“Introduction to Hospitality Accounting”.

: Accounting And The Business Environment

Topic Objective:

At the end of this topic students will be able:

- Describe the nature and types of business organizations.
- Explain the role of accounting in business organizations.
- Define Generally Accepted Accounting Principles and describe the basic accounting concepts.
- Use the accounting equation to analyze business transactions.
- Prepare financial statements and explain the relationships between them.
- Explain the role of ethics in accounting and business.

“Definition/Overview& :

Business: A business (also called firm or an enterprise) is a legally recognized organizational entity designed to provide goods and/or services to consumers or corporate entities such as governments, charities or other businesses. Businesses are predominant in capitalist economies, most being privately owned and formed to earn profit to increase the wealth of owners. A business is an organization that sells products or services to customers. One major goal of a business is to generate a profit, which is the difference between the sales price of the goods or services sold by the business and the cost of the resources used to provide these goods or services.

Accounting: Accounting is a service activity. Its function is to provide quantitative information primarily financial in nature, about economic entities, that is intended to be useful in making economic decisions, and in making reasoned choices among alternative courses of action.
“Key Points& :

1. Business Organizations

An organization that sells products or services to customers and helps its owner to generate some profit is known as Business organization.

1.1. Types of Business Organizations

A business organization can be classified by what it provides to its customers.

1.1.1. Service companies

Service companies perform services for customers. Some service companies provide legal, accounting, medical, or banking services that require lots of expertise, and others help with personal services such as lawn mowing, oil changing, hair styling, painting, plumbing, or cleaning. Examples include H&R Block, Bank of America, Jiffy Lube, and Merry Maids.

1.1.2. Merchandise companies

Merchandise companies, also known as retail companies, sell products that are made by another company. Examples of merchandise companies include Wal-Mart, Sears, Amazon.com, and Ace Hardware. Many of these companies keep large volumes of goods on hand for sale, such as Toys “R” Us.
1.1.3. Manufacturing companies

Manufacturing companies make their own products that are sold directly to the final customer or to other companies who distribute the products to customers. Toyota, Intel, and Apple are all examples of manufacturing companies.

1.2. Forms of Business Organizations

A business organization can also be classified based on how it is organized, and a business can be organized in one of three basic forms, as a proprietorship, a partnership, or a corporation.

1.2.1. Proprietorship

A Proprietorship:
- Has a single owner, called the proprietor, who is often the manager.
- Tends to be a small merchandising store or the professional business of a physician, attorney, or accountant.

1.2.2. Partnership

A partnership:
- Joins two or more individuals as co-owners. Each owner is a partner.
- Is a business such as a retail store or professional organization of physicians, attorneys, or accountants.
- Is small or medium-sized, but may be gigantic, exceeding 2,000 partners.
1.2.3. Corporation

A Corporation:

- Is owned by stockholders, or shareholders. Stockholders purchase an ownership interest in a corporation by buying shares of its stock.
- Can be small, with as few as one stockholder, but are usually quite large because they get funds from many owners or stockholders.
- Begins when the state approves its articles of incorporation.
- Is a legal entity separate from its owners that conducts business in its own name.

2. Accounting and Accountability

Business organizations are part of a larger community because businesses provide goods and services to the community, as well as employment for some community members.

2.1. Organization Accountability

Accountability is responsibility for one’s actions. Organization accountability is the organization’s fiduciary responsibility to manage its resources carefully. Many different individuals and groups of people, called stakeholders, have an interest in organizations. Stakeholders include investors, creditors, suppliers, employees, customers, government agencies, and investees.

2.2. Business’s Activities

A business’s activities can be grouped into three categories.
2.2.1. Financing activities

Organizations and their management attract investors and creditors who provide cash or other assets to the organization. In exchange, organizations and their management use these resources responsibly to operate the business profitably, and repay amounts owed when due while maintaining a positive cash balance.

2.2.2. Investing activities

Organizations and their management obtain items needed to operate the business. Some of these are physical, long-term things such as building space, equipment, and furniture. Others include stock in or loans to other companies as a way of using extra cash profitably. In exchange, organizations and their management pay suppliers and investees for these items in a timely manner.

2.2.3. Operating activities

Organizations and their management generate a profit from the sale of goods or services.

- Organizations use resources to sell goods or services. In exchange for the resources used, management pays suppliers and employees on time and provides a safe work environment.
- Customers buy goods or services. In exchange, management provides quality goods or services in a timely manner.
- Organizations and their management meet various regulatory obligations to the Securities and Exchange Commission, the Internal Revenue Service, the Federal Trade Commission, and other federal and local government agencies by reporting financial information, paying taxes, and obeying laws.
2.3. Financial Accounting and Management Accounting

To satisfy the needs of stakeholders, managers are required to provide information that communicates the decisions made and the results obtained from those decisions. Because organizations are accountable to others for actions taken, managers communicate using accounting as the language of business. Financial accounting produces reports called financial statements that show financial information about a business. Management accounting provides financial and nonfinancial information inside the organization. This forward-looking information helps managers plan, control, and make decisions consistent with the fiduciary role managers have in operating a business. Management accounting information must be useful, and the benefits of this information must be greater than the costs of obtaining it.

2.3.1. Generally Accepted Accounting Principles (GAAP)

GAAP are the rules that govern financial accounting, the “law” of financial accounting, and must be followed when preparing financial statements.

- Financial statements allow investors and creditors to make investment decisions.
- Financial statements allow suppliers and customers to determine the financial condition of a business.
- Financial statements report to regulatory agencies such as the Securities and Exchange Commission, the Internal Revenue Service, and the Federal Trade Commission.

3. Accounting Concepts and Principles

3.1. The Entity Concept

The most basic concept in accounting is that of the entity. An accounting entity is an organization or a section of an organization that stands apart as a separate economic unit.
The entity concept specifies that boundaries must be drawn around each entity so as not to confuse its financial affairs with those of other entities.

3.2. The Reliability (Objectivity) Principle

Accounting information is based on the most reliable data available so that investors and creditors can use this information to make decisions. This guideline is the reliability, or objectivity, principle. Reliable data is verifiable, which means that it may be confirmed by any independent observer. For example, a bank loan is supported by a promissory note, which is objective evidence of the loan. Without the reliability principle, accounting data might be based on whims and opinions.

3.3. The Cost Principle

The cost principle states that acquired assets and services should be recorded at their actual cost, also called historical cost. The cost principle also holds that the accounting records should keep the historical cost of an asset throughout its useful life because this cost is a reliable measure.

3.4. The Going-Concern Concept

Another reason for measuring assets at historical cost is the going-concern concept. This concept assumes that the entity will stay in business for the foreseeable future, long enough to use existing resources for their intended purpose. Also, creditors who loan money to a business or investors who provide money or assets in a business do so assuming the business will remain in operation indefinitely. To reassure stakeholders that the business is a going concern, the business may have its financial statements audited by a CPA firm.
4. The Accounting Equation

The basic tool of accounting is the accounting equation. It measures the economic resources of a business and the claims to those resources.

4.1. Assets

Assets are the economic resources of a business that are expected to provide benefits to the business in the future. Assets are what the business owns. Cash, merchandise inventory, furniture, and land are examples of assets.

4.2. Liabilities

Liabilities are outsider claims to the assets of a business—liabilities are debts owed to outsiders. These outside parties, called creditors, include organizations that loan money or provide supplies, merchandise, furniture, or buildings.

4.3. Owner’s Equity

Owner’s equity, or capital, represents the insider claims to the assets of a business. Equity means ownership, so owner’s equity is the owner’s claim to the company’s assets that comes from investing in the business.

4.4. Components of Owner’s Equity

By rearranging the accounting equation, we see that owner’s equity is the amount of an entity’s assets left after its liabilities are subtracted.

Owner’s Equity = Assets – Liabilities
The owner’s equity, or capital, of a business can increase in two ways:

- Owner investments increase equity when the owner invests cash and other assets in the business.
- Revenues increase owner’s equity when the business sells goods or services to customers.

The owner’s equity of a business can decrease in two ways:

- Owner withdrawals decrease owner’s equity when the owner takes assets out of the business for personal use.
- Expenses decrease owner’s equity when the business uses up resources to deliver goods or provide services to customers.

4.5. Accounting for Business Transactions

Business is an organization that is accountable to its stakeholders, the business must account for all actual transactions. A transaction is any event that affects the financial position of the business and can be measured reliably. A transaction involves an exchange. In any transaction, something is received by the business, and something is given.

5. Financial Statements

To present the results of the transactions we analyzed, we need to prepare financial statements. Financial statements include the following:

- Income statement
- Statement of owner’s equity
- Balance sheet
- Statement of cash flows
5.1. Income Statement

An Income Statement, also called a Profit and Loss Statement (P&L), is a financial statement for companies that indicates how Revenue (money received from the sale of products and services before expenses are taken out, also known as the "top line") is transformed into net income (the result after all revenues and expenses have been accounted for, also known as the "bottom line"). The purpose of the income statement is to show managers and investors whether the company made or lost money during the period being reported.

