When you have completed this chapter, you will be able to:

**Section 22.1**
- Explain how to calculate selling price.
- Identify variable and fixed costs.
- Discuss effective pricing.

**Section 22.2**
- Describe different forms of business growth.
- Discuss profit planning.
- Explain how to calculate target sales and margin of safety.
- Explain the importance of planning for growth.

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*Reading Strategies*

To get the most out of your reading:
- **Predict** what you will learn in this chapter.
- **Relate** what you read to your own life.
- **Question** what you are reading to be sure you understand.
- **React** to what you have read.
In the Real World . . .

Janet Manzetti enjoys collecting unique pottery and dishware and selling them at local fairs. The pieces are very popular, so she approached a local store about selling them. The store’s buyer was impressed by the craftsmanship and offered to buy them for resale. Janet hesitated because her costs of finding and paying for the goods are about what the store’s buyer wanted to pay. However, she then thought about it and decided to improve the boxed packaging. With fancy presentation, she could charge a higher wholesale price. The store’s buyer agreed to pay more for the pottery, and Janet expanded her business. The right pricing and costing allow Janet to make a profit.

As You Read Consider ways that any business owner can use pricing to encourage sales.

Selling Price

Q: I started making scarves and hats for my friends for fun, but demand for them has become so high that I am thinking of selling them. How much do I charge?

A: Your selling prices should be close to what your competitors charge. Make sure that your business will be profitable at those prices. For many businesses, profit margins are only in the 10 to 15 percent range. For each $1 in sales, the business keeps ten cents—making accurate pricing essential.

Ask Yourself How do you find out what competitors charge?

Go to finance07.glencoe.com to complete the Standard & Poor’s Financial Focus activity.
Merchandise Pricing and Costing

Pricing

Why is pricing important to a business?

Pricing is the process of assigning a selling price to a good or service. Price is usually expressed in monetary terms, such as $60 for a pair of shoes. It can also be expressed in non-monetary terms, such as free goods or services in exchange for the purchase of a product. The oldest form of pricing is the barter system, which involves exchanging a good or service for another good or service without the use of money. For a merchandise business, you must price goods and services appropriately for your business to succeed. If you set monetary prices too high, customers may buy from your competition—or not buy at all. If you set prices too low, you may not be able to cover your costs and operating expenses.

Goals of Pricing

Many factors influence the prices of goods and services. Pricing decisions must take into account costs, competition, and economic conditions. To make sound pricing decisions, a business owner must consider the goals of pricing.

Every business owner wants to set effective prices that yield large profits. Most businesses have three goals that act as guidelines for effective pricing:

- To obtain a given share of the market
- To generate sales that produce a specific profit
- To meet competitors’ prices

In establishing prices, a business may have to prioritize these three goals. For example, suppose that a primary goal of your new outdoor sportswear business is to match your competitors’ prices. You must remember that if you set your prices too low, you may not generate enough profit for your business to succeed. Suppose that the primary goal of your business is to increase profits. You can achieve your objective by selling more items at the current price or by selling the same number of items at a higher price. However, if you raise prices to increase profits, you may no longer meet competitors’ prices. You must decide which pricing goals are most important to your business.
Merchandise Pricing

How do retail businesses price merchandise they sell?

All the financial procedures you have learned so far have involved merchandising businesses. A merchandising business buys goods, marks them up, and sells them to customers, such as retail stores. Establishing selling prices in this type of business is relatively simple.

Retail Pricing Methods

A retail business sells goods or services to the final user, the consumer. One pricing method commonly used by retail businesses is product cost-plus pricing. Product cost-plus pricing is the process of determining an item’s selling price by adding the invoice cost of the item (how much the business paid for the item) to a certain percentage of that cost. This added amount is the markup, which is the difference between the cost of an item to a business and the selling price of the item. This markup amount must cover all of the business’s expenses and allow for a profit.

For example, Luggage World is a retail store that sells a wide variety of travel bags and suitcases. As merchandise is received, the store manager prices all bags with a 70 percent markup. Suppose that the Presidential Bag has an invoice cost of $48. The manager calculates the selling price as follows:

<table>
<thead>
<tr>
<th>Purchase cost</th>
<th>$48.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plus markup</td>
<td>+33.60 ($48.00 \times .70 or 70%)</td>
</tr>
<tr>
<td>Selling price</td>
<td>$81.60</td>
</tr>
</tbody>
</table>

ANNOUNCING PRICES

Newspaper and magazine advertisements are sources for information on what competitors are charging for goods. Do you think a business should always match competitors’ selling prices? Why?
Adjusting Prices

If you cannot sell an item or a line of merchandise with a particular markup, you may have to lower the selling price or discontinue stocking the item. The decision to mark up items by a certain percentage will depend on factors such as economic conditions, competition, or the season of the year.

Suppose that you purchase sweatshirts for your outdoor sports-wear shop at $12 per shirt and price each one with a markup of 60 percent ($12 \times .60 = 7.20). The retail price of each sweatshirt is $19.20 ($12 + 7.20 = 19.20). However, if your competitors are selling the same sweatshirts for $17.99 each, you will probably have difficulty selling your sweatshirts with a 60 percent markup. If you lower your price to be competitive, you may not earn enough profit to cover your expenses. If you cannot purchase the same sweatshirts from another supplier at a lower cost, you may have to sell a different line of sweatshirts.

