Operations LAP 9

Performance Indicator: OP:024

Watch Your (Over) Head

Overhead/Operating Costs



Even though you might not have spent any money today, you still incurred expenses. What does this mean? Well, think about it. You woke up at home—someone pays the rent or mortgage for you to live there. Perhaps the heat or air-conditioning was running—someone pays for utilities, too. How about the cereal you ate for breakfast or the pair of jeans you threw on before leaving for school? Though you might not have purchased those items today, they still cost money.

The expenses that keep your life running on a day-to-day basis—housing, food, clothing, etc.— might be considered your personal "operating" costs. Businesses have operating costs as well. These expenses don't directly relate to the business's product(s), but they are still essential for success. Learn more about operating costs and their effects on business.

Objectives



Explain overhead/operating costs.



Describe the impact of overhead/ operating costs on the business.

Look! Overhead!



Every business has **operating costs**. There are a few different terms that may be used to describe these costs, such as "overhead" or "OPEX" (operating expenses). No matter what they're called, these are the ongoing, day-to-day expenses of running a business that are not directly related to production.

Operating costs are the opposite of **capital expenditures**. Capital expenditures are one-time purchases that a company makes—perhaps a building or a piece of equipment. Operating costs, on the other hand, relate to maintaining that building (e.g., janitorial services) or running that piece of equipment (e.g., electricity). For more on the difference between operating costs and capital expenditures, including a video, visit http://www.diffen.com/difference/Capex vs Opex.

The two main types of operating costs are fixed and variable. They are sometimes further subdivided into categories such as "selling expenses v. manufacturing expenses" or "administrative expenses v. manufacturing expenses." For more on these distinctions, read Sam Ashe-Edmunds' article "Selling Expenses v. Administrative Expenses" at http://smallbusiness.chron.com/ selling-expenses-vs-administrative-expenses-57899.html.

The fix is in

Operating costs that do not increase or decrease with changes in production are called **fixed expenses**. In other words, these are the expenses that must be paid no matter what. Examples of fixed expenses include:

- Maintenance and repairs for the business facility:
 - · Janitorial services
 - Trash removal
 - · Lawn care
- Utilities (electricity, gas, water, sewage, etc.)
- Insurance
- Property taxes
- Rent/Mortgage



- Wages/Salaries
- Employee benefits:
 - · Health insurance
 - Retirement
 - Vacation
- Office supplies
- Office equipment (computers, copiers, etc.)
- Certain business services, such as accounting, legal, etc.
- Interest on debt
- **Depreciation** (loss of value on certain company property, such as computers or vehicles)



▲ Copiers and other pieces of office equipment are considered fixed expenses.



For more on fixed operating costs, go to http://www.wisegeek.com/what-are-the-different-types-of-fixed-operating-costs.htm.

It varies

Operating costs that fluctuate with changes in production are called **variable expenses**. When a company produces more of a product, variable expenses go up. When a company produces less of a product, variable expenses go down. Most people don't associate variable expenses with overhead; rather, they think of them mainly as direct costs relating to production. However, there are several variable operating expenses, such as:

Advertising and promotion

Example: A company ramps up its production of pool accessories for the summer. During this season, it spends more on advertising and promotion to keep sales moving.

■ Travel expenses

Example: A company has slowed down its production of medical supplies due to lower demand. This also means that the company is spending less on travel expenses for its sales associates, as they are now visiting accounts just once a month, instead of twice.

Sales commissions

Example: Demand for flat-screen televisions is up during the holiday season, so an electronics manufacturer is producing more of them. Its sales associates are selling more televisions to wholesalers and retailers, meaning their commissions have been higher lately.

■ Employee bonuses

Example: A financial-services firm has had a stellar year selling its products (e.g., retirement-plan administration, investment advising, etc.) to more customers than ever. As a result, its employees will be receiving larger bonuses this year.



The commission that a sales associate gets for selling televisions is considered a variable expense.



Certain permits and fees

Example: As the economy recovers and more people build new homes, a construction business has more customers and is paying more in building permits and fees.

Costs of providing free shipping, delivery, or installation

Example: An appliance manufacturer offers free delivery to wholesalers and retailers who spend a certain amount of money with each order. Demand for appliances is up, so the manufacturer has been producing more, customers have been ordering more, and—as a result—the costs of providing free delivery have risen as well.