5.2. Statement of Owner’s Equity

Statement of owner’s equity answers this question by presenting the amount of the owner’s claim to assets and the changes to that claim during a specific time period, such as a month or a year, as follows:

- Remember that increases in owner’s equity come from Owner investments
- Net income (Revenues – Expenses, when revenues are greater than expenses)
- Decreases in owner’s equity result from Owner withdrawals
- Net loss (Revenues – Expenses, when expenses are greater than revenues)

5.3. Balance Sheet

In financial accounting, a balance sheet or statement of financial position is a summary of a person's or organization's balances. Assets, liabilities and ownership equity are listed as of a specific date, such as the end of its financial year. A balance sheet is often described as a snapshot of a company's financial condition. Of the four basic financial statements, the balance sheet is the only statement which applies to a single point in time.
5.4. Statement of cash flows

In financial accounting, a cash flow statement or statement of cash flows is a financial statement that shows a company's incoming and outgoing money (sources and uses of cash) during a time period (often monthly or quarterly). The statement shows how changes in balance sheet and income accounts affected cash and cash equivalents, and breaks the analysis down according to operating, investing, and financing activities. As an analytical tool the statement of cash flows is useful in determining the short-term viability of a company, particularly its ability to pay bills.

6. Ethical Decision Making

6.1. Ethics in Accounting and Business

Ethics are the principles of right behavior that guide decision making. These principles are based on values of responsibility, fairness, trustworthiness, respect, caring, and citizenship; the general rule of ethics is to bring no physical or emotional harm to others. Organizations create a culture with standards representing the expected behavior of its members, sometimes in the form of a code of ethics. As individuals, we also have beliefs about what is right or wrong. Ethical dilemmas can arise when personal beliefs or organizational culture differ from ethical principles. Stakeholders need relevant, reliable, and comparable information about a company. Companies naturally want to look as good as possible. The potential for conflict here is significant.

6.2. Standards of Professional Conduct

The American Institute of Certified Public Accountants (the AICPA), has a Code of Professional Conduct that provides guidance to CPAs in their work. The preamble to the Code states: “[A] certified public accountant assumes an obligation of self-discipline above and beyond the requirements of laws and regulations . . . [and] an unswerving commitment to honorable behavior. . . . &
Similarly, Certified Management Accountants (CMAs) have standards. The opening paragraph of the Standards of Ethical Conduct of the Institute of Management Accountants (IMA) states: “Management accountants have an obligation to the organizations they serve, their profession, the public, and themselves to maintain the highest standards of ethical conduct.

: Recording Business Transactions

Topic Objective:

At the end of this topic students will be able:

- Describe the role of accounts in summarizing business transactions.
- Explain double-entry accounting.
- Record and summarize business transactions.
- Prepare and use a trial balance to create financial statements.

“Definition/Overview& :

Transactions: A transaction is any event that affects the financial position of the business and can be measured reliably. A transaction involves an exchange. In any transaction, something is received by the business, and something is given.
1. The Role of Accounts in Summarizing Business Transactions

1.1. Transactions

All business transactions, like personal transactions, involve an exchange. So, transactions are the economic events—the exchanges—that have a measurable impact on the financial position of the business.

1.2. Accounts

The key summary device of accounting is the account. This is the detailed record of all the changes that have occurred in a particular asset, liability, or owner’s equity as a result of transactions.

1.3. Assets

Assets are the economic resources of a business expected to provide benefits to the business in the future. Most businesses use the following asset accounts:

1.3.1. Cash

The Cash account is a record of cash transactions. Cash includes money, such as the business’s bank account balance, paper currency, coins, and checks.

1.3.2. Accounts Receivable

A business may sell goods or services in exchange for an oral or implied promise of future cash receipt. Such sales are made on credit, on account. The Accounts Receivable account holds the amounts that customers owe the business for goods
or services that have already been provided, how much the company can expect to receive from customers in the future.

1.3.3. Notes Receivable

A business may sell goods or services or loan money and receive a promissory note. A note receivable is a written pledge that the customer or borrower will pay a fixed amount of money by certain date. Notes Receivable is a record of the promissory notes that the business expects to collect in cash.

1.3.4. Prepaid Expenses

A business often pays certain expenses, such as rent and insurance, in advance. A prepaid expense is an asset because the prepayment provides a future benefit for the business. A separate asset account is used for each prepaid expense. Prepaid Rent and Prepaid Insurance are examples of prepaid expense accounts.

1.3.5. Land

The Land account is a record of the cost of land a business owns and uses in its operations.

1.3.6. Buildings

The cost of a business’s buildings, its offices, warehouses, and stores, for example, appear in the Buildings account.
1.3.7. Equipment, Furniture, and Fixtures

A business has a separate asset account for each type of equipment. Examples include Computer Equipment, Office Equipment, and Store Equipment. The Furniture and Fixtures account likewise shows the cost of these assets.

1.4. Liabilities

A business generally has fewer liability accounts than asset accounts because a business’s liabilities can be summarized in a few categories:

1.4.1. Accounts Payable

A business may purchase goods or services in exchange for an oral or implied promise of future payment. Such purchases are made on credit, on account. The Accounts Payable account shows how much cash the business must pay suppliers for goods or services that have already been received.

1.4.2. Notes Payable

Notes Payable represents amounts the business must pay because it signed promissory notes to borrow money or to purchase goods or services.

1.4.3. Accrued Liabilities

An accrued liability is a liability for an expense that has been incurred but has not yet been paid. Taxes Payable, Interest Payable, and Salary Payable are accrued liability accounts.
1.5. Owner’s Equity

The owner’s claim to the assets of the business is called owner’s equity, or capital. In a proprietorship or a partnership, owner’s equity is split into separate accounts:

1.5.1. Capital

The Capital account summarizes the owner’s claim to the assets of the business. Capital can be computed by subtracting its total liabilities from its total assets. The Capital balance equals the owner’s investments in the business plus net income and minus any net loss and owner withdrawals.

1.5.2. Withdrawals

When a business owner withdraws cash or other assets from the business for personal use, the business’s assets and owner’s equity decrease. The amounts taken out appear in a separate account titled Withdrawals or Drawing. The Withdrawals account decreases owner’s equity. If withdrawals were recorded directly in the Capital account, the amount of owner withdrawals might be lost among the other Capital account changes.

1.5.3. Revenues

The increases in owner’s equity created by selling goods or services to customers are called revenues. This account represents amounts earned by the company even if the company has not yet been paid for the goods and services provided. A business will have as many revenue accounts as needed, depending on how many ways it earns its revenue.
1.5.4. Expenses

Expenses are the decreases in owner’s equity from using resources to deliver goods or provide services to customers. A business needs a separate account for each type of expense, such as Salary Expense, Rent Expense, Advertising Expense, and Utilities Expense. Businesses strive to minimize their expenses in order to maximize net income.

1.6. Chart of Accounts

Organizations use a chart of accounts to list all their accounts along with the numbers they assign to them. Accounting is consistent; accounts are listed in the chart of accounts in the balance sheet order of assets, liabilities, capital, withdrawals, revenues, and expenses. Account numbers usually have two or more digits.

2. Double-Entry Accounting

The rule that reflects the fact that every transaction involves at least two accounts is called double-entry accounting.

2.1. Rules of Debits and Credits

To understand double-entry accounting, you need to know the rules of debits and credits. The left side of any account is called the debit side, sometimes abbreviated as Dr. The right side of any account is called the credit side, sometimes shown as Cr. You may be confused by the words debit and credit, especially if you use a debit or credit card.
2.2. T-Account

A T-account is an informal account form used to summarize transactions. It isn’t really used in accounting for business transactions, but it does provide a handy way of getting used to debits and credits. The T-account gets its name from the fact that it is shaped like the letter “T”.

2.3. Normal Balance

An account’s normal balance falls on the side of the account where increases are recorded.

3. Recording and Summarizing Business Transactions

In real life, the accounting process actually begins when business transactions are entered in a journal. The journal is the chronological, or date order, record of the transactions of a business. The accounting system tracks each exchange by creating a record in the journal showing the transaction, the date it occurred, and how it affected the business’s accounts. Because of the double-entry system of accounting—where each exchange involves at least two accounts—every journal entry includes an equal amount of debits and credits.

3.1. The Transaction Analysis

To properly record, or journalize transactions in the journal and summarize them in the T-accounts, you will complete a five-step transaction analysis. Steps 1 through 4 analyze the transaction for the journal entry. Step 5 reflects the posting of the transaction from the journal into the accounts.
3.2. Balancing the Accounts

After transactions are recorded and posted to accounts, you will calculate each account’s balance. A balance is the difference between the account’s total debits and its total credits.

3.3. Details of Journals and Ledgers

The journal and the ledger provide information that creates a “trail& that can be used to follow transactions through the accounting records of a business.

4. Trial Balance

The trial balance lists all the accounts of a business and their balances in balance sheet order. A trial balance can be constructed at any time, but is most commonly put together at the end of the accounting period. Because the total of the debit balances should equal the total of the credit balances, the purpose of the trial balance is to summarize all account balances to be certain that total debits equal total credits before the financial statements are prepared. After completing the trial balance, you can prepare the financial statements. Set up the financial statements.