The percentage of markup will vary depending on the line of merchandise you are selling. Stores (such as jewelry stores) that sell very few items in a day have higher markup percentages than stores (such as music stores) that sell many items in a day. Regardless of the product, the markup must cover expenses and generate a profit for the business.

As You Read

Think about sales where you have “gotten a bargain.” What do you think the retailer reduces to come up with a sale price?

\[ \text{EXPENSIVE ITEMS} \] A jewelry store may have only a few potential customers each day and will sell merchandise to only a small percentage of them. Why does a jewelry store have to set high prices on its merchandise?
Costing and Pricing in a Manufacturing Business

How does costing affect pricing for manufacturing businesses?

Not all businesses simply purchase items, mark them up, and resell them to customers. Some businesses produce new merchandise. These businesses are called manufacturing businesses. A manufacturing business is a business that buys raw materials or processed goods and transforms them into finished products.

For example, if Tonya decides to sell hand-decorated handbags to her friends, her business will be a manufacturing business. She purchased a plain bag and decorated it, using paints, buttons, and sewing materials to create a desirable new item. Tonya will have to consider the cost of the materials and labor that go into the production of her first bag before she can determine an appropriate price for similar bags. Determining costs and pricing in a manufacturing business is more complicated than it is in a retail business.

Careers in Finance

CHIEF FINANCIAL OFFICER

Alberto Saenz
Cycle Gear

Alberto loves to make short-term goals that help achieve long-term ones. As the chief financial officer (CFO) for a chain of motorcycle parts, accessories, and clothing retailers, Alberto is expected to direct the company’s overall financial policies, procedures, and reporting that are required to continue a 30 percent per year growth rate with increasing profitability. He manages all financial functions, including accounting, budgeting, cash flow, bank relationships, risk, inventory management, and taxes. Besides knowledge of accounting, CFOs need to know federal and state laws and regulations as well as international trade.

SKILLS: Accounting, analytical, communication, computer, decision making, math, problem solving, and long-range planning skills

PERSONAL TRAITS: Able to see the big picture, able to cope with stress, flexible, good judgment, independent, likes working with people and numbers, and tactful

EDUCATION: High school diploma or equivalent; bachelor’s degree or master’s degree in accounting, economics, finance, or business administration; Certified Public Accountant certification

ANALYZE Why would a CFO need to understand pricing principles?

To learn more about career paths for chief financial officers, visit finance07.glencoe.com.
Product Costing

**Product costing** is the process of analyzing all costs involved in creating products. By product costing, you can establish a selling price that is both competitive and profitable for your business.

Product costing will help Tonya decide whether she can sell hand-decorated bags for a reasonable price. Her costs for the first bag might be low. Thus, she could make and sell similar bags at a profit. However, making the first bag could be expensive. To cover costs, she would have to set a high price. The price may be so high that no one would buy the bags. Thus, Tonya could decide that the bags are not worth making.

Global Financial Landscape

Vietnam

The Vietnamese have a saying: “Close the past, open the future.” When American troops pulled out of Vietnam at war’s end in 1975, they were the enemy. Today they are welcomed as friends. The Vietnamese have opened up former war-related sites as part of The Vets’ Tour, adding one more market to their soaring economy. In the last decade, the country’s economy has grown 7.4 percent a year. Two of the most famous exhibits include the “Hanoi Hilton,” a war prison, and the Cu Chi tunnels. This underground, 75-mile-long maze hid thousands of guerilla soldiers. Now widened to accommodate tourists, the tunnels display mess halls, meeting rooms, and a small cinema.

Tourism is a growth industry in Vietnam. Many hotels have been rated at three to four stars, and investors such as Disney are developing resorts. Focusing on cultural, ecological, and business tourism, Vietnam may attract 7.5 million visitors by 2010.

**DATABYTES**

| **Capital** | Hanoi |
| **Population** | 80,786,000 |
| **Languages** | Vietnamese, English, French, Chinese, Khmer, and local languages |
| **Currency** | dong |
| **Gross Domestic Product (GDP)** | $203.9 billion (2003 est.) |
| **GDP per capita** | $2,500 |
| **Industry** | Food processing, garments, shoes, and machine manufacturing |
| **Agriculture** | Paddy rice, corn, potatoes, rubber, poultry, and fish |
| **Exports** | Oil, marine products, rice, coffee, and rubber |
| **Natural Resources** | Phosphates, coal, manganese, bauxite, and chromate |

**Think Globally**

*How might pricing and costing affect Vietnam’s tourist industry?*
Classifying Costs

What are the different types of costs to consider?

Whether you are the manager of a large business, such as General Electric, or a small business, such as a local bakery, you need complete information about costs to make smart financial decisions. You must identify your costs and determine what costs will increase, and what costs will remain the same.

