
Extraordinary items, net of tax	-
Cumulative effect of change in accounting principle, net of tax	_
Net income	\$xxx

The statement of income consists of a series of intermediate calculations. In other words, gross profit is a transitional calculation. It is found by subtracting the cost of goods sold from the sales. Gross profit is further transformed into

another profit concept called operating income by subtracting selling, general, and administrative expenses. **Exhibit 6** shows the formulas that are embedded in the income statement.

EXHIBIT 6 Formulas of the Statement of Income

Gross profit =

Sales - Cost of goods sold

Operating income =

Gross profit - Selling, general, and administrative expenses

Income from continuing operations before income taxes =

Operating income + Other income - Other expenses

Income from continuing operations =

Income from continuing operations before income taxes - Income tax expense

Net income =

Income from continuing operations +/- Gains or losses from discontinued operations, extraordinary items, and cumulative effect of changes in accounting principles

Ashmont Cycles' statement of income is shown in Exhibit 7.

EXHIBIT 7 Ashmont Cycles Income Statement

Ashmont Cycles Income Statement for the year ended December 31, 20X3	
Sales	\$205,000
Cost of goods sold	(\$106,000)
Gross Profit	\$99,000
Operating Expenses	
Selling, general, and administrative costs	(\$58,000)
Utilities expense	(\$6,960)
Rent expense	(\$16,240)
Depreciation and amortization	(\$1,080)
Total operating expenses	(\$82,280)
Operating Income	\$16,720
Interest income (expense)	(\$1,200)
Income Before Income Taxes	\$15,520
Income taxes	(\$5,432)
Net Income	\$10,088

The format of the statement of income allows financial statement users to quickly analyze certain aspects of a company's financial performance. Some typical accounts include the following:

- Product revenues Represents revenues the company earned for product sales from the business' primary operations over the accounting period.
 These are typically reported net of any sales returns, discounts, and allowances.
- **Service revenues** Represents revenues the company earned for services sales from the business' primary operations over the accounting period. These are typically reported net of any discounts and allowances.
- **Cost of goods sold** The cost of the finished goods or services that the company sold.
- **Gross profit** Also referred to as gross margin. This is the difference between revenues and the cost of goods sold; it represents the profit that the company earned by selling its products before considering administrative and selling expenses.

- **Selling, general, and administrative (SG&A) costs** Generally referred to as the company's operating expenses, these costs represent the resources consumed during the accounting period to generate the revenues indicated in the first line of the income statement. Also called period costs, they are expensed in the period in which they occur.
- **Operating income** Represents the income generated by the company during the accounting period through its normal operations. Operating income indicates the profitability of a company's normal operations.
- **Other income** Includes income from investments and any gains generated from the sale of fixed assets.
- **Other expenses** Includes interest expense, losses generated from the sale of fixed assets, and unusual items that do not qualify as extraordinary.
- **Income from continuing operations before income taxes** The operating income plus other income and less other expenses.
- **Income tax expense** Represents the current-year federal tax expense plus the impact of any changes in future deferred tax assets and liabilities on the current accounting period.
- **Income from continuing operations** Once income tax expense is subtracted, the **resulting** amount represents the net income from the company's ongoing operations.
- Discontinued operations Represents the net income or loss effect of any operations that have been disposed of during the year or are currently being disposed of. It is presented as one amount, net of any income tax effects.
- Extraordinary items Gains and losses that are considered to be both unusual and infrequent (e.g., losses stemming from a particular weather event). As of December 31, 2015, companies filing financial statements under US GAAP will no longer be allowed to report extraordinary items as a separate category on the income statement.
- Net income A company's income less its expenses, taxes, discontinued operations, and extraordinary items. Also called net profit, net earnings, or the bottom line.
- **Earnings per share** The income generated for every share of common stock. It is a measure of return on investment for shareholders.

- Basic earnings per share This ratio is calculated by subtracting preferred stock dividends from the net income, then dividing by the weighted average common shares outstanding during the accounting period. The common shares outstanding are calculated as the weighted average of the number of shares outstanding during the period multiplied by the portion of the year those shares were outstanding. Outstanding shares can be calculated from the issued shares less those shares reacquired.
- Diluted earnings per share This ratio adjusts the basic earnings per share calculation by including the potential dilutive effects of options, convertible debt and preferred stock, and warrants. A diluted earnings per share assumes that all financial instruments that can be converted into common stock are converted at issue or at the beginning of the accounting period.

In 20X3, Ashmont Cycles had \$205,000 in sales. These revenues included sales of products, such as bikes and equipment, and sales of services, such as bike repairs. Some companies choose to break out sales of goods and services into separate line items, whereas others choose to present a consolidated figure showing both types of sales. Ashmont Cycles also recorded \$106,000 in cost of sales, also called cost of goods sold, for the year ended December 31, 20X3. This figure includes the acquisition of raw materials as well as the cost to convert the raw materials into finished goods. Although Ashmont Cycles bought some bikes preassembled, other times the company bought the frames, hubs, tires, brakes, and so forth separately and an employee assembled the bike. All of these costs would be included in the cost of sales. The cost of sales also includes the expenses associated with providing services, such as bike tune-ups. The cost of goods sold is not recognized until the products are sold or services delivered. Instead, they remain on the balance sheet as inventory until the products are sold, which is consistent with the matching principle (discussed in section 2.2).

For a company that provides only services instead of selling tangible goods, neither cost of goods sold nor **gross profit** are presented on the income statement. Gross profit shows financial statement users the markup that a company had on its goods sold during an accounting period. A gross profit that is close to zero indicates that a company has a much smaller margin for covering its operating expenses. For example, grocery stores generally have a small gross margin. As a result, grocery stores generally earn net income through the volume of goods sold, not through high gross margin attributable to individual products.