Mix it up

Some operating costs may be considered partially variable and partially fixed. These are known as **semi-variable costs** (sometimes called **semi-fixed costs** or **mixed costs**). Semi-variable costs are fixed until the company reaches a certain level of production; after that, they become variable. Here are a few examples:

- A manufacturer has a fixed cost for its employees' wages, but when it decides to produce a greater number of products this month, its employees work more hours and earn overtime. The employees' base wages are still fixed, but the cost of paying this overtime is variable, depending on how many extra hours are worked.
- This same manufacturer also has a fixed cost for its electric bill, but with the increased production, it's been using more electricity. The amount that is over and above the regular, fixed expense is variable.
- A company has a fixed cost for its salespeople's salaries, but when the company produces more, and salespeople sell more, their sales commissions increase. The salaries are fixed, but the commissions are variable. Considered together, they are a mixed cost.



Semi-variable costs are partially variable and partially fixed. Just think about what happens when an employee works overtime—the employee's base wages are fixed, but the overtime pay is variable.



I o see how companies calculate their semi-variable costs, go to http://www.variablecost.net/Semi-Variable-Costs.html.

Either/Or

As you can probably guess, certain costs may be considered either fixed or variable, depending on how you look at them. For instance, one business may consider pest-control costs to be fixed, since it spends the same amount of money each year ridding its facility of spiders and ants. Another business, however, may consider the costs to be variable, since it only spends money for pest control as needed (perhaps only once every few years). The decision of whether to categorize an expense as fixed or variable is ultimately up to the individual business. However, for accounting purposes, the decision must remain consistent over time.

Summary

Operating costs are the ongoing, day-to-day expenses of running a business that are not directly related to production. The two main types of operating costs are fixed and variable. Fixed expenses (e.g., rent, insurance) do not increase or decrease with changes in production. Variable expenses (e.g., advertising, travel costs) fluctuate along with production levels. Semi-variable (also called semi-fixed or mixed) costs are fixed until the company reaches a certain level of production; after that, they become variable. Some costs may be considered either fixed *or* variable. The decision of how to categorize an expense is up to the individual business; however, for accounting purposes, the decision must remain consistent over time.



TOTAL RECALL

- 1. What are operating costs?
- 2. What are the two main types of operating costs?
- 3. What are fixed expenses?
- 4. Give two examples of fixed expenses.
- 5. What are variable expenses?
- 6. Give two examples of variable expenses.
- 7. What are semi-variable costs?



Businesses like to keep operating costs as low as possible, so they can focus on production and profit. One way to keep operating costs down is to keep wages low. Many businesses pay their workers the minimum wage required by law. Often, workers consider this unfair and feel they should be paid more than the bare minimum for the work they do. Paying employees the minimum wage is certainly not illegal, but is it always ethical? What do you think?



Keep Things Running

Business owners and managers must keep operating costs in mind every time they engage in important business activities, such as setting organizational goals, determining whether or not to launch new products, setting budgets, etc. Though most businesses try to keep operating costs as low as possible so they can focus on production, these expenses are still vital for success. A realistic budget, for example, plans for operating costs (both fixed and variable) appropriately.

Pay the price

Operating costs have a great influence on a product's final selling price. The **total cost** of a product is the sum of the overhead and direct costs required to produce it. Let's say the total cost of producing a pair of



To learn more about markups and how they affect selling price, read Tamara Monosoff's article "Demystifying Profit Margins and Markups" at http://www.entrepreneur.com/ article/170964.

basketball shoes is \$25 (\$5 in operating costs and \$20 in materials). To make a profit, then, the company must set a selling price that is higher than \$25. Don't forget that there will be **price markups** between the manufacturer and the wholesaler, between the wholesaler and retailer, and between the retailer and the customer. The final selling price of the shoes that cost \$25 to make may be \$100 or more.

Many different factors go into setting a product's final selling price, and there are several pricing methods businesses can follow. One is cost-based pricing, in which the business figures out a product's total cost and then charges a predetermined markup. For instance, if a piece of jewelry costs \$50 total to make, the company charges \$75 for it to create a \$25 profit. The downside of cost-based pricing is that it is easy for competitors to undercut. Another company can come along with a similar piece of jewelry and charge just \$65 or \$70 for it.

Another method for setting selling prices is "price-based costing," in which the business determines how much customers will pay for a certain product, then figures out how to produce it for a cost that still leaves room for profit. Let's say the same jewelry business conducts market research and determines that it can reasonably expect customers to pay \$65 for the piece of jewelry in question. The business then determines how it can make the jewelry for just \$40, so it can still make \$25 in profit for each piece. This means whittling down costs, either operating costs or direct costs. In most cases, a business will look to reduce operating costs first.



▲ One downside of cost-based pricing? It's easy for another company to come along and undercut your price.

▲ Businesses should be careful when cutting operating costs. If a hair salon doesn't have enough stylists on duty, customers may grow frustrated with long wait times.

Cutting operating costs too deeply can affect product quality, so businesses must be careful. This risk can be especially evident in service businesses. Consider a hair salon. Its owners may cut down on operating costs by having only three stylists on duty at one time. However, if walk-in customers are kept waiting too long, the overall product suffers, and the salon may lose business.

One way for businesses to combat high operating costs is to create **economies of scale**. Economies of scale happen when a business creates enough of a product to spread out and "dilute" its fixed costs. Let's say that a manufacturer's monthly operating costs are \$20,000. If it produces 10,000 products a month, each product carries \$2 of operating costs into its total cost. However, if the company can manufacture 15,000 products in that same time period, that number is only about \$1.33. This economy of scale allows the company to reduce the impact of its operating costs without actually lowering them at all. Read more about economies of scale at http://www.economist.com/node/12446567.



The bottom line

As you can see from our discussion on selling prices, operating costs have a major impact on a business's profits. As costs go up or down, profits fluctuate as well. More costs equal less profit, and fewer costs equal greater profit.

A company's **gross profit** is the revenue it makes after subtracting the costs of the products it has sold. For example, if a company made \$1 million last guarter and spent \$200,000 producing its goods, its gross profit is \$800,000. Gross profit is a good indicator of how well a company keeps its costs under control. You see, a similar company may also have made \$1 million in revenue during the same quarter; however, it spent \$300,000 producing its goods. This company's gross profit is only \$700,000. It is spending more money to make the same amount of revenue. Clearly, the first company is more efficient.



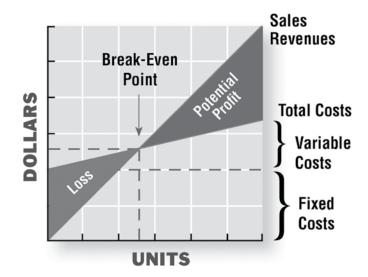
Operating costs have a major impact on a business's profits. More costs mean less profit, but fewer costs mean greater profit!

Learn more about gross profit at http://www.entrepreneur.com/article/226158.

A company reaches its **breakeven point** when total expenses equal total sales. At this point, the business has covered its costs but has not vet made a profit. The formula for calculating breakeven point is:

Fixed costs / (Price per unit - Variable costs per unit) = **Breakeven** point

Example: A company incurs a total of \$20,000 in fixed costs. and each product carries \$3 in variable costs. If the company sells each product for \$10, it will break even after selling 2,858 products: \$20,000 / (\$10 - \$3) = 2,858.



When budgeting for operating and production costs, companies should consider the breakeven point to see if it's feasible to sell the number of products that will ensure a profit. You can find a breakeven calculator online at http://www.calculatorpro.com/calculator/breakeven-calculator/.

Operating costs are just "a part of life" for every business and organization. They relate to the everyday routine, but they are anything but ordinary. Operating costs can mean the difference between profit and loss, failure and success, Prosperous businesses are mindful of operating costs and work to keep them in line.



Summary

Business owners and managers should keep operating costs in mind with every business activity and decision. Operating costs influence a product's final selling price. The selling price must cover the total cost of making the product and leave room to make a profit. An effective way to price products is to determine how much customers will pay for them, then to control costs in a way that will still allow for a profit. One method for lowering the impact of operating costs is to create economies of scale—making more products at the same level of operating costs. Operating costs also influence a company's overall profits. Gross profit is a good indicator of how well a company is keeping costs under control. When creating a budget for operating and other costs, a company should consider its breakeven point to ensure that it can still make a profit after production.

TOTAL RECALL

- 1. How do operating costs affect selling price?
- 2. Describe two main cost-focused methods of pricing.
- 3. What are economies of scale?
- 4. How do operating costs affect profit?
- 5. What is gross profit?
- 6. What is breakeven point?

Make It Pay!

Consider the operating costs at your place of employment or at your school. What are they? Which ones are fixed? Which ones are variable? Which might be considered semi-variable? How do these costs affect the business's (or school's) prices and profits?