Cost behavior is the way a cost changes in relation to a change in business activity. For example, as your business makes more items, some costs may increase, such as the costs of additional materials or labor. Other costs remain constant and are not influenced by the number of items you produce or the volume of sales. These costs could include rent, taxes, and insurance. In analyzing cost behavior, you will usually classify costs as variable or fixed.

Variable Costs

In product costing, variable costs are costs that change in direct proportion to the activity level of production. This means that if production increases, these costs will increase. If production decreases, your variable costs will decrease.

To understand cost behavior, consider the example of Windy River Creations. Wayne and Naomi are Native Americans who want to start a small business producing handmade Native American jewelry. They intend to buy metal bands, beads, leather, and other materials and make items to sell to area stores. They have rented a small shop, purchased a few pieces of equipment, bought materials and supplies, and hired two local artists to make the jewelry.

Windy River has identified three variable costs. These are (1) direct materials used to make the jewelry, (2) direct labor to create the jewelry, and (3) supplies used in processing the jewelry.

Business Expenses

When planning for expenses that will affect the prices of the products you sell, consider your operating expenses. The top ten small business expenses include: health insurance, DSL or dial-up Internet fees, cell phone fees, utilities, advertising, accounting services, voice mail, financial planning services, and collection services. Choose a small business that you would like to own. If you were looking for ways to cut back on your business expenses, what areas would you target and why?
Direct Variable Costs  

Direct materials are the raw materials used to make a finished product. For Windy River’s jewelry, these materials include metal, beads, leather, pins, packaging, and other items. Wayne and Naomi plan to produce five pieces of jewelry, one of which is the Sunset Bracelet. The direct materials needed to produce each bracelet cost $4.30.

Direct labor is the work required to convert raw materials into a finished product. To determine the cost of direct labor, multiply the amount of time spent to produce the item by the employee’s hourly wage. Wayne and Naomi are paying their employees $12 per hour. It takes approximately 15 minutes (0.25 hours) to make the Sunset Bracelet. Therefore, the cost of direct labor per bracelet is $3 ($0.25 \times $12 = $3).

Wayne and Naomi now know that the cost of materials and labor needed to make the bracelet is $7.30 ($4.30 direct materials plus $3 direct labor). They must also take into account the cost of the supplies that will be consumed in the production process. This cost could include polish, wire, solder, glue, and finishing spray. Wayne and Naomi estimate that the cost of the supplies for one bracelet is $0.35. This brings the total variable cost per bracelet to $7.65, illustrated as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct materials</td>
<td>$4.30</td>
</tr>
<tr>
<td>Direct labor</td>
<td>$3.00</td>
</tr>
<tr>
<td>Supplies</td>
<td>$0.35</td>
</tr>
<tr>
<td><strong>Total variable cost</strong></td>
<td><strong>$7.65</strong></td>
</tr>
</tbody>
</table>

As more units are made, the variable cost assigned to each unit remains the same, but the total variable cost for the business increases. When fewer units are made, total variable costs decrease. The table below shows how the total variable cost for Windy River increases or decreases depending on the number of Sunset Bracelets made.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Variable Cost</th>
<th>Total Variable Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Bracelets</td>
<td>$7.65 \times 7 = $53.55</td>
<td></td>
</tr>
<tr>
<td>10 Bracelets</td>
<td>$7.65 \times 10 = $76.50</td>
<td></td>
</tr>
<tr>
<td>18 Bracelets</td>
<td>$7.65 \times 18 = $137.70</td>
<td></td>
</tr>
</tbody>
</table>

Fixed Costs

Rent, insurance, taxes, salaries, and some utilities are examples of fixed costs. Fixed costs are costs that remain constant even if activity or production level changes. The total fixed cost remains the same regardless of the number of units produced.

For example, Wayne and Naomi pay $700 per month to rent the shop that Windy River occupies. Regardless of the number of bracelets produced in a month, the fixed cost of rent will remain at $700. Remember, the selling price of the bracelets must exceed all fixed costs plus all variable costs in order for Windy River to make a profit.
Selling Price
How do businesses determine the selling price for goods?

Wayne and Naomi plan to mark up the variable costs by approximately 70 percent in order to cover the fixed costs and show a profit. The total monthly fixed costs for the business are $1,400. Windy River is selling five types of jewelry, so each type must cover one-fifth, or 20 percent, of the fixed costs per month. Therefore, each type of jewelry must cover $280 in fixed costs per month ($1,400 \times 0.20 = 280).

If the variable costs total $7.65 for each bracelet and a 70 percent markup is added, the selling price of the bracelet will be $13 ($7.65 \times 0.70 = 13). Wayne and Naomi must determine whether this markup is sufficient. To do so, they will have to figure out how many bracelets they must sell to cover both fixed and variable costs.

The Contribution Margin
What is the contribution margin?

The contribution margin is the amount of money that the sale of a particular product contributes toward the payment of fixed costs and the profit of a business. The contribution margin equals total sales minus total variable costs. For example, if a product has sales of $13,000 and has variable costs totaling $7,000, it has a contribution margin of $6,000. This is the product’s contribution to cover the fixed expenses and provide a profit.

<table>
<thead>
<tr>
<th>Sales</th>
<th>$13,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minus variable costs</td>
<td>- 7,000</td>
</tr>
</tbody>
</table>
| Contribution margin | $ 6,000 | (Amount available for fixed expenses)
Learn to identify and understand the standard financial documents you will use in the real world.

**Investigate: A Break-Even Analysis**
A break-even analysis contains the following information:
- Names of the products analyzed
- Unit pricing and fixed and variable expenses
- Calculation for number items that must be sold to break even

**Your Motive:** If you manage or own a retail store, you need to analyze your merchandise pricing, costs, and sales to determine when you are making a profit. The Break-Even Analysis Worksheet can help you determine profitability.

**Break-Even Analysis Worksheet**

<table>
<thead>
<tr>
<th>Store:</th>
<th>Sallie’s Accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>129 Fashion Way Skokie, Illinois</td>
</tr>
<tr>
<td>Product Line:</td>
<td>Jewelry</td>
</tr>
<tr>
<td>Period:</td>
<td>Six months beginning June 2008</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit Price (P)</th>
<th>Variable Costs per Unit (V)</th>
<th>Fixed Costs (F)</th>
<th>Units to Breakeven (n) ( Pn = Vn + F )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watches</td>
<td>$49.99</td>
<td>$23.25</td>
<td>$2,000</td>
<td>75</td>
</tr>
<tr>
<td>Necklaces</td>
<td>$79.95</td>
<td>$29.50</td>
<td>$2,000</td>
<td>40</td>
</tr>
<tr>
<td>Rings</td>
<td></td>
<td>$40.00</td>
<td>$2,000</td>
<td>40</td>
</tr>
<tr>
<td>Bracelets</td>
<td>$19.95</td>
<td>$4.50</td>
<td>$2,000</td>
<td>130</td>
</tr>
<tr>
<td>Earrings</td>
<td>$41.50</td>
<td>$12.00</td>
<td>$2,000</td>
<td>68</td>
</tr>
</tbody>
</table>

**Key Points:** Fixed costs can include such expenses as rent, utilities, insurance, advertising, and administrative expenses.

**Find the Solutions**
1. What are the total fixed costs assigned to the jewelry department for the six-month period?
2. What is the break-even point for necklaces?
3. Which item has the highest markup?
4. What would happen to the break-even point if Sallie raised the price of the bracelets?
5. How much does a ring cost at Sallie’s?
The Break-Even Point

Why do businesses that sell products want to know the break-even point?

The **break-even point** is the point at which total sales equal total costs (variable and fixed costs). The break-even point represents the sales that a business must achieve to break even, or cover all costs. At the break-even point, there is neither a profit nor a loss.

Calculating the break-even point helps a business owner predict how changes in costs and sales will affect the profit earned by the business. The break-even analysis can also determine how many units of a product must be made and sold to cover expenses.

For example, suppose that you wanted to calculate how many units of the Sunset Bracelet that Wayne and Naomi would have to sell to break even, or cover all costs. Represent the number of units needed to break even by a variable such as $n$. On the left side of the equation, multiply unit sales price by $n$. On the right side of the equation, multiply the unit variable costs by $n$, then add the total fixed costs. Solve for $n$.

Break-even sales are the sales, expressed as a dollar amount that a business must make to cover all costs. Break-even sales for the Sunset Bracelet are $689 (53 bracelets \times 13 = 689) per month. The following calculations show the accuracy of the math.

**GO FIGURE  FINANCIAL MATH**

**BREAK-EVEN POINT**

**Synopsis:** By calculating the unit variable cost of products to sell with the monthly fixed costs, a business can figure out how many units of a product must sell to break even.

**Example:** Windy River sells each Sunset Bracelet for $13. The unit variable cost for the bracelet is $7.65. The amount of monthly fixed costs that sales of the Sunset Bracelet are expected to contribute is $280. How many units of the Sunset Bracelet must Windy River sell to break even?

**Formula:**

\[
\text{Break-Even Sales} = \text{Variable Costs} + \text{Total Fixed Costs} \\
\text{Unit Sales Price} \times n = (\text{Unit Variable Costs} \times n) + \text{Fixed Costs}
\]

**Solution:**

\[
13.00n = 7.65n + 280.00 \\
13.00n - 7.65n = 280.00 \\
5.35n = 280.00 \\
\frac{5.35n}{5.35} = \frac{280.00}{5.35} \\
\text{n} = 52.3 \text{ or } 53 \text{ bracelets}
\]

To break even, Windy River must sell 53 Sunset Bracelets each month.

**YOU FIGURE**

Your sister is selling custom printed T-shirts at the beach on weekends. Fixed costs from sales total $345. How many bracelets should she sell to break even if each T-shirt sells for $20 and the unit variable cost is $11.50 each?
Fortunately for Wayne and Naomi, Windy River has been averaging sales of 70–80 bracelets per month for the past few months, exceeding their break-even point. At the present rate of sales, the bracelet’s contribution margin is covering its share of fixed costs and is contributing to a net income for the business.

By substituting different numbers in the break-even equation, Wayne and Naomi can analyze how changes in sales price, costs, and sales volume affect profit. What if only 45 bracelets are sold? What if the variable costs increase by $2? How much profit is reported if 75 bracelets are sold? Such questions are an important part of financial analysis. If you are a business owner, you must anticipate changes in the market and be prepared with alternative plans if the changes actually occur. Using the techniques to analyze all financial possibilities and being prepared for change can help keep a business growing.

Section 22.1 Assessment

**QUICK CHECK**
1. What are the basic goals that businesses use for setting prices?
2. What is the difference between variable costs and fixed costs in product costing?
3. What is the purpose of calculating the break-even point?

**THINK CRITICALLY**
4. Describe what might happen if a retail business sold its products to consumers for the same price it paid for them.

**USE MATH SKILLS**
5. **Break-Even Point** Dani sells mirrors at weekend craft shows for $75 each. She makes the mirror frames out of colored pieces of glass and ceramic tile. The mirrors are very popular, and Dani has more orders than she can fill. Calculate Help Dani figure out how many mirrors she has to sell to break even. Dani estimates that her variable costs are $25 per mirror and her fixed costs are $1,000.

**SOLVE MONEY PROBLEMS**
6. **Establishing Retail Prices** Cookie Cutters is a retail store that sells a variety of kitchen gadgets and gifts. Today is your first day on the job there, and you have been asked to price the food processors that have just arrived. The manager has told you that all products have a 65 percent markup. The invoice price of one food processor is $72. Calculate Figure out the selling price of each food processor.
Planning for Growth

Sources of Business Growth

What are the different sources of business growth?

The key to all successful business operations is growth. Businesses, whether they are small sole proprietorships or large corporations, are much like people. They must grow and mature to achieve success. A business that does not grow can end up far behind its competition.

Business growth can come from many sources and can be measured in many ways. It may develop from an increase in the number of customers, sales, share of the market, employees, lines of merchandise, and (of course) profit. These are important aspects of growth for any business as well as indicators of success. However, growth should be carefully planned and directed. Sound financial planning is essential for making decisions regarding expansion.

Not every aspect of your business needs to grow every year. For a business, bigger does not necessarily mean better. If a business grows too rapidly or in the wrong area, serious financial problems may result.

Planning growth to correspond with the business’s short-term and long-term goals is essential to financial success. If you have a business, short-term goals for the business reflect the areas to concentrate efforts. One year you may place an emphasis on increasing the number of customers; the following year, you may explore new lines of merchandise. As one of your target areas grows, others may also increase and grow. For example, if you concentrate on increasing your number of customers this year, your sales and profits should also report increases. Primary growth in one area often leads to secondary growth in other areas.

Customers

Adding new customers usually causes a rise in sales. More sales usually result in greater profits. Increasing the number of customers is always a primary goal in business. Acquiring new customers is often a result of two factors: effective advertising and promotions and referrals by satisfied customers. Potential customers must know where the business is located, and they must believe that buying goods and services from your business will be a positive experience. Although you may have control over your advertising and marketing programs, you have little or no control over customer referrals. Satisfying your customers’ needs is the key to building a solid customer base.
Sales

Growth in sales is also a source of business growth. When sales increase, however, you must be capable of handling the larger volume so that you continue to satisfy your customers. If sales grow too quickly, and you do not have enough employees, the quality of your customer service may suffer seriously. In addition, you must be sure that you have sufficient merchandise to offer.

Market Share

A measurement of growth is the business’s share of the existing market. If your business held approximately 15 percent of the potential market last year, and this year your market share has risen to 19 percent, you have achieved positive growth. This is evidence that your business is staying competitive, probably through effective advertising and promotions.

Market Development

A business can grow and expand its products to reach new locations locally, nationally, or even internationally. Franchising is one way to grow. Franchisers sell the right to operate a business under the company’s name. In exchange for a fee, you the franchiser provide training, hiring, and other assistance such as manuals and market analyses.

Employees

As your market share grows and your sales increase, you must maintain an appropriate number of employees to contribute to growth. The need to hire more employees to accommodate your customers is a sign of positive growth. However, the additional employees should be utilized in the proper manner. Payroll is a major expense of your business.

Product Development

When expanding with a new line of merchandise, carefully analyze the potential market and estimate the profits to be made. Expanding for the sake of expansion is not always a source of positive growth. The new line should assure a new sales market and good profits. Unfortunately, many small businesses experience financial success only to expand to new areas that prove unprofitable.

Profits

One of the key indicators of the success of your business is the rate of growth of your profits. Making a profit is crucial to your business. Profits must grow for your business to survive. However, planning for increased profits is often easier said than done. Businesses may approach profit in several ways.
Profit Planning

How can a business plan to make profits?

Business managers frequently evaluate cost and profit data to determine how to maximize profits. They use break-even analysis to test possible changes and to determine how those changes might affect future profits. Using the results of their analysis, managers forecast sales and plan financial activities for their business.

Setting a Target Profit

An important part of the planning process is setting goals. One common goal is to increase the amount of net income, or profit. **Target profit** is the amount of net income that a business sets as a goal. For example, you may want to expand to a new line of merchandise or possibly open another outlet or store. In order to fulfill these objectives, you will need to generate a given amount of profit.

Suppose that Wayne and Naomi want to earn a profit of $500 per month over the next six months on sales of the Sunset Bracelet. Assuming that the selling price and costs remain constant, how many bracelets would they need to sell to achieve this target profit?

**Target sales** is the number of units a business needs to sell to reach a target profit. The target sales equation is as follows:

\[
\text{Target Sales} = \text{Variable Costs} + \text{Fixed Costs} + \text{Target Profit}
\]
TARGET SALES

Synopsis: Calculating how much product a business must sell to reach a profit is essential for success.

Example: Windy River sells each Sunset Bracelet for $13. The unit variable cost for the bracelet is $7.65. The amount of monthly fixed costs that sales of the Sunset Bracelet are expected to contribute is $280. The target profit is $500 per month. How many units of the Sunset Bracelet must Windy River sell to reach its target profit?

Formula:
Target Sales = Variable Costs + Fixed Costs + Target Profit
Unit Sales Price × n = (Unit Variable Costs × n) + Fixed Costs + Target Profit

Solution:
$13.00n = $7.65n + $280.00 + $500.00
$13.00n − $7.65n + $280.00 + $500.00
$5.35n = $780.00
n = $780.00 ÷ $5.35
n = 145.7, or 146 bracelets

Windy River would have to sell 146 Sunset Bracelets to achieve its target profit.

You are selling smoothies at school-sponsored sporting events. You price them at $3.50 each. The unit variable cost is $1.25 each. Your monthly fixed costs by sales should be $150. The target profit is $400 a month. How many smoothies should you sell?

Using the target sales equation, you can calculate how many units a business must sell to reach its target profit. Represent the number of units needed to achieve the target profit by a variable such as $n$. On the left side of the equation, multiply the unit sales price by $n$. On the right side of the equation, multiply the unit variable costs by $n$. Then add fixed costs and the required profit. Solve for $n$.

Windy River has been selling about 70 to 80 bracelets per month, and sales have risen approximately 10 percent per month. By increasing current sales by approximately 10 percent a month for the next six months, Windy River will sell about 124 Sunset Bracelets per month by the sixth month. Assuming current sales are 70 per month, projected sales would be as follows:

<table>
<thead>
<tr>
<th>Month</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>77</td>
<td>85</td>
<td>94</td>
<td>103</td>
<td>113</td>
<td>124</td>
</tr>
</tbody>
</table>

(*Assumes 10 percent increase in current sales per month.)

Windy River would have to sell 146 bracelets per month to reach its target profit of $500. Wayne and Naomi decide that this is an unrealistic expectation. They conclude that a target profit of $400 is more realistic. Using the target sales calculation, they determine that they must sell 128 bracelets each month to achieve the goal of $400 profit per month.
Margin of Safety

When you are analyzing target sales and profits, you should consider what will happen if you do not reach your target. Your margin of safety will indicate the amount that sales can drop before the business experiences a loss. The **margin of safety** is the target sales minus the break-even sales, which indicates the amount of risk that sales will meet the break-even point. A high margin of safety suggests a minimal risk that sales will fall below the break-even point. Wayne and Naomi calculate the margin of safety for the Sunset Bracelet as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target sales</td>
<td>$1,664.00</td>
<td>128 bracelets</td>
</tr>
<tr>
<td>(to achieve a profit of $400)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less break-even sales</td>
<td>$689.00</td>
<td>53 bracelets</td>
</tr>
<tr>
<td>Margin of safety</td>
<td>$975.00</td>
<td>75 bracelets</td>
</tr>
</tbody>
</table>

The margin of safety is $975, or 75 bracelets. This means that sales can drop by this amount below target sales before the business experiences a loss on this item. For Windy River, this target sales amount is a fairly safe venture.

**SHORT DEMAND** Items such as seasonal clothes and CDs have a short selling period. Tastes in music and clothes change, and new items come out every day. *Can you name any other products that have a very short selling period?*
The Challenges of Growth
What are the factors that might affect a business’s ability to grow?

If your business is successful, it will probably grow. If you have planned effectively for growth, you will also experience growth. However, you should consider whether your business is ready or suited for growth. Several factors affect the ability of a business to grow:

- **Market characteristics**—If your niche market is too small, your business may be unable to grow. To develop further, the business must expand outside into new market areas.
- **Multiple sites**—With more than one location, you must decide where your main operations will be located. You will also need to staff your other locations.
- **Delegation**—Many small business owners are successful at starting their own businesses. However, they may not have the skills to manage others to do expanded tasks. You might consider hiring someone as a manager.
- **Industry innovation**—If your industry’s growth is dependent upon innovation or constantly changing ideas and products, you will have to move ahead faster than the trends.
- **Systems and controls**—Effective systems and controls need to be in place for management, marketing, finances, and record keeping.

▲ **CONTROLLED EXPANSION** Expanding a small business such as a restaurant or boutique is good, but you should not expand too rapidly. *Can you name a business in your area that expanded but then had financial problems?*
Planning and Growth

Why is planning so important?

As you project your business’s financial prospects, you must analyze carefully where you will spend your profits. Growth is important, but only if it is carefully analyzed, planned, and controlled. Good planning will usually result in successful growth; poor planning could drive you out of business.

The following guidelines will not guarantee successful decisions, but ignoring them could result in business failure:

- Make sound financial decisions when setting short-term and long-term goals.
- Set realistic financial targets.
- Control expenses and costs.
- Analyze financial statements frequently.
- Analyze your competition.
- Evaluate current economic conditions.
- Maintain a reserve fund.

You may always have limited funds to invest for business growth. However, careful planning and financial analysis should provide you with the knowledge you will need for intelligent investment decisions and well-planned, controlled growth of your business.

Section 22.2 Assessment

QUICK CHECK
1. What are the common forms of business growth?
2. How is the target sales figure calculated?
3. How is margin of safety calculated?

THINK CRITICALLY
4. Explain why business growth just for the sake of growth is not wise.

USE COMMUNICATION SKILLS
5. Business Growth Lil owns an independent rug store in a small town. The Rug Rack has been open for about a year, and business has been very good. Currently she sells new and antique rugs as well as home decorating magazines. Lil thinks that it is time to add a new line of merchandise and expand her customer base.

Write About It You write an advice column for small business owners. What guidance might you give Lil regarding the goals she has set for The Rug Rack?

SOLVE MONEY PROBLEMS
6. Achieve Target Profit You have been hired by Windy River Creations as a business consultant. After analyzing the market for the company’s products, you determine it is possible to earn a profit of $600 per month within the next six months on the Sunset Bracelet. Assume that the bracelet will continue to sell for $13 and that the costs will remain constant.

Calculate Figure out how many bracelets Windy River will need to sell in order to achieve this target profit.
Communicating Key Terms

Imagine you are a consultant assisting the owner of a florist shop in pricing her flowers and floral design services. Use as many of the key terms as you can to write a presentation on pricing.

- pricing
- product cost-plus pricing
- markup
- manufacturing business
- product costing
- cost behavior
- variable costs
- direct materials
- direct labor
- fixed costs
- contribution margin
- break-even point
- target profit
- target sales
- margin of safety

Reviewing Key Concepts

1. **Explain** why product cost-plus pricing would not work in a manufacturing business.
2. **Explain** why, in some cases, it may be beneficial to have more variable costs and to also reduce fixed costs.
3. **Explain** why the contribution margin is so important.
4. **Explain** why expanding into new lines of merchandise may not lead to business growth.
5. **Explain** why determining target profits is necessary to plan for business growth.
6. **Explain** why the margin of safety is so important to a business.
7. **Discuss** how your reserve fund can affect growth opportunities.
Margin of Safety  Target sales for Cricket Lane Flowers are $338,000 in its third year of operation. Break-even sales are estimated at $289,000 (estimated cost of goods sold + expenses for year three).

1. Calculate the margin of safety. Then explain your opinion of this level.
2. Compute as an alternative activity, using spreadsheet software to make these calculations.

Connect with Economics and Business  In economics, demand for a product usually grows gradually. Unfortunately, a business owner has to make large investments in lump sums to increase capacity to meet the growing demand. For example, investment in production facilities is made in large “jumps” while demand grows gradually.

1. Role-Play  Imagine that Electro Toys has experienced great demand for its products and services, and its owner is thinking about opening two more stores, a major investment. How can she be sure that demand will continue to grow and use the additional supply she offers? With a partner, take on the roles of the shop’s owner and a friend of hers who invested in her business when she first started it. They are discussing the business owner’s thoughts about whether to expand.
2. Write About It  Write a script about this discussion.

Economics  Clothing is often marked up more than 100 percent.
Write About It  Write a paragraph explaining what this means in terms of the price you pay in the store. Include your analysis of factors that go into the price determination, other than the cost of the clothing before markup.

Internet CONNECTION  You are considering opening a business providing home maintenance and “handyman” services. You realize that you will be competing with large plumbing repair companies and other specialists.

Log On  Make a list of services you plan to offer. Then access an Internet search engine and find sources of such services in your town to evaluate the competition.

Write About It  Write a marketing plan that explains how you will grow your business by promoting your services so that potential customers can differentiate you from the competition, and thus, increase your market share.

Newsclip: The Right Price  Smart pricing systems are Web-based systems that adjust prices to changing market conditions.

Log On  Go to finance07.glencoe.com and open Chapter 22. Learn about the methods companies use to price goods. Write a list of some of your favorite things to buy and what they cost.
CREATIVE THINKING

Successful businesses rely on a constant stream of ideas and people with the courage to present them. Do you have a lot of good ideas? Here is an opportunity to test your creative thinking. Write your answers on a separate sheet of paper.

1. Do you look for ideas?
   - Often
   - Sometimes
   - Rarely

2. Do you sometimes play “devil’s advocate” as a way to stimulate others?
   - Often
   - Sometimes
   - Rarely

3. Do you challenge the rules?
   - Often
   - Sometimes
   - Rarely

4. Do you ask “what if” questions?
   - Often
   - Sometimes
   - Rarely

5. Can you motivate yourself and do what it takes to set your ideas in motion?
   - Often
   - Sometimes
   - Rarely

6. Do you use impractical ideas as stepping stones to new ideas?
   - Often
   - Sometimes
   - Rarely

7. Do you express silly ideas?
   - Often
   - Sometimes
   - Rarely

8. Do you challenge assumptions?
   - Often
   - Sometimes
   - Rarely

**Scoring:** Give yourself 5 points for each “often,” 3 points for each “sometimes,” and 0 points for each “rarely.”

**Beginner:** If you scored 0–10 points, consider playing around with new ideas and presenting them. Ideas can be fun!

**Explorer:** If you scored 11–20 points, you are willing to stretch yourself.

**Creator:** If you scored 21–30 points, your input will be welcome on any team.

**Brainstormer:** If you scored 31–40 points, you take the lead in risky ideas that may result in big rewards.
Business Expansion Magic

Under the name of Morgan the Magnificent, Victor Morgan has been performing magic since he was eight years old. Now that he is 16, he wants to branch out from school events and birthday parties for friends and family to perform professionally. He already has his own Web site and a performance video. To expand the business, he wrote down the following strategies and actions he could take:

- Make a flyer and a cover letter I can send out to potential customers.
- Contact a public relations agency and offer to do free performances in exchange for their helping me get publicity.
- Call the local newspaper and ask if someone could write an article about me.
- Contact the human resources department of local companies to let them know I am available to perform at employee functions and holiday parties.
- Contact local chambers of commerce to find out when they are having street fairs or crafts fairs.
- Contact local stores that sell or rent party supplies. Ask if I can post a flyer and if they can recommend me if anybody is looking for an entertainer.
- Contact wedding planners to see if they would recommend me to be part of the wedding entertainment.
- Stop by ice cream stores to find out if I can post a flyer.

Analyze

Pick a business in your town. On a separate sheet of paper, list eight strategies and actions that could improve or expand the business.
Growing a Business

Overview

Two years ago, Jack Lanier and his sister Eva opened their retail store called Party Town. They sell a wide variety of party decorations, paper goods, balloons, and games. The business has been a success so far. Eva and Jack have been able to meet their expenses each month and make a modest profit. Now they want to grow their business. They are interested in carrying a new line of merchandise and opening an online store with expanded inventory. With their regular customers, in addition to new Web-site customers from outside their area, they hope to gain a greater share of the market and expand their business now and in the future.

Procedures

1. Recommend a new product or line of merchandise that you think Party Town should carry. (Examples might include hard-to-find costumes, piñatas, or party favors.) Create a flyer, poster, or other visual aid describing the new product.

2. Research the competition (other party stores, discount stores, toy stores, and Internet sites), either by looking through the yellow pages or by visiting stores nearby. Describe Party Town’s competition and its merchandise.

3. Interview a business owner of a similar business in town.

4. Eva and Jack also plan to sell balloon bouquets that they will make. The direct materials will cost $5.25; the direct labor per bouquet is $6; and the supply costs will be about $0.85. Assume that Party Town plans to mark up the bouquets by 80 percent. Figure out the selling price of each bouquet. If the fixed costs are $300, determine how many balloon bouquets Eva and Jack must sell to break even.

5. Help Eva and Jack set a target profit for the balloon bouquets. How many bouquets must they sell to achieve the target profit? Calculate the margin of safety for this product.

6. Research costs of starting a Web site with e-tail capability, such as costs of Internet service providers, design, and customer-service support.
STEP B  Create Your Portfolio
As you work through the process, save the results so that you can refer, review, and refine. Create a professional-looking portfolio of the recommendations that you will present to Eva and Jack.

1. The first page should be a title page with the following information centered:
   Business Growth  
   Presented to Eva Lanier and Jack Lanier,  
   Owners  
   Party Town  
   By (Your Name)
2. The first section should include your flyer, poster, or other visual material describing the new merchandise and Web site that you have recommended to Eva and Jack.
3. The second section should present your research about the competition in your community and on the Internet.
4. The third section should include the selling price, break-even point, target profit, and margin of safety for the balloon bouquets. Include calculations. Also, include costs for operating a Web-site.

STEP C  The Internet
Almost anything you want to know can be found on the Internet. It provides a vast communication network for people around the world. Students and employees must learn to use the available information wisely, ethically, and legally.

1. Write a definition for the term ethics.
2. Many employers have a formal policy that defines the acceptable and unacceptable uses of the Internet in the workplace. Write a policy that Eva and Jack might establish for their employees.
3. Research one legal issue that can arise when an employee uses the Internet, such as plagiarism, viruses, employers accessing employees’ e-mail, or employees accessing the Internet for personal use. Write a one- to two-page paper on the issue.
4. Some people assume that everything appearing on the Internet is factual. However, this is not always the case. As a class, develop a list of ways to check the accuracy of information that you find.