4.1. Trial Balance Errors

When recording and posting transactions, accounting errors can and do occur in both manual and computerized accounting systems. The trial balance helps us find those errors that cause total debits and total credits to be unequal. To find an error, you start with the trial balance and work back through the accounting records through the ledger and through the journal to the transaction. Errors can occur in the following activities:

- Preparing the trial balance
- Calculating account balances
- Posting amounts into the accounts
Recording journal entries

: The Adjusting Process

Topic Objective:

- At the end of this topic students will be able:
- Describe the accounting principles that help businesses measure income.
- Describe the four types of adjusting entries.
- Make adjusting entries.
- Prepare an adjusted trial balance.
- Prepare financial statements from an adjusted trial balance.

“Definition/Overview & :

Adjusting Entries: In accounting/accountancy, adjusting entries are journal entries usually made at the end of an accounting period to allocate income and expenditure to the period in which they actually occurred. The revenue recognition principle is the basis of making adjusting entries that pertain to unearned and accrued revenues under accrual-basis accounting. They are sometimes called Balance Day adjustments because they are made on balance day.

Profit: Profit generally is the making of gain in business activity for the benefit of the owners of the business. The word comes from Latin meaning "to make progress," is defined in two different ways, one for economics and one for accounting.
“Key Points&:

1. Measuring Business Income Using Accounting Principles

One of the primary goals in business is to earn a profit. Generally Accepted Accounting Principles (GAAP) guide us in measuring net income accurately, and according to GAAP, we account for transactions on an accrual basis to make this happen. Accrual basis accounting dictates that we record revenues when they are earned and expenses when they are incurred in order to produce revenues. In this way, revenues of a period are matched against the expenses of that period. The basic accounting period is typically one year long, and nearly all businesses prepare annual financial statements.

2. Types of Adjusting Entries

At the end of that period, the accountant prepares a trial balance and uses it to prepare financial statements. However, before most business can prepare correct financial statements, the accountant will have to prepare adjusting entries. Adjusting entries are journal entries needed to ensure that accrual basis accounting is accomplished so that business income can be measured accurately.

Two types of adjustments are made for deferrals:

- Divide prepaid expenses, supplies, buildings, equipment, or other assets between periods. These assets will be used, or expensed, over more than one time period after the cash has been paid. We wait to record the expenses until the point in time when we use the items.
- Divide unearned revenues between periods. These liabilities represent obligations to provide goods or services and will be earned over more than one time period after the cash has been received. We wait to record the revenues until the point in time that we deliver the goods or provide the services to the customer.

Two types of adjustments are made for accruals:
• Accrue, or record, unrecorded expenses. These liabilities represent the company’s obligation to pay for unrecorded expenses that have been incurred, or used, in the current period. We record the expenses in the current period even though we have not yet paid for them.

• Accrue, or record, unrecorded revenues. These assets represent the company’s right to receive payments from customers or other parties for unrecorded revenues that have been earned. We record the revenues in the current period, even though we have not yet received cash from the customers.

3. Adjusting the Accounts

At the end of the accounting period, the accountant prepares the financial statements by first preparing a trial balance.

3.1. Deferrals

3.1.1. Dividing Assets between Periods

- **Prepaid Rent**: Prepaid rent and prepaid insurance are examples of prepaid expenses, items that are paid for before they are used. Often, landlords require tenants to pay rent in advance and this prepayment creates an asset for the renter.
- **Supplies**: Supplies are accounted for in the same way as prepaid expenses.
- **Depreciation on Long-Term Assets**: A special type of deferral relates to long-term assets. Long-term assets are long-lived, tangible assets used in the operation of a business. Long-term assets last for more than a year.
- **The Accumulated Depreciation Account**

3.1.2. Dividing Liabilities between Periods

- **Unearned Revenues**: Some businesses collect cash from customers in advance. Receiving cash from a customer before earning it creates a liability called
unearned revenue, or deferred revenue, because the company owes a product or a service to the customer.

3.2. Accruals

3.2.1. Accruing Expenses

- Salary Payable

3.2.2. Accruing Revenues

Accounts receivable, as we just discussed, some expenses occur before they are paid, which creates an accrued expense. Likewise, businesses sometimes also earn revenue before they receive the cash. Assets such as Accounts Receivable and Interest Receivable hold this accrued revenue amount until cash is received.

4. The Adjusted Trial Balance

A useful step in preparing the financial statements is to list the accounts and their adjusted balances on an adjusted trial balance to make sure total debits still equal total credits after adjusting entries have been recorded and posted. Preparing the adjusted trial balance by using the following steps:

4.1. Step 1

Copy account titles and trial balance amounts directly from the trial balance. Place debit balances in the debit column and credit balances in the credit column of the Trial Balance columns.
4.2. Step 2

Enter the adjusting journal entries into the correct debit or credit column of the Adjustments section of the worksheet. Label each entry with the letter that identifies it as one of the adjusting entries recorded in Exhibit 3-7.

4.3. Step 3

Calculate new, adjusted balances for each account. Start with the balance from the Trial Balance columns. Add or subtract the change in the balance as shown in the Adjustments section. Enter the new balance into the correct debit or credit column of the Adjusted Trial Balance columns. Remember that accounts will be affected differently by adjusting entries.

: Completing The Accounting Cycle

**Topic Objective:**

At the end of this topic students will be able:

- Explain the steps in the accounting cycle.
- Prepare a worksheet.
- Prepare financial statements using the worksheet.
- Close the revenue, expense, and withdrawals accounts.
- Classify assets and liabilities as current or long-term.
**“Definition/Overview& :**

**Accounting Cycle:** The Accounting Cycle is a series of steps which are repeated every reporting period. The process starts with making accounting entries for each transaction and goes through closing the books. Use this tutorial for an overview of the accounting cycle, covering activities required both during and at the end of the accounting period.

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**“Key Points& :**

1. **The Accounting Cycle**

   Accountants use financial accounting to prepare financial statements that communicate the decisions made and the results obtained from those decisions. The financial statements “tell the story” of the business’s past activities. The accounting cycle is the process of gathering financial information and preparing these financial statements.

1.1. **Step 1**

   The accountant identifies business transactions by examining source documents, contracts, and internal business reports.

   - Source documents are documents that represent a business transaction.
   - Business contracts include bank loans, mortgage loans, lease agreements, and other arrangements. Contracts obligate the business to repay the loan or mortgage, pay for the use of assets owned by someone else, or fulfill some other requirement agreed to in the document.
   - Internal business reports include lists of assets used to calculate depreciation as well as payroll registers that show payments to employees.
1.2. Step 2

The accountant records these transactions in the journal.

1.3. Step 3

The accountant posts the journal entries into accounts in the ledger. Steps 1 through 3 happen throughout the accounting period as the business engages in transactions.

1.4. Step 4

At the end of the accounting period, the accountant prepares a worksheet, or sometimes simply prepares a trial balance, and uses this as a basis for adjusting the accounts. If a business prepares only a trial balance, then it will use the trial balance to complete the rest of the steps in the cycle instead of the worksheet.

1.5. Step 5

Using the worksheet, the accountant prepares the financial statements.

1.6. Step 6

Using the worksheet, the accountant records adjusting entries in the journal and posts them to accounts in the ledger.

1.7. Step 7

Using the worksheet, the accountant records closing entries in the journal and posts them to accounts in the ledger.
1.8. Step 8

The accountant prepares a post-closing trial balance.

2. The Worksheet

Accountants often use a worksheet, a document that holds the trial balance, adjustments, and adjusted trial balance, to summarize data for the financial statements. The worksheet is not part of the ledger or the journal, and it is not a financial statement. It is merely a tool that accountants use to gather information before financial statements are prepared. Listing all the accounts and their unadjusted balances helps identify the accounts that need adjustment. Once completed, the worksheet is useful when journalizing adjusting and closing entries and when preparing financial statements.

3. Completing the Accounting Cycle

The worksheet helps accountants prepare the financial statements, record the adjusting entries, and close the accounts.

3.1. The Four Closing Entries

At the end of the accounting period, the results of the business’s operating activities and owner withdrawal activity move from the temporary accounts to the owner’s equity permanent account. To journalize closing entries, complete the following steps:
3.1.1. Step 1

Close the revenue accounts and move their balances into the Income Summary account. Income Summary is a temporary, holding account that collects revenue and expense amounts during the closing process. The Income Summary account is only used during this process.

3.1.2. Step 2

Close the expense accounts and move their balances into the Income Summary account.

3.1.3. Step 3

At this point, Income Summary now holds revenues and expenses, which means it now holds net income or net loss. Close the Income Summary account by moving its balance, the net income or net loss, into the owner’s capital account.

3.1.4. Step 4

Close the owner’s withdrawals account and move the total amount withdrawn into the owner’s capital account.

3.2. Post-Closing Trial Balance

The accounting cycle ends with the preparation of a post-closing trial balance. This trial balance lists the accounts and their adjusted balances after closing. Only assets, liabilities, and capital appear on the post closing trial balance. No temporary accounts revenues, expenses, or withdrawals are included because they have been closed. The accounts in the ledger are now up-to-date and ready for the next period’s transactions.
4. Classifying Assets and Liabilities

Liquidity refers to a business’s ability to pay its bills. Since bill-paying ability relies on cash, liquidity depends on how quickly a company can convert assets into cash. Managers are interested in liquidity because business difficulties arise from a shortage of cash. A classified balance sheet lists assets and liabilities in classes in the order of their liquidity, so that the financial statement users can analyze the business’s ability to pay its bills on time.

4.1. Assets

4.1.1. Current Assets

Current assets are assets that will be converted to cash, sold, or used up during the next 12 months or within the business’s normal operating cycle if the cycle is longer than a year. The operating cycle is the length of time a business needs to obtain resources, use the resources to sell goods and services to customers, and collect cash from these customers. For most businesses, the operating cycle is a few months. Cash, Accounts Receivable, Notes Receivable due within a year, and Prepaid Expenses are current assets.

4.1.2. Long-Term Assets

Long-term assets are generally long-lived, tangible assets, although this category usually includes all assets other than current assets. One category of long-term assets is called plant assets or fixed assets and can be seen on the balance sheet as property, plant, and equipment. Land, buildings, furniture, fixtures, and equipment are examples of these assets.
4.2. Liabilities

4.2.1. Current Liabilities

Current liabilities are the debts or obligations of the business that must be paid with cash or fulfilled with goods and services within one year or the entity’s operating cycle if the cycle is longer than a year. Accounts Payable, Notes Payable due within one year, Salary Payable, Interest Payable, and Unearned Revenue are current liabilities.

4.2.2. Long-Term Liabilities

Long-term liabilities are obligations that extend beyond one year. Often, a business owner signs a contract to repay a note or mortgage over several years. The portion of the note or mortgage payable within one year will be a current liability. The remaining balance will be a long-term liability.

: Accounting For A Retail Business

Topic Objective:

At the end of this topic students will be able:

- Describe the supply chain that links suppliers, retailers, and customers.
- Journalize transactions between the supplier and retailer.
- Journalize transactions between the retailer and customer.
- Journalize shipment transactions and identify other selling expenses in a retail business.
- Prepare a retailer’s financial statements.
- Compute the gross profit percentage and inventory turnover rate.
**Definition/Overview & :**

**Supply Chain:** A supply chain or logistics network is the system of organizations, people, technology, activities, information and resources involved in moving a product or service from supplier to customer. Supply chain activities transform natural resources, raw materials and components into a finished product that is delivered to the end customer. In sophisticated supply chain systems, used products may re-enter the supply chain at any point where residual value is recyclable. Supply chains link value chains.

**Key Points & :**

1. **The Supply Chain**

A supply chain is the chain of transactions between businesses that supply goods and the customers that ultimately use these goods; it begins when a manufacturer purchases raw materials and uses them to produce products. Merchandisers, wholesalers and retailers, buy these manufactured goods and deliver them to the ultimate user, the customer. Wholesalers typically buy large lots of products from manufacturers and resell them to retailers. Retailers buy goods from manufacturers or wholesalers, then sell smaller quantities to the public, the final consumers. Thus, this sequence of events involves the flow of materials, completed goods, and related information between manufacturers, wholesale and/or retail merchandisers, and customers.

1.1. **The Supplier/Retailer Relationship**

Activities between suppliers and retailers i.e. Retailers:

- Identify suppliers, either manufacturers or wholesalers.
- Purchase goods from these suppliers, often on credit.
Pay cash to suppliers for goods purchased.
Return goods purchased from suppliers as necessary.

1.2. Retail Inventory Systems

The products that manufacturing and wholesale businesses supply retailers become inventory of the retailer. Inventory refers to the goods that the retailer owns and has available to sell to its customers; it is the products that the business holds for sale as part of its normal operations. Retail businesses buy and sell products, also called merchandise inventory, instead of services. Throughout the remainder of the book we refer to merchandise inventory simply as inventory. It is typically a retailer’s most important asset because it is probably the business’s largest current asset, as well as the center of merchandising transactions. Businesses that have inventory use one of two systems to keep track of the cost of goods:

1.2.1. Periodic Inventory System

Periodic Inventory System is a system of accounting for inventory that does not keep a continuous, running record of all goods owned. Instead, it only updates the inventory account periodically. Under this method, the business physically counts the goods in inventory at the end of the accounting period. It then multiplies the number of each item owned by the cost of the item to get a total value for the product. Finally, it then adds the total value of each product type together to calculate a new balance for the inventory account.

1.2.2. Perpetual Inventory System

Perpetual Inventory System is a system of accounting for inventory that keeps a running record of inventory owned and the cost of the inventory sold. Every time the business engages in a transaction involving inventory, it immediately adjusts
the balance in the inventory account. In this way, the inventory balance is perpetually up-to-date.

1.3. The Retailer/Customer Relationship

Activities between the retailer and the customer i.e. Retailers:

- Attract and retain customers.
- Sell goods for cash or credit to customers.
- Collect cash from customers.
- Accept returns of goods sold to customers as necessary.

2. Accounting for the Supplier/Retailer Relationship

Throughout the year, the retailer engages in a number of inventory transactions with suppliers:

- **Cash purchases**: Purchase goods for cash paid immediately.
- **Credit purchases**: Purchase goods on account and promise to pay cash later.
- **Purchase discounts**: Receive deduction from the amount due by paying cash earlier than the due date.
- **Purchase returns and allowances**: Return damaged goods to supplier for a refund or accepts an allowance on those goods.

3. Accounting for the Retailer/Customer Relationship

The retailer engages in several different types of business transactions with its customers:

- **Cash sales**: Sell goods for cash received immediately.
- **Credit sales**: Sell goods on account and receive customer’s promise to pay cash later.
- **Sales discounts**: Grant reduction in the amount receivable from customer as an incentive for customer’s payment within the discount period.
• **Sales returns and allowances**: Accept damaged goods from customer for a refund or grant customer an allowance for them.

4. **Accounting for Delivery and Other Selling Expenses**

In addition to purchases and sales transactions, a retailer must also manage shipping costs and other selling expenses. Retailers often pay the following costs:

- To receive goods from suppliers
- To deliver goods to customers
- To advertise and sell goods

4.1. **Costs to Receive Goods from Suppliers**

Shipping and handling increases the cost of what you purchased. The same thing happens when retail businesses buy merchandise from suppliers. When retailers order items, they often have to pay the cost of getting those items shipped to their place of business in addition to paying the purchase price of the items themselves. For a business, these shipping costs are often referred to as freight charges. Buyers and sellers specify who will pay shipping costs by setting shipping terms. Shipping terms specify the point at which ownership of the goods transfers from seller to buyer and also fix responsibility for paying shipping costs.

4.2. **Costs to Deliver Goods to Customers**

The cost of shipping goods to customers is usually recorded in a Delivery Expense account. Delivery Expense is an expense on the income statement and, as an expense account, normally holds a debit balance. This cost occurs when the seller agrees to ship goods to the final destination, shipping terms FOB destination.
4.3. Other Selling Costs

Retail businesses use resources to support their relationships with customers. The costs of advertising and selling merchandise are expenses of operating a business that sells goods.

5. Preparing a Retailer’s Financial Statements

In the previous chapter, we studied the completion of the accounting cycle. Recall that the cycle includes the following steps:

- Identify business transactions, record them in the journal, and post them to the ledger.
- Prepare a trial balance or worksheet, adjusting the accounts as necessary.
- Prepare financial statements.
- Journalize and post adjusting and closing entries.
- Prepare a post-closing trial balance.

6. Two Key Ratios for Decision Making

Inventory is the most important asset for a retail business because it is often the largest current asset and the focus of retail operations. Statement readers use several ratios to evaluate operations involving inventory, including the gross profit percentage and the rate of inventory turnover.

6.1. The Gross Profit Percentage

Gross profit, also called gross margin, is a key tool in evaluating retail operations; remember that gross profit is net sales revenue minus the cost of goods sold. Thus, gross profit is the amount left over from sales after deducting the cost of the merchandise sold. Retailers strive to maximize gross profit, and the gross profit percentage shows how well they are meeting this goal. Gross profit percentage, also called the gross margin
percentage, measures the relationship between gross profit and sales. It is computed by dividing gross profit by net sales revenue.

6.2. The Rate of Inventory Turnover

Owners and managers strive to sell inventory quickly because inventory generates no profit until it is sold. The faster a business produces sales, the higher the sales revenue available to create income will be. Inventory turnover, the ratio of cost of goods sold to average inventory, measures the number of times a company sells, or turns over, its average level of inventory during a period.

Instructions

- In Section 2 of this course you will cover these topics:
  - Internal Control And Cash
  - Receivables
  - Inventory
  - Long-Term Assets: Plant Assets And Intangibles

- You may take as much time as you want to complete the topic covered in section 2. There is no time limit to finish any Section. However, you must finish All Sections before semester end date.

- If you want to continue the remaining courses later, you may save the course and leave. You can continue later as per your convenience and this course will be available in your area to save and continue later.

: Internal Control And Cash

Topic Objective:

At the end of this topic students will be able:
• Define fraud and describe the different types of fraud in business.
• Describe an internal control system.
• Apply internal controls for cash and prepare bank reconciliation.
• Record journal entries for the petty cash fund.
• Report cash on the balance sheet.

“Definition/Overview & :

Fraud: A fraud is a deception made for personal gain. In criminal law, fraud is the crime or offense of deliberately deceiving another in order to damage them – usually, to obtain property or services unjustly. Fraud can be accomplished through the aid of forged objects. In the criminal law of common law jurisdictions it may be called "theft by deception; "larceny by trick," "larceny by fraud and deception" or something similar.

Internal Control: In accounting and organizational theory, Internal control is defined as a process effected by an organization's structure, work and authority flows, people and management information systems, designed to help the organization accomplish specific goals or objectives. It is a means by which an organization's resources are directed, monitored, and measured. It plays an important role in preventing and detecting fraud and protecting the organization's resources, both physical and intangible.
“Key Points&:

1. Fraud in Business

Fraud involves deceit or trickery that causes financial harm to a business, its stakeholders, or both. Accordingly, the accounting profession believes that fraud includes intentional actions that result in a misstatement of the financial statements.

1.1. The Fraud Triangle

For fraud to occur, fraud investigators believe that three factors must be present: perceived pressure, perceived opportunity, and rationalization. Figure 1 presents the Fraud Triangle, which shows the connection of the three factors necessary to commit fraud.

1.2. Fraud

The accounting profession believes that business fraud involves misstated financial statements, so it believes that there are really two types of fraud as follows:

- Misappropriation, or theft, of business assets
- Fraudulent financial reporting caused by falsifying accounting records

1.2.1. Employee Embezzlement

Employee embezzlement is employee fraud involving misappropriation of assets, which occurs when employees steal from their employers. Employee fraud involving disbursement schemes occurs when an employee tricks a company into giving up cash for an invalid reason. Examples of disbursement schemes include:
- **Check tampering:** Employee writes a fraudulent check and makes the check payable to him. Or, the employee obtains a check intended for an outside party, endorses the check, and then cashes it.

- **Cash register schemes:** Employee gives a false refund for returned merchandise by filling out a refund form, putting it in the cash register, then taking the cash and pocketing it. Another, related scheme happens when the employee accepts cash from the customer for a purchase but does not record the transaction in the cash register, keeping the cash for personal use.

- **Expense schemes:** Employee over-bills the company for travel and other business-related expenses, such as lunches, hotels, air travel, parking fees, and cab fares.

### 1.2.2. Management Fraud

Management fraud typically involves fraudulent financial reporting by management. This intentional misrepresentation of financial information on the financial statements is driven by greed, such as a manager’s desire to receive a larger cash bonus, or pressure to keep his job by showing owners that the business is more profitable than it really is. These pressures, combined with the opportunity to manipulate financial information and the rationalization that an unethical solution is really acceptable, lead managers to commit fraud.

### 2. Organization Accountability for Fraud

#### 2.1. Objectives of Internal Control

The most effective way for a business to prevent fraud is to eliminate the perceived opportunity for an employee to freely steal an asset or for a manager to report false financial information. This opportunity can be reduced through internal controls.

Internal control is a plan, or process, that helps an organization achieve these objectives:
- Safeguard assets and report financial information properly.
- Operate efficiently and effectively.
- Comply with laws and regulations that apply to the organization’s operations.

2.2. Control Activities

Control activities are the policies and procedures of an internal control system. The types of control activities used by an organization vary from firm to firm. Generally, the controls chosen for an entity are based on its control environment, the company’s assessment of risk, the size and structure of the company, as well as the nature of its operations. Common control activities include:

2.2.1. Separation of duties

Do not allow any one employee to be responsible for more than one of the following functions:

- Authorizing transactions
- Maintaining custody of assets
- Keeping accounting records

Assigning an individual with responsibility for more than one of these duties creates an opportunity for fraud.

2.2.2. Physical safeguards

Limit the number of employees who have access to the business’s assets, such as cash, inventory, and supplies, as well as its financial records. For instance, use cash registers, vaults, and locked storage units to control access to assets. Use passwords to restrict access to computerized accounting records and limit contact with journals and ledgers to the accounting staff. Allowing too many people
access to assets and records creates opportunity for fraud and makes it more
difficult to find the perpetrator.

2.2.3. Proper authorization

Establish and require appropriate authorization for transactions. For example, in a
small business, the owner could review and approve a purchase invoice before a
check is written to pay the amount. In a larger company, price lists and credit
policies set criteria for credit sales transactions. Good authorization procedures
reduce the chance that an unauthorized transaction may occur, thus providing an
employee with access to assets.

2.2.4. Adequate documents and records

Implement a system to provide evidence of transactions. An audit trail, a trail of
business documents and records, evidences the details of business transactions.
Documents include checks and invoices, and records include journals and ledgers.
Documents should be pre-numbered, so gaps in the numbered sequence draw
attention. Creating an effective audit trail diminishes the chance that inappropriate
activity will go unnoticed.

2.2.5. Independent checks on performance

Assign an employee who does not have access to assets or the accounting records
to check for errors and discrepancies.
2.3. Accountability for Internal Control

Audits involve the examination of the company’s financial statements and the accounting system that produces them. To evaluate the system and the reports that it generates, auditors also examine internal controls. Audits can be internal or external. Internal audits are assessments conducted by employees of the business. They check to see that employees are following company policies and procedures, and that operations are running efficiently. Internal auditors also determine whether the company is following applicable legal requirements. Because fraud has occurred so frequently in so many large, publicly owned companies in recent years, a number of regulatory changes have affected accounting and auditing.

2.4. Limitations of Internal Control

Although some reliance may be placed on internal controls to reduce the amount of fraud in a business, an internal control system can provide only reasonable, rather than absolute, assurance that fraud will be prevented or detected. The effectiveness of internal control systems is limited for the following reasons:

- Employees can make mistakes by using poor judgment while following controls, misunderstand policies and procedures, and become tired, careless, or distracted while applying controls.
- Controls can be poorly designed.
- Collusion of two or more people can circumvent controls.
- Management can override controls.
- The cost of implementing some internal controls may exceed the benefits of these controls.
3. Internal Control for Cash

Cash is the most liquid asset of any business because it’s the medium of exchange. Also, cash is easy to conceal and has no identifying marks that link it to its owner, making it relatively easy to steal.

3.1. Internal Control over Cash Receipts

Companies typically receive cash over the counter and through the mail. Good internal control dictates that all cash receipts should be deposited for safekeeping in the bank quickly. Each source of cash needs its own security measures.

3.1.1. Cash Receipts over the Counter

The point-of-sale terminal, the cash register, provides control over the cash receipts for a retail business. Consider a Macy’s store. Macy’s issues a receipt for each transaction to ensure that every sale is recorded; a customer cannot receive a receipt unless the register records the transaction. When the clerk enters a transaction in the register, the machine records it and the cash drawer opens to receive cash. At the end of the day, a manager checks to see that the proper amount of cash was collected by comparing the cash in the drawer against the machine’s record of sales. This step helps prevent theft from cash register schemes.

3.1.2. Cash Receipts by Mail

Many companies receive cash by mail, especially if they sell products or services on credit. Figure 2 shows how companies can control cash received by mail. Generally, an employee who has no other involvement in the sales or collection process, often a mailroom employee opens all incoming mail and prepares a
control listing of amounts received. The mailroom then sends all customer checks to the treasurer, who has the cashier deposit the money in the bank and collects a receipt. The remittance advices, often check stubs, go to the accounting department and serve as a basis for making journal entries to Cash and customer receivable accounts. As a final step, the controller compares the bank deposit amount from the treasurer with the debit to Cash from the accounting department. The amount of cash received according to the mailroom should match the debit to Cash and should equal the amount deposited in the bank. This procedure ensures that cash receipts are safe in the bank, and the company accounting records are up to date.

3.2. Internal Control over Cash Payments

A good separation of duties between operations and writing checks for cash payments provides internal control over those payments. Also, making payments by check is another important control for several reasons:

- The check provides a written record of the payment.
- An authorized official studies the evidence supporting the payment.
- The official approves the payment by signing the check.

3.2.1. Purchase and Payment Process

To illustrate the internal control over cash payments by check in a company large enough to separate duties, suppose Bicycles Plus buys its inventory from Specialized. This purchase and payment process will differ slightly between companies, but generally the process follows these steps, as shown in figure 3:

- Bicycles Plus faxes a purchase order to Specialized, its supplier. By preparing this document, Bicycles Plus is placing an order to buy bicycles.
- Specialized ships the goods and sends an invoice back to Bicycles Plus.
Bicycles Plus receives the bicycles and prepares a receiving report as evidence that it got its bikes.

After matching the information on these documents, Bicycles Plus sends a check to Specialized. By writing the check, Bicycles Plus pays Specialized.

For good internal control, the purchasing agent, the individual who buys the bikes, should neither receive the goods nor approve the payment. Otherwise, the purchasing agent could buy goods and have them shipped to his home. Or he can receive kickbacks from suppliers by having the supplier bill his employer too much, approving the payment and splitting the excess with the supplier. The controller, as the person responsible for the accounting function, should not sign the checks for similar reasons; she could sign a check payable to herself then manipulate the accounting records to hide this improper payment.

3.2.2. Streamlined Payment Procedures

Technology is streamlining payment procedures. Evaluated receipts settlement (ERS) compresses the approval process for payment into a single step: comparing the receiving report to the purchase order. If those documents match, the matching proves that the business got the items it ordered. The business then pays the supplier without receiving an invoice.

3.3. The Bank Account

Keeping cash in a bank account helps a depositor, or bank customer, control cash because banks have established practices for safeguarding customers’ money. Several documents are used to control cash in a bank account.
3.4. Preparing the Bank Reconciliation

The basic format, showing items that typically appear on a bank reconciliation. They all cause differences between the bank balance and the book balance, the balance according to the company’s accounting records. When establishing the procedures for a bank reconciliation, keep in mind our discussion of separation of duties; the person who prepares the bank reconciliation should have no other responsibilities related to cash. Otherwise, the bank reconciler could steal cash and manipulate the reconciliation to conceal the theft.

3.5. Online Banking

Online banking allows businesses to pay bills and view account activity electronically. The company doesn’t have to wait until the end of the month to get a bank statement. With online banking, the account can be reconciled at any time and kept current.

4. Petty Cash

A business may choose to keep a petty cash fund, which is a fund containing a small amount of cash used to pay for minor expenditures, such as the purchase of postage stamps or a shipment of a small package. Cash is easy to steal and the thief is often able to do so without leaving evidence. For this reason, petty cash funds need controls such as the following:

- Designate a custodian for the petty cash fund to fix responsibility for the fund.
- Establish the fund as an imprest account by keeping a specific, fixed amount of cash on hand so that any missing amount can be easily identified.
- Keep the fund in a safe, locked location and only allow the custodian to have access to the fund.
- Support all payments from the fund with a written record documenting the purpose and amount of the payment.
5. Reporting Cash on the Balance Sheet

Cash is the first asset listed because it’s the most liquid. Businesses often have several bank accounts and several petty cash funds, but they customarily combine all cash amounts into a single total. On the balance sheet, this total may be called Cash, or it may be listed as Cash and Cash Equivalents. Cash on the balance sheet includes coin, currency, checks on hand, petty cash, checking accounts, payroll checking accounts, money orders, and traveler’s checks. In short, cash consists of anything that a bank will take as a deposit. Cash equivalents include very liquid, very safe short-term investments that so closely resemble cash that they are included with cash on the balance sheet. These items are liquid because they can readily be converted into cash, and are safe because they have little risk of losing their value.

Receivables

Topic Objective:

At the end of this topic students will be able:

- Describe the types of sales and receivables and discuss the related internal controls.
- Use the direct write-off method to account for uncollectible receivables.
- Use the allowance method to account for uncollectible receivables.
- Account for notes receivable.
- Calculate the quick ratio and days’ sales in receivables.

“Definition/Overview &:

Sales: A sale is the pinnacle activity involved in selling products or services in return for money or other compensation. It is an act of completion of a commercial activity. The "deal is closed",...
means the customer has consented to the proposed product or service by making full or partial payment (as in case of installments) to the seller.

**Receivable:** Receivable is one of a series of accounting transactions dealing with the billing of customers who owe money to a person, company or organization for goods and services that have been provided to the customer. In most business entities this is typically done by generating an invoice and mailing or electronically delivering it to the customer, who in turn must pay it within an established timeframe called credit or payment terms.

“**Key Points&:**

1. **Sales and Receivables**

The challenges that many businesses face to attract and keep the right customers, provide internal controls to protect cash collections from customers, track amounts due from these customers, and estimate resulting bad debts.

1.1. **Types of Sales**

Recall that liquidity, a primary goal of businesses, means having enough cash to pay bills on time. Selling goods or providing services can provide a steady inflow of cash to pay for the operating expenses of a business.

1.1.1. **Cash Sales**

Cash sales are the easiest type to track because customers give currency or a check at the time of sale. The business does not need to keep records of the
individual customers. Recording a cash sale requires increasing the Cash account and increasing the Sales Revenue account for the amount of the sale. Although cash sales are easy to account for, businesses may limit their sales potential by not providing options for customers to buy now and pay later.

1.1.2. Bank Credit Card Sales

One alternative that helps businesses attract more customers is the acceptance of bank credit cards, sometimes called bank cards. Bank credit cards are a form of credit cards issued by most banks, which allow customers to buy now and pay the bank later. VISA and MasterCard are the two main examples. Retailers taking a bank credit card as payment do not have to worry about collecting the cash or keep accounts receivable records because the bank issuing the cards bears the responsibility of collecting the amounts due from the customers. Bank credit card purchases are reported on a monthly statement prepared by the bank, and cardholders write one check to the bank to pay the amount due. The retailer accepting the card typically pays the bank a small service fee to cover the processing costs. The retailer records the cost as a credit card expense at the time of sale.

1.1.3. Debit Card Sales

Businesses can also attract customers by accepting debit card payments rather than cash. Debit cards allow the debit card users the freedom to pay for purchases without carrying cash or writing a check. They also offer advantages to retailers because retailers collect the cash from the bank and don’t need records of accounts receivable.
1.1.4. Credit Card Sales

Credit card sales, which allow customers to buy now and pay later, are common in both traditional and online retailing. Customers will present the retailer with credit cards such as American Express or Discover to pay for purchases. These credit card owners then write one check to the credit card company to cover purchases made and reported on a monthly statement. Retailers also benefit from credit card sales. They do not have to check a customer’s credit rating. The credit card company has already done so. Retailers do not have to keep accounts receivable records, and they do not have to collect cash from customers.

However, these benefits do not come free because the retailer must pay a small fee for accepting these cards, just as it does for accepting bank credit cards and debit cards. The seller receives less than the full amount of the sale because the credit card company charges a fee of 1% to 5% of the sale. The retailer then records this fee related to the sale as a credit card expense.

1.1.5. Sales on Account

Cash, bank credit card, debit card, and credit card sales are common methods of sales in retail, business-to-customer environment.

1.2. Types of Receivables

The two major types of receivables are accounts receivable and notes receivable. Accounts Receivable in the general ledger serves as a control account because it summarizes, or controls, the total of the receivables from all customers. The information on the individual customer accounts within the subsidiary ledger provides information for
preparing monthly billing statements. The total of the customer account balances in the subsidiary ledger should equal the balance of the Accounts Receivable control account. If not, an error exists in the records. Notes receivable are more formal than accounts receivable. The debtor promises in writing to pay the creditor a definite sum at a future date, and a promissory note, serves as the evidence of this pledge.

1.3. Internal Control over Receivables

Businesses that sell on credit receive most cash receipts by mail. Because of the amount of these receipts, internal control over collections is important, and a critical element of internal control is the separation of duties. No one person should be responsible for more than one of the following tasks: authorizing transactions, maintaining custody of assets, or keeping accounting records.

1.4. Managing the Collection of Receivables

Most large companies have a credit department to evaluate potential customers.

The extension of credit requires a balancing act. The company doesn’t want to lose sales to good customers, but it also wants to avoid selling to customers who do not pay their bills. Uncollectible receivables become an expense of doing business on credit, which reduces net income. For good internal control over credit management, separation of duties is again important. The credit department should have no access to cash. For example, a credit employee who handles cash might pocket money received from a customer. The employee could then label the customer’s account as uncollectible, authorizing the company to remove it from the accounting records. The company would stop billing that customer, and the employee would have covered the theft.
2. The Direct Write-Off Method

Credit sales will allow a business to attract more customers, but may also result in drawing some customers that will never pay the amount that they owe the business. These uncollectible accounts create an uncollectible accounts expense for the seller, and this account is a selling expense that reduces operating income for the year. The amount of this expense varies from year to year. The problem with accounting for uncollectible accounts is that, at the time of sale, it is not known which receivable amounts will never be paid; if it was known, these customers would not be allowed to make credit purchases and would instead have to pay cash at the time of the sale. One way of accounting for uncollectible accounts is the direct write-off method. Under this method, the decision to write off a customer’s account receivable as uncollectible occurs when the business knows with certainty that the customer will not pay.

3. The Allowance Method

Most companies use the allowance method to account for uncollectible accounts.

Under this method, the income statement matches Uncollectible Accounts Expense against the revenue that the credit sales created. It also allows the balance sheet to show the amount of accounts receivable realistically expected to be collected in the future. When the allowance method is used:

- The amount of uncollectible accounts receivable is estimated.
- The current estimate of uncollectible accounts receivable is debited to Uncollectible Accounts Expense and credited to Allowance for Uncollectible Accounts, which is a contra-asset account. This entry is recorded as an adjusting entry at the end of the period.
- When a customer’s account receivable balance is written off, the amount is debited to Allowance for Uncollectible Accounts and credited to Accounts Receivable.

3.1. Estimating Uncollectible

Under the allowance method, two basic methods are used to estimate uncollectible:
3.1.1. Percent-Of-Sales Method

The percent-of-sales method computes uncollectible accounts expense as a percentage of net credit sales. Net credit sales are equal to total credit sales less the related sales discounts and sales returns and allowances. We will simply call it credit sales in this chapter. This method is also called the income-statement approach because it focuses on Uncollectible Accounts Expense, an account that appears on the income statement.

3.1.2. Aging Method

The second popular approach for estimating uncollectibles is the aging method. This method is also called the balance-sheet approach because it focuses on accounts receivable, which appears on the balance sheet. In the aging approach, the accountant completes two steps:

3.1.2.1. STEP 1

Calculate the balance needed in the Allowance for Uncollectible Accounts at the end of the period.

- Group individual accounts based on their age, and calculate the total amount of accounts receivable for each group: 1–30 days, 31–60 days, 61–90 days, or over 90 days.
- Multiply the total for each group by a percentage representing the estimated portion of that total that will never be collected. The older the group, the higher percentage of the balance that will likely not be collected; in other words, the longer it has been since a customer made a credit purchase, the less likely it is that the customer will pay the
amount due. The result will be the dollar amount of each category expected to be uncollectible.

- Calculate the balance needed in the Allowance for Uncollectible Accounts at the end of the period by adding the estimated uncollectible amounts for each group together.

3.1.2.2. STEP 2

Calculate the uncollectible accounts expense. Compare the ending balance of the Allowance for Uncollectible Accounts before adjustment to the amount needed, as calculated in step 1. The difference is the amount of the adjustment to Allowance for Uncollectible Accounts and Uncollectible Accounts Expense.

3.2. Recovery of Accounts Previously Written Off

When an account receivable is written off as uncollectible, the receivable does not cease to exist. The customer still owes the money, but the business stops pursuing collection and writes off the account. Some companies turn delinquent receivables over to an attorney and recover some of the cash through a process called recovery of an uncollectible account.

4. Notes Receivable

Notes receivable are more formal than accounts receivable because, for a note receivable, the debtor signs a promissory note as evidence of the debt. Terms used to account for notes follow:

- A promissory note is a written promise to pay a specified amount of money at a future date.
- The maker of the note is the party who signs the note and promises to pay the required amount; the maker of the note is also known as the debtor.
• The payee of the note is the party to whom the maker promises future payment; the payee of the note is the creditor.
• The principal is the amount loaned by the payee and borrowed by the maker of the note.
• Interest is the fee for using money. It is revenue earned by the payee for loaning the money; it is an expense incurred by the maker as the cost of borrowing the money.
• The interest period is the time span of the note during which interest is computed. It extends from the original date of the note to the maturity date. It is also referred to as the note term, or simply time.
• The interest rate is the percentage rate of interest specified by the note. Interest rates are almost always stated for a period of one year.
• The maturity date of the note is the date when final payment of the note is due. It is also called the due date.
• The maturity value of the note is the sum of the principal plus interest due at maturity.

4.1. Accruing Interest Revenue
A note receivable may be outstanding at the end of an accounting period. Recall that interest revenue is earned over time, not just when cash is received. Thus, the interest revenue earned on the note up to year-end is part of that year’s earnings and represents accrued revenue. To record this accrued revenue, we will create and increase the asset, Interest Receivable, and increase a revenue account, Interest Revenue, much like the entry we made to accrue service revenue earned but not yet received.

4.2. Dishonored Notes Receivable
If the maker of a note does not pay at maturity, the maker dishonors, or defaults on, the note. Because the term of the note has expired, the note agreement is no longer in force. But the payee still has a claim against the maker. In this case, the payee will transfer the amount of the note plus interest from Notes Receivable to Accounts Receivable.
5. More Ratios for Decision Making

The balance sheet lists assets in order of liquidity:

- Cash comes first because it is the most liquid asset.
- Short-term investments appear next because they are almost as liquid as cash.
- Current receivables are less liquid than short-term investments because the company must collect the receivables; hence, they appear next on the balance sheet.
- Merchandise inventory is less liquid than receivables because, to generate cash, the goods must first be sold, so they follow the other current assets.
- Prepaid expenses generally appear next because they are the least liquid.

: Inventory

Topic Objective:

At the end of this topic students will be able:

- Describe inventory and discuss the related internal controls.
- Compute inventory costs using first-in, first-out (FIFO), last-in, first-out (LIFO), and average cost methods and journalize inventory transactions.
- Compare the effects of the different costing methods on the financial statements.
- Apply the lower-of-cost-or-market (LCM) rule to value inventory.
- Report inventory on the balance sheet and measure the effect of inventory errors.
- Estimate ending inventory by the gross profit method.

“Definition/Overview & :

Inventory: Inventory is a list for goods and materials, or those goods and materials themselves, held available in stock by a business. Inventory are held in order to manage and hide from the
customer the fact that manufacture/supply delay is longer than delivery delay, and also to ease the effect of imperfections in the manufacturing process that lower production efficiencies if production capacity stands idle for lack of materials.

**FIFO:** FIFO is an acronym for First In, First Out, an abstraction in ways of organizing and manipulation of data relative to time and prioritization. This expression describes the principle of a queue processing technique or servicing conflicting demands by ordering process by first-come, first-served (FCFS) behaviour: what comes in first is handled first, what comes in next waits until the first is finished, etc.

**LIFO:** LIFO is an acronym which stands for last in, first out. In computer science and queueing theory this refers to the way items stored in some types of data structures are processed. By definition, in a LIFO structured linear list, elements can only be added or taken off from only one end, called the "top".

“Key Points& : 

1. Inventory

1.1. Types of Inventory

In addition to cash and receivables, management has a responsibility to protect inventory and to properly report it and cost of goods sold in the financial statements. Let’s begin our consideration of inventory by examining the assets that a company can hold as inventory during the accounting period. Inventory represents the goods that a business owns and has available to sell to its customers; it is the products that the business holds for sale as part of its normal operations. Wholesalers and retailers have an inventory of goods available for resale, while manufacturers have inventory of raw materials to be
used in production, work in process of partially completed goods, and finished goods ready to sell. These inventories will be discussed in a later chapter. Even though service, retail, and manufacturing businesses may have inventories of supplies for office, janitorial, and other use, these inventories are accounted for as supplies; Inventory is the account used to hold the cost of goods available for sale, not for use, by the business.

Inventory is a current asset usually listed after receivables on the balance sheet. In a perpetual inventory system, retailers track the related cost of goods sold appearing on the income statement by recording activity in this account and the merchandise inventory account as it occurs. Manufacturers calculate the cost of goods manufactured by analyzing the activity in the raw materials and work in process inventory accounts, and calculate the cost of goods sold by analyzing the activity in the finished goods inventory account.

1.2. Inventory Shrinkage

In recent years, a number of major retail businesses filed for bankruptcy due to inventory losses. Billions of dollars in sales are lost each year due to inventory shrinkage. Inventory shrinkage is the loss of inventory; it is the difference between actual inventory value and the inventory value recorded in the accounting records. Each loss decreases the inventory value as well as net income. Anyone can be involved in shrinkage, including employees, customers, managers, and suppliers:

- Employee theft: Employee theft of goods can occur when the store is opened or closed.
- Customer shoplifting: Customer theft of goods can occur during store hours.
- Administrative error: Loss from poor purchasing decisions, poor physical organization, and poor inventory management can result in damage, spoilage, spillage, or obsolescence, or errors in counting inventory.
Vendor fraud: Vendors can charge excessive prices for merchandise or accept payment for merchandise that is never received.

1.3. Internal Controls over Inventory

The objectives of internal controls for inventory are to ensure inventory is physically safe and secure, reasonably well organized, not obsolete, properly recorded, and properly valued. Additionally, a retailer can prevent losses in other ways related to employee management:

- Obtain reference checks on employees.
- Educate employees on the costs of inventory shrinkage.
- Give employee discounts in order to monitor employee purchases.
- Reward employees who recover goods from shoplifters or identify fellow employees who are stealing.

2. Inventory Costing Methods

The objectives of internal controls for inventory include ensuring proper recording and valuation of inventory. With this purpose in mind, we will now look at methods for calculating the cost of inventory, and we will review the journal entries to record inventory activity.

2.1. Inventory Cost Flows

The Inventory account is a current asset with a normal debit balance. In a perpetual inventory system, purchases of goods for resale increase the balance of the Inventory account, while sales of goods to customers decrease the account’s balance. The Inventory account also reflects purchase discounts, purchase returns and allowances, and shipping costs related to the purchase of goods. In a perpetual inventory system, companies determine the number of units in inventory from inventory accounting records verified by
a physical count. The physical count provides an internal control over the number of units on hand.

The cost of the inventory flows through the Inventory account as items are purchased and sold. The cost of the units on hand in inventory at the beginning of the period is added to the net cost of units purchased for the period to determine the cost of goods available for sale.

### 2.2. First-In, First-Out (FIFO) Method

Assume that Adler’s Outfitters uses the FIFO method to account for its inventory. FIFO costing is consistent with the physical movement of inventory for most companies. Under FIFO, the first inventory costs incurred by Adler each period are the first costs to be assigned to cost of goods sold. Simply put, FIFO assumes that the first inventory items owned are the first inventory items sold. FIFO leaves in ending inventory the last, the most recent, costs incurred.

### 2.3. Last-In, First-Out (LIFO) Method

Now imagine that Adler uses the LIFO method instead of FIFO. Under the LIFO method, the last, most recent costs incurred are the first costs assigned to the cost of goods sold. Thus, LIFO assumes that the last inventory items owned are the first inventory items sold. Ending inventory’s cost comes from the oldest, earliest costs of the period. LIFO costing does not follow the actual flow of goods for most companies, but it doesn’t have to match; the point of choosing an inventory costing method is to allow businesses to make assumptions about which goods are sold and which remain in inventory so they don’t have to track each item. When costs are increasing, LIFO often results in the highest cost of goods sold, and the lowest income tax, the main advantage of LIFO.
2.4. Average Cost Method

Suppose Adler’s Outfitters uses the average cost method to account for its inventory of suede jackets. With this method, the business computes a new, weighted average cost per unit after each purchase based on the number of items purchased at each price. Ending inventory and cost of goods sold are then based on the average cost per unit.

3. Comparing FIFO, LIFO, and Average Cost

Figure 1 compares the FIFO, LIFO, and average cost methods of costing inventory assuming that, over time, inventory costs are increasing. Different methods have different benefits. FIFO is the most popular inventory costing method, LIFO is next most popular, and average cost ranks third.

4. Valuing Inventory Using Lower-of-Cost-or-Market (LCM)

When the cost of replacing these items is lower than the historical cost, the price of the items at the time of purchase, the lower-of-cost-or-market rule (LCM) applies. LCM requires businesses to report inventory in the financial statements at whichever is lower, the historical cost, or the market value of each inventory item. For inventory, market value generally means current replacement cost, that is, the cost to replace the inventory on hand at that point in time. The lower-of-cost-or-market method is an example of an important accounting principle, conservatism. Conservatism in accounting means reporting items in the financial statements at amounts that lead to the most cautious immediate results.

5. Reporting Inventory on the Balance Sheet

Several accounting principles have special relevance to inventory. Conservatism, discussed previously, is one of them. Most businesses will report inventory on the balance sheet at the
lower-of cost-or-market value; however, others will use the concept of materiality to decide whether inventory needs to be written down to its current replacement cost. The materiality concept states that a company must perform strictly proper accounting only for items that are significant for the business’s financial statements. Information is significant, or in accounting terminology, material, when its presentation in the financial statements would cause someone to change a decision; stated differently, a material amount is one large enough to make a difference to a user of the financial statements. The full disclosure principle holds that a company’s financial statements should report enough information for outsiders to make knowledgeable decisions about the company. To provide this information, accountants typically include a set of disclosures or footnotes to accompany the financial statements.

5.1. Financial Statement Presentation of Inventory

As we mentioned earlier, inventory is a current asset often listed after receivables on the balance sheet. In addition to showing the inventory amount, a business must disclose the costing method used (specific-identification, FIFO, LIFO, or average cost) and the valuation of inventory at the lower-of-cost-or-market value.

5.2. Effects of Inventory Errors

Business managers are accountable for accurately reporting the value of inventory at the end of the period. An accurate count of the inventory items on hand helps managers calculate the inventory’s value. However, errors in the inventory count can and do occur due to:

- Human error
- Incorrectly counting inventory
- Double counting inventory; for example, counting it in one location and then moving it to another location to be counted again
- Not counting one section of the storeroom or excluding incoming goods shipped FOB shipping point
Failure to recognize obsolete or damaged goods, resulting in failure to write down their value accordingly.

Some of these errors are perhaps made intentionally and thus may represent fraudulent activities, so internal controls are necessary to ensure an accurate count of inventory.

Long-Term Assets: Plant Assets And Intangibles

Topic Objective:

At the end of this topic students will be able:

- Define and describe the life cycle of long-term assets.
- Calculate and record the acquisition of plant assets.
- Calculate and record the depreciation of plant assets.
- Calculate and record the disposal of plant assets.
- Calculate and record the depletion of natural resources.
- Account for intangible assets.
- Report long-term assets on the balance sheet.

“Definition/Overview&:

Long-term assets: Long-term assets or non-current assets are those assets usually in service over one year such as lands and buildings, plants and equipment, and long-term investments. These often receive favorable tax treatment over current assets. Tangible long-term assets are usually referred to as fixed assets.
“Key Points&:

1. Long-Term Assets

Long-term assets are resources owned by a business and employed for more than one year. These assets support daily operations and are not held for sale to customers.

Long-term assets include the following:

- **Plant assets**: Long-lived, tangible assets used in the operations of the business. Examples include land, land improvements, buildings, equipment, furniture, and fixtures, as well as natural resources, such as ore deposits and timber.
- **Intangible assets**: Long-lived resources without physical form that represent rights, such as patents, copyrights, trademarks, trade names, and franchises.

Long-term assets may either be donated to or purchased by a business. As the asset is used, a portion of its cost is expensed against the revenues earned from its use. The following expenses relate to long-term assets:

- **Depreciation** is the allocation of the cost of assets such as buildings, equipment, and machinery, to expense over their useful life.
- **Depletion** is the allocation of the cost of natural resources to expense over their useful life.
- **Amortization** is the allocation of the cost of intangible assets to expense over their useful life.

Organizational accountability applies to long-term assets as well as current ones. Business managers are responsible for developing internal controls for long-term assets. These assets are often expensive, and some long-term assets such as computers are easy to steal, so the following internal controls are important. In addition to the general internal control activities, some specifics apply:

- Tag or otherwise label each newly purchased plant asset with an identification number.
Create a subsidiary ledger for long-term assets, listing each asset and its identification number, date of purchase, location, and person responsible for it.

In each plant asset’s account in the subsidiary ledger, record the cost, depreciation data, and subsequent disposal date and amount of the asset.

Periodically make sure the total balance of all asset subsidiary accounts agrees with the general ledger account balances shown on the balance sheet.

Inspect each asset at least once a year, noting its condition and whether it remains in use.

2. Measuring the Cost of Plant Assets

The cost principle says that an asset should be carried on the balance sheet at its historical cost, the amount actually paid for the asset. The general rule for measuring cost is to include all amounts paid to acquire the asset and make it ready for its intended use.

2.1. Land and Land Improvements

The cost of land generally includes its purchase price, brokerage commission, survey and legal fees, and any unpaid property taxes the purchaser pays. It also includes the cost of clearing the land and removing any unwanted buildings. The cost of land is not depreciated because it is never really exhausted. The cost does not include fencing, paving, sprinkler systems, and lighting. These plant assets, called land improvements, are recorded separately because they are subject to depreciation.

2.2. Buildings, Equipment, Machinery, Furniture, and Fixtures

A business may hire a contractor to construct a building, or it may buy a building already built. The costs to construct a building include fees, permits, and the cost of material, labor, and overhead. When an existing building is purchased, its cost can include many of the items mentioned in our discussion of land, such as commissions, legal fees, and unpaid taxes, plus other costs such as those needed to repair and renovate the building for
its intended use. The cost of equipment and machinery includes purchase price less any
discounts, shipping charges, insurance while in transit, sales and other taxes, purchase
commission, installation costs, and the cost of testing the asset before it is used. Furniture
and fixtures consist of desks, chairs, file cabinets, and display racks. The cost of furniture
and fixtures includes the basic cost of each asset less any discounts, plus all other costs to
get the assets ready for use, such as transportation costs and sales tax. Nearly all
companies have furniture and fixtures.

2.3. A Lump-Sum (Basket) Purchase of Assets

A company may purchase several assets as a group, in a basket purchase, for a single
price. For example, a company may pay one price for land, land improvements, and a
building. For accounting purposes, the company must identify the cost of each asset
because each is used, or depreciated, differently, and land is not depreciated at all. The
total cost of the assets purchased is divided among the assets according to their relative
appraised, or market, values. This allocation technique is called the relative-sales-value
method.

2.4. Capital Expenditures

Even after an asset has been purchased, it may be necessary to spend money on it.
Businesses buy resources for use in daily operations. These expenditures may be
consumed over more than one period and treated as an asset. Conversely, they may be
consumed in the current period and treated as an expense. Expenditures that increase the
asset’s capacity or efficiency or that extend the asset’s useful life are called capital
expenditures because they result in the capitalization, or increase, of an asset. Other
expenditures do not extend an asset’s efficiency, life, or capacity, but merely maintain the
asset in working order. These costs are recorded as expenses and immediately subtracted
from the revenue they produced.
3. Measuring Plant Asset Depreciation

Recognizing depreciation expense matches the portion of the asset cost used in the period against the revenue earned by the asset in that period. Depreciation is an expense that reflects the wear and tear or the obsolescence of plant assets. An asset is obsolete when another asset can do the job much more efficiently. Thus, an asset’s useful life may be shorter than its physical life. Accountants usually depreciate computers over a short period, perhaps two to four years, even though the computers can continue working much longer. In all cases, the asset’s cost is depreciated over the period that the asset is truly useful. Depreciation of a plant asset is based on three factors:

- Cost is the amount paid to acquire the asset and get it ready for use. This factor is known because it relates to an event that already happened.
- Useful life is the estimated length of service of an asset. Useful life may be expressed in years, units of output, miles, or another measure of productivity. For example, a building’s life is stated in years, a bookbinding machine in the number of books it can bind, and a delivery truck in miles.
- Residual value, also called salvage value, is the estimated cash value of a plant asset at the end of its useful life. Imagine that a machine’s useful life is seven years. After seven years, the company expects to sell the machine as scrap metal. The expected cash receipt is the machine’s estimated residual value. The estimated residual value of the asset is excluded from the amount of cost depreciated because the business expects to receive this amount at the end. If the asset has no residual value, then the business depreciates the full cost of the asset. Cost minus residual value is called depreciable cost.

3.1. