5-1 How to Manage a Business

OBJECTIVES

- ***Define the five functions of management.***
- ***Describe the three types of plans used in business management.***
- ***Identify some of the management styles commonly found in businesses.***

HOW TO MANAGE A BUSINESS

Once you open your business and have people working for you, you become a manager. A manager is the person responsible for planning, organizing, directing, and controlling the operations of a business. These are functions that all managers must perform, no matter the size or type of business that they manage. Management is the process of achieving goals by establishing operating procedures that make effective use of people and other resources. Put another way, management is defined as getting work done through others. All functions of management work together and are continuous.

A manager has authority over employees and is ultimately responsible for their work. He or she must use many skills in this role but, mostly, a manager is a creative problem solver. The purpose of management is not just to achieve business goals but to achieve them with the greatest efficiency. This means maximizing production while minimizing expenses. Experts break down the job of a manager into four general functions: Planning, Organizing, Directing, and Controlling.

PLANNING (setting goals and making plans)

Planning is an ongoing process of setting goals, deciding when and how to accomplish them, and determining how best to accomplish them. A plan is a systematic process for achieving a specific goal. Three types of plans are used in business management:

- Strategic Plan. A strategic plan lays out a broad course of action to achieve a long-term goal, typically three to five years in the future. These plans are usually created by top-level managers with a big-picture view of what needs to be done and the general way in which it will be accomplished.
- Tactical Plan. A tactical plan outlines specific major steps for carrying out the strategic plan. Tactical plans typically cover a time period of less than a year and include target dates for accomplishing goals. Tactical plans are usually laid out by midlevel managers who analyze the big picture of the strategic plan and choose the major steps needed to achieve it.
- Operational Plan. An operational plan details the everyday activities that will achieve the goals of the tactical plan (and ultimately the strategic plan). Operational plans are short-range, covering days, weeks, or at most, months. These plans are typically drawn up by low-level managers-usually supervisors-who are very familiar with the actual day-to-day workings of the business.

Remember, planning is an ongoing process. Entrepreneurs frequently refer back to their business plan for guidance. Likewise, the planning that you do once your business is up and running will help you maintain focus and keep your business on track. Once plans are in place, it does not mean they must be followed exactly. Plans can be revised as needs change.

ORGANIZING (assembling the right resources and staffing)

Organizing is an ongoing process of arranging and coordinating resources and tasks to achieve specific goals. Organizing creates structure. It puts the people and other resources of a business in the right places and in the right combinations to maximize production and minimize expenses. Included in the organizing function are the following:

- Staffing the Business. This includes all of the activities involved in obtaining, training, and compensating the employees of a business. Because a company is only as good as the people who work for it, the staffing function is critical to the success of a business.
- Assignment of Tasks. You will need to decide which employee will be responsible for which tasks in the business. As you start your business, you will have to determine how many employees you will need and what their duties will be.
- Grouping of Tasks into Departments. As your business grows, you will need to organize departments. You will have to decide which tasks are closely related and group them accordingly. Some of the department titles that businesses use include Accounting, Marketing, and Human Resources.
- Organizational Structure. As your company grows, you will need an organizational structure. An organizational structure is a plan that shows how the various jobs in a company relate to one another. It is often represented in a chart and indicates the working relationships within the business.

- Allocation of Resources Across the Organization. There will never be enough resources for all the needs and wants of everyone in your business. There must be a plan for distributing the available resources for their most efficient use across the company. This is done by creating budgets based on requests from the departments within the company.

DIRECTING (leading, influencing, and motivating employees)

Directing is an ongoing process of leading, influencing, and motivating employees so they will work together to achieve specific goals. Leaders must have good interpersonal skills. These are skills used by people as they interact with others, particularly in a one-on-one setting. They include communicating clearly, listening, having a positive attitude, and behaving politely. Communication skills are particularly important. Leaders who communicate well with their employees build connections that help ensure the success of the business.

The ultimate goal of directing is team building, which is motivating individuals in a group to work together to achieve a shared goal. Leaders build teams. A good manager is not necessarily a good leader. Employees may obey a manager because he or she has authority. Employees willingly follow a leader because they have confidence in that person and share the leader's vision for the future. Although there are as many leadership styles as there are leaders, the three basic ones are:

- Authoritarian Management Style. The authoritarian leadership style is practiced when a leader tells employees what needs to be done and how to do it, without seeking their advice.
- Democratic Management Style. The democratic leadership style is practiced when a leader seeks input from employees about what tasks need to be done and how to do them but ultimately makes the final decisions.
- Delegating Management Style. The delegating leadership style is practiced when a leader gives employees complete freedom to decide what tasks need to be done and how to do them.

In reality, good leaders choose and adjust their leadership styles depending on the situation (known as Mixed Management). For example, they might lead a new employee in an authoritarian manner to ensure that he or she learns a task properly. They might use a democratic style and ask more experienced employees for suggestions about how to improve a task. And they might delegate a task to the most skilled and trusted employees and ask them to accomplish it as they see fit.

CONTROLLING (setting standards and measuring results)

Controlling is an ongoing process of setting performance standards, measuring actual performance, comparing actual performance to the standards, and taking corrective action if actual performance does not meet the performance standards. A business has many components for which performance standards can be set: production, expenses, customer service, employee actions, equipment, finances, inventory levels, product quality, profits, and sales. In all cases, the standards and the components to which they apply should be numerical and specific, as with, say, the number of sales per day per employee. That way, actual performance can be easily compared to a standard.

Some of the ways that you can determine if standards are being met are as follows:

- Compare actual revenues and expenses with what was projected
- Observe business operations and determine if they are running effectively
- Inspect products and services to ensure they are meeting performance and quality standards

Many businesses use the controlling management function to monitor the quality of the goods or services they sell. A quality control program is a program used by a business to ensure that its products or services meet specific quality standards. For example, a clothing manufacturer might set a quality standard for the number of straight seams sewn in a garment.

MAINTAINING A HEALTHY BUSINESS ENVIRONMENT

Workplace climate refers to the general feeling in a business, and is shaped by the psychological states and attitudes of the people who work there. Workplace climate is affected by many circumstances, including such things as interpersonal relationships, job security, and pay levels. Managers play a major role in shaping the workplace climate. Businesses that successfully implement the four management functions – planning, organizing, directing, and controlling – are much more likely to create a healthy environment. A company image is the perception (thoughts, attitudes, opinions, and beliefs) that the public holds about a company. Companies build image every time they interact with the public. Logos, signs, Websites, store layout, business cards and letterhead, product choices and packaging, advertising, publicity, customer relations-even the way employees dress-contribute to a company's image. Companies try to create and foster images that fit the vision of how they want to be identified in the marketplace. A good company image is not only good for business; it also makes employees proud to be associated with the company and contributes to a positive workplace climate.

5-2 Managing Employees

OBJECTIVES

- ***Explain how to implement your staffing plans.***
- ***Discuss ways to motivate your employees.***
- ***Describe the control function of management as it applies to human resources.***

IMPLEMENT YOUR STAFFING PLAN

Once you have people working for you, you become a manager. This means that you will no longer focus all of your efforts on doing your own job. You will be implementing) which involves directing and leading people to accomplish the goals of the organization. As a manager, you will have to exhibit leadership and motivate your employees. To manage your staff effectively, you need to understand the levels of management and develop good leadership qualities. This will help you create a workforce that is dedicated to meeting customer needs and increasing sales.

UNDERSTAND THE LEVELS OF MANAGEMENT

There are three basic levels of management: supervisory level (lower), department level (middle), and executive level (top). The amount of responsibility varies with the level of management. As the manager moves up, the amount of responsibility increases. The number of managers at each level will vary depending on the size of the company. In a new business venture, the entrepreneur may serve in all levels of management. A large corporation may have many individuals working as department- and supervisory-level managers.

- Supervisory-level managers work directly with the workers on the job and are responsible for implementing the plans of middle management.
- Department-level managers serve as a liaison between the supervisory-level and the top-level managers. They are responsible for implementing the goals of top management.
- Executive-level management is responsible for establishing the vision for the company and has the highest level of responsibility.

APPLY LEADERSHIP STYLES

As you learned before, managers will develop a style or way of working with those whom they supervise. Leadership styles have changed over the years as the workplace has changed. Successful managers today often empower their employees and give them the authority to make decisions without supervisory approval. Empowerment gives employees a sense of responsibility and pride in accomplishment. It also reduces delays in the flow of work and reduces the workload of the manager. However, not all managers use this style. There are many different leadership styles.

- Theory X Managers. Some managers use fear and intimidation and manage their employees as if they are lazy and cannot be trusted. They are called Theory X managers and use the authoritarian management style.
- Theory Y Managers. Other managers trust and respect their employees and value their contributions. They are called Theory Y managers and use both the democratic and delegating management styles.
- Theory Z Managers. Theory Z managers place more emphasis on motivating workers through group decision making and teams. These managers assume the average worker wants to be involved in managing a company and building trust among all organizational members is central to raising productivity.

In your working career, you will encounter many different leadership styles. When you become a manager, incorporate the qualities you like in other leaders into your leadership style.

ENFORCE EMPLOYEE POLICIES

As the owner of your own business, you will establish policies concerning vacations, holidays, hours, acceptable dress, and other issues affecting your workers. You will need to make sure that all of your employees are familiar with these policies. You may need to gently remind employees of policies if they fail to follow them.

Many companies communicate policies to staff by creating an employee handbook. These handbooks can be just a few pages long or they can fill a small binder, depending on the size of the company and the number of policies.

TRAIN YOUR EMPLOYEES

You will need to develop a training program for your new employees. This program should begin as soon as they are hired. Training should not end when the employee learns how things are done. Continuous training ensures that employees are always knowledgeable and up to date on changes affecting the business. There are many ways to provide training to

employees. You may use different techniques for different job responsibilities. You will need to decide which is best for you, your business, and the employee.

- On-the-job training. Employees learn new responsibilities by actually performing them at their place of business.
- Coaching. Employees receive feedback and instruction from their manager on a constant basis.
- Mentoring. One employee teams up with another more experienced employee to learn a job.
- Conferences and seminars. Employees attend conferences and seminars to learn about new techniques and trends from an expert in the field. These are usually held off-site.

After training, you need to make sure employees are using the training and that the training was effective. Justin Reynolds needs to train his employees on the new computerized inventory system he wants to use. He brings in a representative from the software company to provide a training session. Justin will know the training was effective if employees understand the software and are able to use it.

MOTIVATE YOUR EMPLOYEES

To get the most out of your employees, you will have to motivate them. You can do so in several ways.

1. Pay employees well. When employees feel they are compensated well, they will be happier. They will perform to the best of their ability.
2. Treat employees fairly. Everyone wants to be treated well. Be sure to treat everyone the same.
3. Recognize employees for the work they do. Offer public recognition for a job well done. Praise employees frequently.
4. Give employees adequate responsibility. Employees who are allowed to make decisions on their own often work harder. They take pride in the fact that their input makes a difference.

DELEGATE RESPONSIBILITY

Many entrepreneurs have difficulty delegating responsibility. To delegate is to let other people share workloads and responsibilities. Employees who are given more responsibility are better motivated and contribute more to the company. Delegating responsibility to them allows you to make the most of their experience, talents, and skills. As a business owner, delegating allows you to focus on important items, such as expanding into new markets or offering new products. Assigning paperwork and other duties that can be performed by someone else will free up your time.

Finally, delegating responsibility is essential if a company is to grow. When your business is small, you may be able to handle all areas of its management. If the company is to expand, you will have to let managers take on more and more responsibility.

LISTEN TO EMPLOYEES

Some entrepreneurs fail to listen to their employees. In doing so, they miss out on an opportunity to take advantage of valuable ideas and resources that can help them increase profits. The people who work for you are very familiar with your business and may be able to offer fresh ideas. Listening to new points of view may help you come up with new, creative solutions. If you value the opinions of your employees, they will feel they are a valuable asset to your company. This feeling of importance will keep them motivated to do a good job for you.

CONTROL HUMAN RESOURCES

The controlling function of management involves setting standards for the operation of a business and ensuring those standards are met. In the area of human resources, it is necessary to establish performance standards for employees and then evaluate employees periodically to be sure they are meeting the performance standards. This process can help you identify outstanding employees who should be promoted and problem employees who should be dismissed.

EVALUATE EMPLOYEES

Most businesses perform an employee review once or twice a year in which they analyze each employee's performance and determine the increase in the employee's salary. The job description should be used when evaluating how well an employee has fulfilled all of his or her job responsibilities. Some of the items that are usually evaluated include dependability, punctuality, attitude toward job and coworkers, and success in achieving predetermined objectives.

A performance evaluation serves as a management control tool that helps determine whether the objectives for a particular job are being met. The evaluation process is also useful to the employee. It helps the employee recognize strengths and see where there is room for improvement. As part of the process, plans for mentoring, training, and practice should be put in place to help improve the employee's performance in areas where needed.

During the performance review, the reviewer should focus on the positive aspects of the employee's performance. Productivity should be reviewed, and the employee and reviewer should work together to set new objectives for the upcoming period. The review should be recorded on an appraisal form. The form should include the employee's name and job title as well as the manager's name, the date range the review covers, job responsibilities and attributes, comments, goals for the next year, and a section outlining plans for employee development. A ranking method can be used to rate how well the employee has performed. Performance reviews should be conducted face to face. A written summary of the review should be kept in the employee's file.

PROMOTE EMPLOYEES

Promoting good employees will help ensure that they remain interested in working for your business. Employees often compete with one another, so promoting one over the other may cause problems. Be sure you make all decisions fairly. Base your decisions on solid reasons, such as volume of sales and quality of customer service.

DISMISS EMPLOYEES

Some employees may not work out. In fact, they may end up hurting your business. How will you handle such situations? As soon as you notice an employee not performing well or causing problems, discuss the situation with him or her. If performance does not improve, issue a written warning. If there is still no improvement, you will need to dismiss that employee. Once you decide to dismiss an employee, do so immediately. Record the reasons for the dismissal in the employee's file.

5-3 Managing Expenses, Credit, and Cash Flow

OBJECTIVES

- ***Describe strategies for managing cash flow.***
- ***Evaluate a business's performance through financial statement analysis.***

MANAGE YOUR CASH FLOW

As the owner of your own business, you will need to make sure that you have enough cash to make purchases and pay expenses. To do so, you will have to create a cash budget. You will also have to learn how to manage your cash flow.

CREATE A CASH BUDGET

A cash budget should show the projections of your cash coming in and going out. To ensure accuracy, it should be based on actual past revenues and operating expenses. A cash budget looks very similar to a cash flow statement, but it has slight differences. Three columns are used to show the estimated cash flow, the actual cash flow, and the difference between the two. This information can help you budget your financial resources. If your cash budget shows you will be short of cash in six months, you can begin arranging financing or generating capital now. If your cash budget shows you will have a surplus of cash two years from now, you might use that information in planning how to expand your business.

Many companies use spreadsheets to prepare their cash budgets. The spreadsheet will automatically perform calculations on the amounts you provide. This allows you to see the outcomes of changes in your cash flow instantly.

Mark Matson owns a snow removal business that he runs from his home. He uses a spreadsheet to create a budget for the first three months of the coming year, which is shown below.

CASH BUDGET MARK'S SNOW REMOVAL SERVICE Month One, 20—

	A	B	C	D
		Estimated	**Actual**	**Difference**
1	**Cash receipts**			
2	Cash sales	$2,000	$4,000	$2,000
3	Accounts receivable payments	$11,150	$13,150	$2,000
4	Tax refund	$850	$850	$0
5	**Total cash receipts**	**$14,000**	**$18,000**	**$4,000**
6	**Cash disbursements**			
7	Salaries	$4,500	$5,500	−$1,000
8	Gasoline	$2,500	$3,125	−$625
9	Vehicle maintenance	$350	$400	−$50
10	Utilities	$50	$50	$0
11	Advertising	$150	$300	−$150
12	Insurance	$500	$500	$0
13	Other	$250	$250	$0
14	**Total cash disbursements**	**$8,300**	**$10,125**	**−$1,825**
15	**Net cash increase/decrease**	**$5,700**	**$7,875**	**$2,175**

IMPROVE YOUR CASH FLOW

Two businesses with the same level of sales and expenses may have very different cash flows. One business may have a positive cash flow while the other may have a negative cash flow and be unable to cover its expenses. The difference may reflect a different pattern of cash receipts and disbursements. If your cash receipts will not cover required cash disbursements, you will need to take action to improve your cash flow. You can increase cash receipts, decrease cash disbursements, or perform both actions.

Increase Cash Receipts. One way to improve your cash receipts is to decrease your accounts receivable by getting customers who owe you money to pay more quickly. To encourage faster payment, you can do the following:

- Offer discounts on bills paid right away.
- Establish tighter credit policies (decrease the amount of time your customers have to pay their bills from 60 to 30 days).
- Establish a follow-up system for collecting unpaid accounts receivable. Consider hiring a collection agency to track down customers who are considerably late with their payments.
- Hold shipments to customers with large unpaid bills or insist that such orders be paid in advance.

Businesses can have cash flow problems if they start off with too little capital. If your cash flow is inadequate, you may want to increase cash receipts by obtaining more capital. This means securing a loan, investing more of your own money in the business, or finding investors who will provide you with capital in return for a share of your future profits.

Decrease Cash Disbursements. Another way of improving the cash flow of your business is to reduce your disbursements. This can be done by gaining better control over your inventory and payroll, slowing the rate at which you pay your bills, or reducing your expenses.

- Inventory is a large business expense over which you have some control. Reducing this expense will improve your cash flow. You know that carrying inventory is costly. If your business has cash flow problems, check to make sure that you are not holding too much inventory. Reducing your inventory will reduce your accounts payable because you will not be purchasing as much.
- Payroll is another large category of expense for businesses. Reducing your payroll can improve your cash flow. Payroll expenses can be decreased by reducing the size of your workforce or reducing the number of hours employees work. It is important to determine your workforce needs before you start making reductions in this area.
- Most of your suppliers will offer credit terms. This means that they may agree to accept payment at a later date if you pay interest charges. Depending on your cash flow needs, you may want to take advantage of the longest possible credit terms or use a credit card for purchases.
- Other expenses, such as rent, are fixed, so you cannot reduce them. But you can reduce variable expenses, such as advertising, to help improve your cash flow.

Mark Matson usually pays cash for gasoline and oil for his snowplow trucks. At the beginning of the winter season in December, his expenses are particularly high and cash receipts low, so he charges his expenses to his credit card. By delaying payment until the following month, Mark improves his cash flow in December. When the credit card bill comes in January, he will have received payment from his customers for the work he did in December and will not have a problem paying the bill.

PREPARE AND ANALYZE FINANCIAL STATEMENTS

To run your own business, you have to be able to understand and analyze financial statements to determine how well your business is performing. Businesses keep many kinds of records and create different kinds of financial statements. Your records and statements can help you analyze your business and assist you in making management decisions.

PREPARE FINANCIAL STATEMENTS

When you are starting a business, you will prepare pro forma financial statements based on projections. Once your business is up and running, you will prepare financial statements that show actual financial performance. These financial statements will contain more detailed financial information than the pro forma statements because the business's finances will change as the business grows.

- Income Statement. The income statement reports revenues, expenses, and the net income or loss over a specific period of time, such as a month, a quarter, or a year. Many businesses will prepare an income statement monthly in order to closely monitor revenues and expenses.
- Cash Flow Statement. The cash flow statement shows the cash inflows (receipts) and cash outflows (disbursements) for a business during a specific period of time. This statement shows the actual cash a business receives and how that cash is

used. Unlike the income statement, which reports revenues not yet received and expenses not yet paid, the cash flow statement reports actual amounts, making it the most valuable financial statement for many business owners.

- Balance Sheet. The three most important elements of a company's financial strength are its assets, liabilities, and owner's equity. The value of assets, liabilities, and owner's equity on a specific date is reported on the balance sheet. The balance sheet is usually prepared monthly, quarterly, and at year-end.

ANALYZE SALES

You must know how to use the information in your financial statements to determine the level of sales you need to achieve to earn a profit. Your sales records show sales trends and patterns. You can use these records to forecast future sales and make good business decisions.

Analyze Sales By Product. Analyzing your sales by product can help you make decisions about the kind of inventory to stock. It can help you increase sales and profits. Emily Lee owns a garden and patio store. Her store has four departments: outdoor furniture, outdoor grills, plants, and garden tools. Emily's sales figures show that almost 57 percent of her annual sales come from the outdoor furniture department, as calculated below.

DEPARTMENTAL SALES • LEE GARDEN AND PATIO

Department	Sales	Percent of total*
Outdoor furniture	$110,000	56.7
Outdoor grills	37,000	19.0
Plants	24,000	12.4
Garden tools	23,000	11.9
Total	$194,000	100.0

*Rounded

Sales of Outdoor Furniture ÷ Total Sales = Percent of Sales

The plants department accounts for only a little over 12 percent of sales. Based on these data, Emily decides to reduce the size of the plants department and increase her inventory of outdoor furniture.

ANALYZE NET PROFIT ON SALES

Your income statement shows whether or not your business is earning a profit. It also tells you how profitable your business is. This information can be very useful in helping you set and meet profit goals. The rate of profit a business earns is often shown as the ratio of its net profit to its sales. This ratio is calculated by dividing net income after taxes by net sales.

Net Income After Taxes ÷ Net Sales = Net Profit on Sales

In order to calculate net profit on sales, a business must first perform calculations to determine net income after taxes and net sales. All of these calculations are found on the income statement, as shown below.

INCOME STATEMENT
Hendrick's Auto Supplies, 20—

Revenue from sales	
Gross sales	$235,000
Returns	3,200
Net sales	$231,800
Cost of goods sold	150,000
Gross profit	$ 81,800
Operating expenses	
Salaries	$ 26,200
Rent	8,400
Utilities	1,500
Advertising	1,100
Insurance	1,000
Supplies	700
Other	1,000
Total operating expenses	$ 39,900
Net income from operations	$ 41,900
Interest expense	2,400
Net income before taxes	$ 39,500
Taxes	12,245
Net income/loss after taxes	$ 27,255

Calculate Net Sales. Jack Hendrick owns a retail store that sells automotive supplies. He wants to find out his net profit on sales. First he must determine his gross sales and net sales. Gross sales is the dollar amount of all sales. Net sales is the dollar amount of all sales with any returns subtracted. Jack sold $235,000 worth of merchandise and had $3,200 worth of merchandise returned. Therefore, his net sales amount is $231,800.

Gross Sales - Returns = Net Sales
$235,000 - $3,200 = $231,800

Calculate Net Income After Taxes. Three calculations must be performed to determine your net income after taxes. You must calculate the (1) gross profit, (2) net income from operations, and (3) net income before taxes.

Gross profit is profit before operating expenses are deducted. Last year, Jack spent $150,000 for merchandise that he sold. This amount represents his cost of goods sold. Jack subtracts his cost of goods sold from his net sales to find his gross profit.

Net Sales - Cost of Goods Sold = Gross Profit
$231,800 - $150,000 = $81,800

Jack's operating expenses include rent, salaries, and similar business expenses. Last year his operating costs were $39,900. Gross profit minus operating expenses equals net income from operations.

Gross Profit - Operating Expenses = Net Income from Operations
$81,800 - $39,900 = $41,900

To calculate net income before taxes, Jack has to subtract one more expense that has not yet been taken into account: interest on loans he has obtained. Last year, Jack paid $2,400 in interest. He subtracts this from his net income from operations to get his net income before taxes. If a company has no additional expenses, such as interest expense, the net income from operations equals the net income before taxes.

Net Income from Operations - Interest Expenses = Net Income before Taxes
$41,900 - $2,400 = $39,500

To compute his after-tax income, Jack subtracts the amount he paid in income tax last year, $12,245, from his net income before taxes. This gives him his net income after taxes for his automotive supply business.

Net Income before Taxes - Income Tax Paid = Net Income after Taxes
$39,500 - $12,245 = $27,255

Calculate and Analyze Net Profit on Sales. After all of the above calculations have been performed, the net-profit-on-sales ratio can be calculated. This calculation helps determine how profitable your business is. Jack determines that his profits represent 11.8 percent of his net sales.

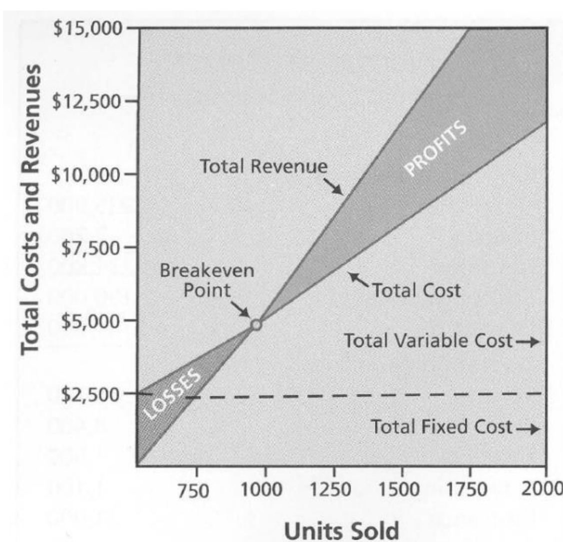
Net Income After Taxes ÷ Net Sales = Net Profit on Sales
$27,255 ÷ $231,800= 0.118 or 11.8%

Jack can use this figure to assess his profits in two ways. First, he can compare his profit ratio this year with his profit ratio in previous years. If his profit ratio has declined, his business has become less profitable. If the ratio has increased, his business has become more profitable. Jack can also compare his profit ratio with average profit ratios in his industry. If his ratio is lower than the industry average, he may want to figure out what he can do to improve his profitability.

SET AND MEET PROFIT GOALS

To run your business effectively, you will need to set profit goals. These goals will reflect the amount of profit you hope to earn from your business during a particular year.

Jack Hendrick would like to increase his profit ratio to 15 percent. He decides to try to increase his sales and reduce his expenses. He begins a frequent-buyer program and offers discounts on bulk purchases. Jack will talk to suppliers with the hope of reducing his cost of goods sold. Jack would like to increase his profits even more by opening several more stores. He hopes that purchasing his inventory in large quantities will lower his costs significantly.



PERFORM BREAK-EVEN ANALYSIS

As you learned in before, break-even analysis is a useful tool for determining how increases in sales will affect your profits. The break-even point is the volume of sales that must be made to cover all of the expenses of a business.

- Below the break-even point, your expenses will exceed your revenues and you will be losing money.
- Once you reach the break-even point, your sales will equal all of your expenses. This means that at this level of sales, you will neither make nor lose money.
- Once you exceed the break-even point, you will begin to earn profits, as shown in the graph.

ANALYZE DEBT AND EQUITY

When analyzing a company's financial health, it is important to look at its mix of debt and equity. The balance sheet, as shown on the next page, contains most of the data needed for this analysis. There are four key areas an entrepreneur should review using data from the balance sheet:

1. Ability to pay debt as it comes due. Does the company have enough money to meet its short-term commitments?
2. Return on assets. Is the company providing a good rate of return on assets?
3. Amount of debt the company is using. Using debt increases the risks a company faces, but it could also increase the expected return on owners' equity investment.
4. Rate of return by the owners on their equity investment. All decisions ultimately affect the rate of return earned by the owners on their equity investment in the business.

Ability to Pay Debt. A business that has enough money to payoff any debt owed is described as being liquid. The liquidity of a business depends on the availability of cash to meet debt obligations. The current ratio is used to measure a company's liquidity. You'll recall that the ratio compares a company's current assets to its current liabilities.

$$\textbf{Current Ratio} = \frac{\textbf{Current Assets}}{\textbf{Current Liabilities}}$$

Return on Assets. A very important factor for a company to consider is its return on assets (ROA). The ROA indicates how profitable a company is relative to the total amount of assets invested in the company. It is usually expressed as a percentage. Assets are invested in a company for the purpose of producing net income. A comparison of net income to total assets reveals the rate of return that is being earned on the entire company's assets.

$$\textbf{Return on Total Assets Ratio} = \frac{\textbf{Net Income}}{\textbf{Total Assets}}$$

Debt Ratio. The amount of debt, relative to total assets, used to finance a business should be examined. The more debt a business has, the more risk it is taking. Because debt is a fixed cost, it has to be repaid no matter how much profit the company earns. The debt ratio is calculated using the following formula:

$$\textbf{Debt Ratio} = \frac{\textbf{Total Debt*}}{\textbf{Total Assets}}$$

** total debt includes all payables, short-term debt, and long-term debt.*

Return on Equity. The owner's (or shareholders') profitability can be measured by the return on equity (ROE). The ROE is the rate of return the owners are receiving on their equity investment. It reveals how much profit a company earned in comparison to the total amount of owner's equity reported on the balance sheet. It is usually expressed as a percentage. A business that has a high ROE is likely to be more capable of generating cash internally. The formula for return on equity is as follows:

$$\textbf{Return on Equity Ratio} = \frac{\textbf{Net Income}}{\textbf{Stockholders' Equity}}$$

5-4 Managing Production

OBJECTIVES

- ***Examine the tasks and tools of production management.***
- ***Learn about scheduling, productivity, and quality control.***

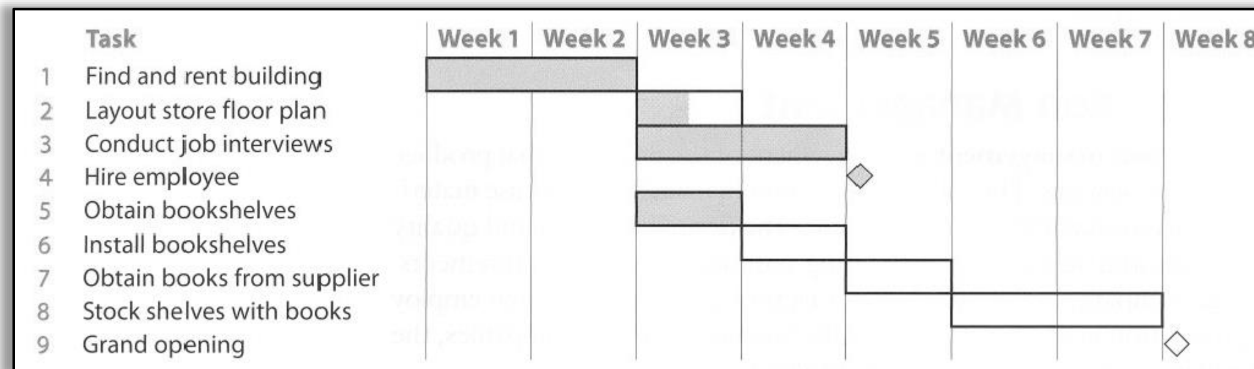
MANAGING PRODUCTION

Production management is management of the processes that produce goods and services. The goal of production management is to use materials and resources efficiently to produce the desired quantity and quality of goods and services while meeting cost and schedule requirements. Large companies, particularly manufacturing companies, often employ a production manager to perform this function. In small companies, the business owner typically oversees production management. Production managers typically focus on three issues: Scheduling, Productivity, and Quality.

SCHEDULING

Scheduling is a key activity in every business. Manufacturers make schedules for their production processes. Wholesalers and retailers make schedules for their orders and deliveries. Service businesses make schedules of the activities they intend to perform for customers. However, making a schedule and keeping it are two different things. It is the responsibility of the production manager to ensure that schedules are kept. A schedule is not a wish list; it is a plan for achieving goals. Like any good plan, a schedule should reflect reasonable expectations. Production managers need to know how long it will take to make a product, perform a task, get an order from a supplier, or serve a customer. Established businesses rely on past data to make these predictions. New businesses have to make sensible estimates, using the best information available.

Production managers use tools to create schedules. One tool is a Gantt chart, a bar chart that shows schedule goals for a list of tasks and the duration (length of time) of each task. A Gantt chart may also show the progress made at achieving each task. Although Gantt charts have many variations, a typical example includes a timeline across the top and a list of tasks down the left side. Bars indicate the start and end dates of each task. The timeline may list actual dates or chunks of time (for example, "Week 1"). A diamond shape is used to indicate a milestone-a significant point of progress. Bars and diamonds are outlined on a proposed schedule and then darkened as tasks are completed. If a particular task is finished late (or early), the start and end dates of future tasks and milestones may have to be adjusted.

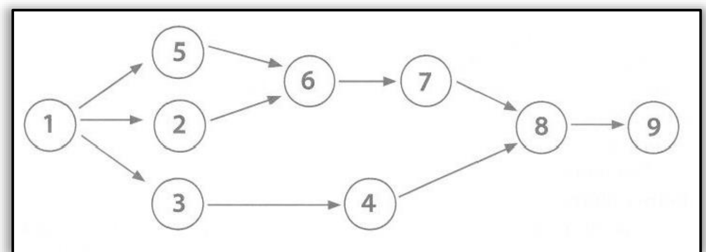


***Gantt Chart**: A Gantt chart shows the schedule of goals for a list of tasks.*

This Gantt chart shows the schedule for opening a retail book store. Week 3 has just ended.

Another scheduling tool is the Program Evaluation and Review Technique (PERT) chart. A PERT chart is a scheduling diagram that shows tasks as a sequence of steps and illustrates how those steps are dependent on each other. In other words, PERT charts show which tasks must be completed before others can be started. A basic PERT chart uses circles to represent completed tasks. Arrows between the circles illustrate the order in which tasks should be completed.

The illustrated PERT chart covers the same nine tasks that were included in the Gantt chart. The PERT chart makes it obvious that the building should be rented (task 1) before any other tasks take place. Store layout (task 2), job interviews (task 3), and obtaining bookshelves (task 5) can proceed at the same time. They are not dependent on one another. However, hiring an employee (task 4) should be completed before the bookshelves are stocked with books (task 8), so the employee can help with the stocking.



***PERT Chart**: A PERT chart shows tasks as steps in a sequence and illustrates how they are dependent on each other.*

PRODUCTIVITY

Productivity is a measure of business output compared to business input. An example of productivity is the number of items produced per employee or the number of customers served per day. Productivity is a ratio of one numerical value to another numerical value. It can be measured in time intervals (hours, days, or weeks) or labor increments (employee, department, or division). The most common measures of productivity for a small business are: ***output per employee, output per unit of time,*** and ***output per dollar of cost***. Production managers use productivity data to monitor the performance of processes and people.

QUALITY CONTROL

Controlling quality is one of the primary functions of business managers. Most entrepreneurs strive to provide high-quality goods and services to satisfy customers. However, quality can be difficult to define and measure. High quality may mean different things to different people. Production managers set quality standards for their businesses based on the types of goods and services they are providing. These standards are part of their overall quality control program. Regular quality inspections ensure that standards are being met. Quality inspections can be conducted at stages during the production process or when a service or product is completed. Manufacturing businesses use quality inspections to make sure their goods meet specified production standards. For example, a product may need to meet certain standards for appearance or strength. Service business managers conduct inspections to make certain that a task has been performed properly. For example, a car wash employee may inspect a vehicle after it has been washed to make sure the job met the company's standards.

5-5 Managing Distribution

OBJECTIVES

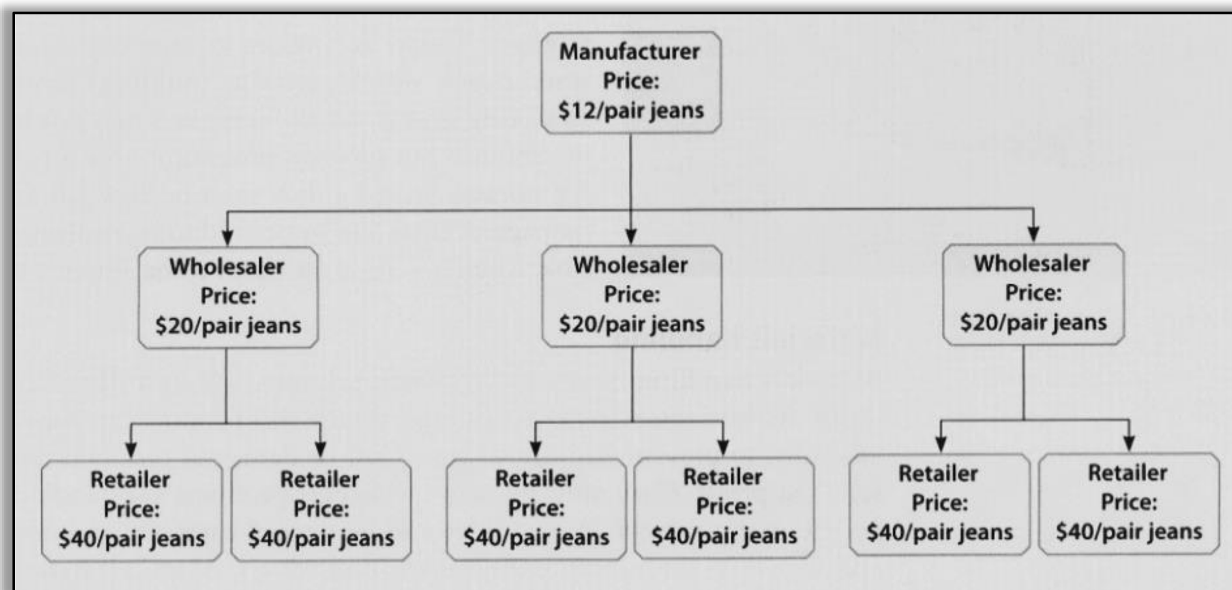
- ***Explore activities within distribution management.***
- ***Examine the distribution chain.***

MANAGING DISTRIBUTION

Distribution management is the management of materials and processes associated with incoming and outgoing products. The goal of distribution management is to ensure that products are handled, stored, and transported in an organized, safe, and cost-effective way.

DISTRIBUTION CHAIN OR CHANNEL

A distribution chain (or distribution channel) is a series of steps through which products flow into or out of a business. A typical distribution chain begins with a manufacturing business producing a product. That product is sold to a wholesaling business and then resold to a retailing business. Each business is a link that serves a specific purpose in the chain. The price of a product increases as it goes along the distribution chain. A markup is a price increase imposed by each link in the chain. For example, manufacturers set a price based on their expenses and desired profit. Wholesalers pay that price and then set a higher price to cover their costs and to earn a profit. Retailers then add a markup to cover their costs and to earn a profit. These markups can be substantial. The price of a product in a retail store is typically much higher than the original manufacturer's price.



<u>Distribution Chain for Jeans</u>: A distribution chain is a series of steps through which products flow into or out of a business.

TRANSPORTATION

Transportation of goods is a vital service in any distribution chain. Most goods are not manufactured and sold to consumers in the immediate area. Some goods travel vast distances, even around the world, to reach their final buyers. Logistics is the handling and organizing of materials, equipment, goods, and workers. Transportation logistics is complex for some businesses, particularly larger ones. Goods can be transported by ship, airplane, train, or truck. Distribution managers make transport decisions based on the cost and scheduling needs of their companies and their clients.

SHIPPING AND RECEIVING

Most large businesses have a department devoted to the shipping and receiving of goods. A shipping department handles outgoing goods. These are goods moving to the next link in the distribution chain or to final buyers. A receiving department handles incoming goods. These are goods sent to the business by suppliers. In a small business, one individual may handle all shipping and receiving duties. Whatever the size of the business, it is vitally important that incoming and outgoing shipments are monitored and tracked carefully and that accurate records are kept. The products in incoming shipments should be checked against purchase invoices to ensure that everything has been received as ordered and is in good condition. Outgoing shipments should also be checked to ensure that orders have been properly filled.

STORAGE AND WAREHOUSING

Many products do not flow immediately along a distribution channel. They spend time in storage at each link along the way. Manufacturers and wholesalers may have large inventories in storage. These businesses commonly operate warehouses, which are large buildings devoted to storing goods. Small businesses may not have warehouses but typically have some area set aside for storage. Stored goods must be kept safe from damage or theft and organized to be easily accessible when it is time for them to be shipped out.

MATERIALS HANDLING

Materials handling is a task of concern at every link in a distribution chain. All businesses in the chain must ensure that products are handled carefully, to prevent damage or loss. Lost or damaged products represent
lost profit. Care must be taken whenever products are handled by people or equipment. Products should be treated carefully and moved and stored in accordance with specific procedures. Materials handling involves more than the safety of the products. It is also concerned with moving them in an orderly, efficient, and cost-effective manner.

DELIVERY TERMS

Large products and large-shipment orders are considered freight, meaning that they are transported by large trucks, trains, or ships. Manufacturing and wholesaling businesses use specialized terms to describe their freight-delivery options. One of these terms is "free on board." Free on board is a delivery term that is followed by a word or group of words that identify a specified location at which the ownership responsibility for the shipment switches from the seller to the buyer. Free on board may be abbreviated as F.O.B., FOB, fob, or f.o.b. For example, a wholesaler in Chicago may use the delivery term "FOB Chicago."

5-6 Managing Operations

OBJECTIVES

- ***Define operations.***
- ***Study general operating procedures.***

MANAGING OPERATIONS

Operations are the everyday activities that keep a business running. So operations management is the management of the everyday activities that keep a business running. Large businesses often devote an entire department to a single operation, such as sales, human resources, or production. Small businesses may have only one person overseeing all operations. In businesses that have employees, the operations manager will likely delegate some operational responsibilities to one or more employees. This gives the manager more time to devote to tasks that only he or she can handle.

GENERAL BUSINESS POLICIES

A policy is a procedure or set of guidelines that specifies exactly how something should be accomplished or handled. Many business policies are in written form. To ensure that operations proceed smoothly, a business develops policies that govern how specific operational activities should be conducted. Operations managers are responsible for making sure these policies are followed for the overall good of the company. Businesses develop policies for many kinds of operations. However, some

operating policies are very general, and common to most small businesses. These policies involve hours of operation, extending credit to customers, handling returns and rework requests, and delivering products.

HOURS OF OPERATION

An important component of overall policy is the hours of operation. Some large manufacturing plants operate around the clock because keeping the machines running continuously can be more economical and productive than stopping and restarting them. Some wholesalers, retailers, and service businesses are also open around the clock-"24/7" – especially in large cities. However, most choose to limit their hours to what best serves their customers' needs as well as their own. They may also be bound by local laws that prohibit businesses from operating at certain hours (for example, late at night).

BUSINESS HOURS:
MONDAY TO
TUESDAY TO
WEDNESDAY TO
THURSDAY TO
FRIDAY TO
SATURDAY TO
SUNDAY TO
HOLIDAYS TO

EXTENDING CREDIT TO CUSTOMERS

Many businesses establish a credit policy as part of their operations management. A clear policy helps make sure customers understand the conditions (if any) under which credit will be extended. Businesses often rely on "the three C's" when deciding whether to extend credit to a particular customer. These are:

- Character. Character refers to the financial trustworthiness of the customer. A customer's past credit history is considered essential here. Someone who has made credit payments on time and in full in the past is likely to do so again.
- Capacity. The customer's cash inflow is referred to as the customer's capacity. A customer's current income is the best measure of this. People with good, steady income are more likely to pay their bills.
- Collateral. The customer's total financial assets are referred to as the customer's collateral (sometimes called capital). A customer who owns financial assets – a house, a business, corporate stock, a savings account – is usually more likely to pay bills on time than an individual who has few or no assets.

RETURNS AND REWORK REQUESTS

Companies that sell products need to establish policies for handling situations when products are returned by dissatisfied customers. Returns due to product defects may be handled differently than returns due to other reasons. Rework is a manufacturing term that refers to work performed to correct defects in a product. Manufacturing businesses often set rework policies that clearly state the conditions under which they will correct defective products, and how customers can go about getting products reworked. All businesses should establish policies that establish whether or not they will exchange, repair, or replace returned products, and whether they will refund a customer's money.

DELIVERY POLICIES

Businesses that sell products need a delivery policy. These guidelines make customers aware of their delivery options and the costs and timetables involved. Manufacturers and wholesalers commonly use freight delivery services to ship large orders. Retail businesses, who sell much smaller orders, may offer customers a choice of several delivery options including the U.S. Postal Service or commercial delivery services (such as Federal Express or UPS). A delivery policy may specify the amount of time between order placement and order shipment-for example, 24 hours. The policy should cover situations in which an order cannot be filled within the specified time, such as when items are out of stock. In addition, some policies include notifying customers bye-mail when orders are shipped, providing a link so the customer can track the shipment online. A delivery policy should also make clear any conditions or restrictions imposed by the seller. Some businesses will not ship outside of the country, for example, or will not deliver to post office boxes.

CUSTOMER SERVICE POLICIES

Customer service is one of the most important aspects of operating a business. There is a well-known saying that it costs more to gain a new customer than it does to keep an existing one. The goal of every business is to get repeat customers – that is, people who come back again and again. Satisfied customers are likely to be repeat customers. People tell their friends about experiences, both positive and negative, with businesses and products. Word of mouth is verbal publicity. Positive word of mouth about a company can bring in new customers. Negative word of mouth can be extremely harmful to a business.

A customer service policy is designed to make sure that people have only good experiences when dealing with the company. Businesses set policies detailing how customers should be treated, both on a general basis and when problems arise. There are five fundamental elements governing the treatment of customers:

- Courtesy
- Respect
- Prompt Attention
- Knowledgeable Employees
- Credibility

HIRING POLICIES

A business must have a hiring policy. The policy may specify that all job applicants must complete an employment application and submit a resume and letters of reference. Testing may be required for some positions. Applicants may also have to submit to a background check or even a credit report check. The hiring policy may also specify who makes final hiring decisions.

SAFETY POLICIES

It is important that you have policies in place that provide for a safe environment for your customers and employees. Instruction in safety procedures should be part of employee training. Employees should know how to operate equipment safely and be required to wear the necessary protective gear. Employees should also be briefed on emergency plans for fires, tornadoes, and other disasters. Signs should be placed in strategic locations reminding employees of safety procedures in the workplace. You should also provide warnings to customers so that they do not enter employee-only areas. Caution cones can be placed where unsafe conditions exist.

OPERATIONS MANUAL

As your business grows, you will find that a detailed operations manual is an essential tool for operating your business efficiently. An operations manual contains all of the rules, policies, and procedures that a business should follow in order to function effectively. You can also have a separate company or employee handbook that details the rules, policies, and procedures that apply to employees. Just as you spent time developing your business plan, it is important to spend time detailing the operations of your business. By having this information in writing, it can be referenced easily and applied consistently to business operations. Your operations manual should include the rules, policies, and procedures that guide your business practices. Rules outline the appropriate behavior and actions of those that work for you. All employees should be treated the same way when it comes to rules. Policies serve as a guideline for daily operations. They are established to make the business run efficiently and may apply to both employees and customers. Procedures are a series of steps and actions that employees must follow to complete an activity. They are instructions on how to perform a job task correctly. Procedures are more specific than rules. Rules, policies, and procedures are established to make the business run efficiently. As a business owner, it is important to remember that sometimes you have to make exceptions to rules, policies, and procedures because not all situations are the same.

5-7 Managing Purchasing and the Supply Chain

OBJECTIVES

- ***Define purchasing and learn about the process of purchasing.***
- ***Explore factors in purchasing management.***

MANAGING PURCHASING

WHAT IS PURCHASING?

Purchasing is buying materials, products, and services for business purposes. Procurement is the act of purchasing. Businesses have many purchasing needs. All businesses buy products for their own use – for example, office supplies, raw materials, or other items needed for everyday operations. Wholesale and retail businesses also purchase merchandise to resell.

Large companies typically have an entire department devoted to procurement. Individuals who have purchasing responsibilities are called buyers, or purchasing managers. In small companies, the business owner is likely to do all the purchasing. Whatever the case, buyers must be knowledgeable about the goods and services they purchase and the companies with which they do business. Vendors (suppliers) are businesses that sell products or services to other businesses.

MANAGING PURCHASING

The goal of procurement management is to buy goods and services of the right quality in the right amounts at the right time, and at the right cost and payment terms from the right vendors. Managing purchasing is extremely important, because every purchase has a cost, which directly affects the profitability of a business.

Goals of Procurement Management
- Right quality
- Right amount
- Right time
- Right vendors
- Right cost
- Right terms

- **Selecting the Right Quality**. Quality covers many aspects of a product or service. Quality can involve appearance, function, or other properties of importance to the buyer. Wholesale and retail buyers may care about who produces the merchandise (brand-name companies), where the merchandise is produced (locally made or American made), or how the merchandise is produced. One of the tools used by procurement managers to make decisions about quality is called value analysis.
- **Selecting the Right Quantity**. Sales forecasting is predicting future sales based on past sales data (or other available information) and expected market conditions in the future. Purchasing managers use sales forecasting to help them determine the right quantities to purchase.
- **Timing Purchases**. Sales and inventory data help purchasing managers schedule the best times to place reorders. Items that are used or sold at a relatively constant rate are likely be reordered at regular time intervals. This is called periodic reordering. Lead time is the period between order placement and receipt of shipment. Some businesses make purchasing decisions based on seasonal factors.
- **Choosing the Right Vendors**. Sourcing is choosing appropriate vendors to supply desired goods or services. Numerous factors are involved in choosing a vendor. They include: Price, Quality, Lead time, Location (local, foreign, etc.), Delivery and shipping options, Reliability (for example, filling orders accurately), Customer service (during and after order placement and after delivery).
- **Getting the Right Price**. Many buyers planning to make a purchase, particularly a large or expensive one, ask several vendors to provide a price quote showing what they would charge to fill the order. Some companies require their buyers to obtain and compare price quotes from a minimum number of suppliers before placing an order.
- **Getting the Right Payment Terms**. Businesses that sell to the general public typically demand payment at the time of purchase. However, business-to-business purchases are often handled differently. Many vendors allow established business customers extra time to pay for purchases - for example, 30 days or 60 days. Vendors who allow trade credit often provide a small discount to the buyer if full payment is made early and in cash. A cash discount is a discount given to buyers who pay for purchases in cash, either at the time of purchase or within a set time period after purchase. A cash discount typically ranges from 1 to 3 percent of the total. For example, the term "2/10 Net 30" means full payment is due within 30 days but a 2 percent discount is given if the bill is paid within the first 10 days of that period.

THE PROCESS OF PURCHASING

Proper purchasing management requires good recordkeeping. Several types of paperwork are common to the purchasing process.

- **Product Specification**. A product specification is a written, detailed description of the characteristics (size, shape, capabilities, etc.) of a product. Businesses may develop product specifications for items they intend to purchase, particularly those that are expensive or crucial to their operations. Buyers use product specifications to guide their purchases and vendor selections and make sure that products meet their quality standards. Suppliers develop product specifications to provide buyers with information about products they have for sale.
- **Purchase Order**. A purchase order is a document issued by a buyer to a vendor that lists the items to be purchased, their quantities and prices, and other relevant information, such as delivery or payment terms. Once a vendor accepts a purchase order, it becomes a binding agreement between the two parties to complete the purchase. A purchase order is a financial commitment. Businesses with employees should have policies that specify exactly who within the company has the authority to issue purchase orders and whether there are any spending limitations.
- **Invoice**. An invoice (bill of sale) is a document issued by a vendor to a buyer on fulfillment of a purchase order. An invoice typically lists the items purchased, their quantities and prices, and other information such as date of shipment and payment terms. Vendors should issue a receipt after each invoice is paid.
- **Packing Slip**. Another vendor-issued document is the packing slip, which is a list of all items in a shipment. Purchasing managers should make sure that invoices, receipts, and packing slips are accurate and match the original purchase orders.

5-8 Managing Inventory

OBJECTIVES

- ***Learn why managing inventory is important.***
- ***Investigate ways to plan inventory levels and investments.***
- ***Research methods for controlling inventory levels.***

MANAGING INVENTORY

INVENTORY MANAGEMENT BASICS

Inventory is the amount of merchandise a business has available for sale at a given time. The term inventory actually has several meanings in business, depending on the context in which the word is used. Inventory can be the merchandise itself, the quantity of the merchandise, or the monetary value of the merchandise (inventory refers to physical merchandise). The quantity of merchandise is called the inventory level, and the monetary value of the merchandise is called the inventory value.

Inventory management is concerned with the physical condition of inventory and the amount of space it takes up. The inventory level is important because it determines how well a business can meet customer demand. Inventory is a business asset; it has monetary value that affects a company's profitability. Inventory also has a cost. In addition to the money paid for inventory (called the inventory investment), there are expenses associated with keeping inventory. Inventory managers try to maintain inventory at a level that satisfies customer demand but minimizes expenses The goal of inventory management can be summed up in one simple phrase: not too little and not too much. Too little inventory can be disastrous for a business. A stock-out occurs when an item in inventory is completely gone. A stock-out leads to lost sales and can cause disappointed customers to go elsewhere to shop. Desperate businesses may be able to place emergency orders with vendors when stock-outs appear likely, but they will probably pay much higher prices than usual to get rush service and delivery.

Too much inventory is also a problem. Excess inventory ties up money that could be used for other purposes. Keeping inventory involves material-handling, labor, tax, and insurance expenses. Inventory that becomes damaged during handling or storage may have to be discarded, adding a waste-disposal expense. Obsolescence is the process of becoming obsolete, which means no longer useful or desirable. Retail inventory can go out of style, for example, as fashion trends change. Obsolete inventory has to be sold at a discount, maybe even for less than was paid for it. Obsolescence is more likely to occur when excess inventory is kept, particularly for long periods.

PLANNING INVENTORY LEVEL AND INVESTMENT

Maintaining the right amount of inventory is an important task for a business. Useful data sources include purchasing records, sales figures and forecasts, and recorded lead times. Inventory managers must also consider the amount of storage space available and the expense of buying and storing inventory.

Some of the concerns about inventory that managers must address include the following:

- Maintaining a wide assortment of stock, but keeping adequate quantities of fast-moving items
- Increasing inventory turnover, but maintaining a high level of service
- Keeping stock levels as low as possible without sacrificing service or performance as a result of stock outs
- Obtaining lower prices by making bulk purchases, but not ending up with slow-moving inventory
- Having adequate inventory on hand, but not ending up with out-of-date items

Calculating Inventory Level for Business Start-up

Start-up businesses do not have previous sales data on which to base inventory-level decisions. However, wise entrepreneurs conduct market research, analyze their competition, and develop a marketing plan and pricing strategy before they go into business. These are all critical components of a good business plan. Proper planning allows new business owners to make reasonable estimates about expected sales during the first months after start-up. They also know how much cash and storage space they can devote to inventory. From all this information, they can estimate how much inventory they should have for opening day.

Calculating Inventory Level for an Ongoing Business

An ongoing business that keeps good records can rely on many data sources for inventory-planning purposes. These include sales and cost data, vendor lead times, and losses of inventory due to damage or other reasons. Inventory managers can use this data to predict how inventory levels are going to decrease over time and decide when to reorder merchandise. Obviously, inventory management and purchasing management are closely linked activities.

Businesses often choose to maintain a certain minimum inventory level. This inventory level is chosen to cover typical sales and delivery situations, and perhaps unusual situations. Safety stock is the minimum amount of inventory kept to protect against a stock-out due to unusually high demand or unusually long lead times on delivery.

PURCHASING PLAN

The most important aspect of inventory management is having items in stock when they are needed. This involves planning ahead to determine inventory needs, placing purchase orders for the items in advance, and scheduling deliveries to arrive at the point in time when you need the items. Inventory management also involves determining when you need the most inventory in stock, when reorders should be placed, and when you should discontinue stocking an item.

The amount of inventory you need to purchase can be calculated from the sales forecast. You must look at how many units you need to add to the inventory you already have in stock to reach your sales objective. The formula for calculating inventory needs is:

Beginning Inventory + Purchases - Sales = Ending Inventory

Alan has a beginning inventory worth $40,000 in his automobile parts store and expects to sell $80,000 over a period of six months. He wants to have $25,000 of inventory at the end of the six-month period. Alan uses the formula to calculate his purchases.

Beginning Inventory	+	Purchases	-	Sales	= Ending Inventory
$40,000	+	?	-	$80,000	= $25,000

Alan must purchase $65,000 in inventory during the six-month period. He now needs to plan for the purchase and delivery of the inventory. He does not want to purchase the entire inventory and have it delivered at the same time because he does not have the cash to pay for it all at once, nor does he have the storage space. Alan decides to make his major purchases in the spring when people are beginning to get their cars ready for vacations and summer travel. He knows from past experience that he will sell more from March through June and that January and February are slower months. Based on this information, Alan prepares a detailed purchase plan to show how much inventory he will purchase each month during the six-month period.

PURCHASE PLAN FOR AUTOMOBILE PARTS

	January	February	March	April	May	June	Total
Beginning inventory	$40,000	$33,500	$29,500	$25,300	$25,600	$25,050	
+ Purchases	4,500	4,500	10,800	16,800	14,200	14,200	$65,000
– Sales	(11,000)	(8,500)	(15,000)	(16,500)	(14,750)	(14,250)	$80,000
= Ending inventory	$33,500	$29,500	$25,300	$25,600	$25,050	$25,000	

CONTROLLING INVENTORY LEVEL

Inventory shrinkage is any loss of inventory that occurs between the time the inventory is purchased and the time it is sold or otherwise removed from the shelves. Inventory levels shrink for a variety of reasons. Items may become damaged during handling or storage and have to be discarded. In businesses with employees, there is also a risk of losing inventory to pilfering, which is stealing, particularly of small amounts over time. Retail businesses with walk-in customers may lose inventory to shoplifting.

Inventory management involves two important values: the recorded inventory level and the actual inventory level. The recorded inventory level is the amount of inventory that exists according to accounting records-such as purchase and sales records. The recorded inventory level can differ from the actual inventory level for a variety of reasons, including human error, inaccurate recordkeeping, and shrinkage. One of the chief goals of inventory control is reconciling (comparing and bringing into agreement) the recorded and actual inventory levels.

INVENTORY SYSTEMS

An inventory system is a process for counting and tracking inventory so inventory value can be calculated. Large companies often use electronic means of tracking inventory. For example, bar codes are scanned when items enter or leave inventory. Electronic inventory systems often feed data to accounting programs.

- <u>Visual Inventory System</u>. Small businesses may rely on people to physically count inventory items. This is known as a visual inventory system and is probably the system of choice for most new small-business owners. Even companies using electronic inventory systems rely on occasional physical inventory counts to reconcile recorded inventory levels with actual inventory levels. Most businesses perform a physical inventory count at least once a year.
- <u>Perpetual Inventory System</u>. For accounting purposes, some businesses choose to update inventory value continually, and others choose to update it periodically. A perpetual inventory system is a system that tracks inventory on a continual basis and calculates the inventory value, for accounting purposes, after each inflow or outflow occurs. In other words, inventory is valued after every transaction. Large companies use electronic means, such as bar-code scanning and sophisticated computer programs, to conduct perpetual inventory tracking. These systems provide a running total of inventory level and value.
- <u>Periodic Inventory System</u>. A periodic inventory system is a system that calculates inventory value for accounting purposes at periodic times-for example, at the end of the month or end of the year-when a physical inventory count is performed. A periodic inventory system does not keep a running total of inventory value.
- <u>Partial Inventory System</u>. A partial inventory system combines elements of a perpetual inventory system and a periodic inventory system. Businesses may use the perpetual inventory system to value their most important or most expensive items and use the periodic inventory system for their other items.
- <u>Just-In-Time Inventory System</u>. The just-in-time (JIT) inventory system is a system in which the goal is to maintain just enough inventory to keep the business operating, with virtually no inventory kept in storage. The JIT system first became popular in the manufacturing industry but has since been embraced by other industries. This system requires precise planning and scheduling, and very close cooperation with vendors, to achieve a condition in which virtually no inventory has to be stored.

<u>**Point of Sale (POS) Software System**</u>. Many retail businesses use cash registers with a point-of-sale (POS) software system that updates inventory records as each sale happens. Bar-code scanners and credit card authorization systems can be integrated into the POS system. With the POS system, you will always have an up-to-date inventory balance. You will also get detailed information on sales that will assist you in the decision-making process for inventory management. You can analyze the sales data, determine how well each item you have in stock is selling, and adjust your purchasing accordingly.

MANAGE YOUR INVENTORY

The level of inventory you keep in stock depends on three factors:
1. The costs of carrying inventory
2. The costs of lost sales due to being out of stock
3. Your stock turnover rate

COSTS OF CARRYING INVENTORY

Holding inventory can be very costly. These costs are known as carrying costs. A business with inventory will always have carrying costs. Carrying costs can become too high if you have too much inventory. Costs can increase for many reasons.
- <u>Obsolescence</u>. Inventory can be held too periodically? long and become old and outdated. People do not want to buy a computer made two years ago. You may be stuck with merchandise you cannot sell.
- <u>Deterioration</u>. Inventory can deteriorate, forcing you to throw it away or sell it at a discount. If you own a garden store, some plants will need to be sold within a few weeks because they will begin to die.
- <u>Interest fees</u>. Vendors charge interest on money due to them. If you cannot pay your vendors until you sell your inventory, you will incur an extra expense.
- <u>Insurance</u>. You will need to carry insurance against theft, fire, and other disasters. Insurance premiums increase as the value of the inventory insured increases.
- <u>Storage</u>. Inventory takes up space- space that you may be leasing on a square-foot basis. If you run out of room, you will need to lease additional space.

COSTS OF BEING OUT OF STOCK

Being out of stock can cost you money. If you are out of the items your customers want, you will lose sales. If customers repeatedly fail to find what they are seeking at your business, you could also lose customer loyalty. You must weigh the costs of being out of stock against the costs of carrying more inventory.

STOCK TURNOVER RATE

A supermarket might sell hundreds of cans of soft drinks every day but only 12 jars of marmalade. The stock turnover rate is the rate at which the inventory of a product is sold and replaced with new inventory. It shows how many times a year you sell all of your merchandise. A store that purchases inventory four times a year and sells all of its inventory in that same year has a stock turnover rate of 4. Stock turnover rates vary from industry to industry. You should contact the trade association for your industry of talk to other entrepreneurs in your field to find out the turnover rate for the items you carry.

Chapter Summary

- **Business managers skillfully use and coordinate resources, such as money, facilities, equipment, technologies, materials, and employees, in a systematic manner to achieve particular goals. Managers have authority over their employees and are ultimately responsible for their work. Managers must be creative problem solvers to achieve business goals while minimizing costs. A good manager exercises the four management functions of planning, organizing, directing, and controlling and also works to build a positive company image and workplace climate.**
- **Implementing your staffing plan effectively requires that you have good management and leadership qualities. By enforcing policies and offering training, you will help your employees perform better. There are several ways to motivate employees, including paying them well, treating them fairly, recognizing them for good work, and giving them adequate responsibility. You should create a procedure for evaluating employees. Outstanding employees should be promoted when opportunities become available, and problem employees should be dismissed.**
- **Business owners manage their expenses, credit, and cash flow because these components are important to a business's financial health. Managing expenses requires knowledge of what they are and actions that should be taken to reduce them wherever feasible. Some businesses use trade credit to buy goods or services from other businesses and offer consumer credit to their own customers. There are specific procedures for granting credit and collecting payments when credit is extended. Cash is the life blood of a business. In a cash budget, owners forecast cash inflows and outflows on a monthly basis and then compare the forecasted amounts to the actual amounts. Many methods are used to improve cash flow by reducing cash outflows and increasing cash inflows.**
- **Before a business begins operating, it must choose a site and plan its layout. Production management is concerned with the processes that produce goods and services. Three major tasks are scheduling, controlling productivity, and controlling quality. Gantt charts and PERT charts are common scheduling tools. Products typically travel along a distribution chain (channel) that includes a manufacturer, wholesaler, and retailer. Distribution management is concerned with materials handling, logistics, shipping and receiving, storage and warehousing, transportation, and terms of delivery for products.**
- **Operations management is concerned with the daily activities that keep a business running. Policies are developed that specify procedures for handling particular operations. General operational policies address the hours of operation, extending credit to customers, handling product returns and rework claims, and delivering goods to customers. Customer service is one of the most important components of daily operations. The five fundamental elements governing the treatment of customers are courtesy, respect, prompt attention, knowledgeable employees, and credibility. Good customer service builds customer loyalty and spreads positive word of mouth about a business.**
- **Managing purchasing is vital to a business, because purchasing directly affects profits. Purchasing managers strive to buy goods and services of the right quality in the right amounts at the right time, and at the right costs and payment terms from the right vendors. Buyers use sales and inventory data, sales forecasts, and information on lead times to help them make purchasing decisions. Price and payment terms are particularly important factors. Discounts are often offered to buyers who buy large quantities, pay their bills early, or are in the same trade as the vendor. Good recordkeeping is an essential element of the purchasing process.**
- **Inventory management is concerned with having the right amount of inventory – that is, neither too much nor too little. Inventory managers strive to maintain inventory at a level that satisfies customer demand but minimizes expenses. They use purchasing records, sales data and forecasts, lead-time records, and space and cost considerations to plan inventory levels and investments. Inventory obsolescence and shrinkage due to damage or theft are also concerns. Inventory counting and control can be performed by people or by electronic and computerized systems. For accounting purposes, inventory value may be calculated continually or periodically.**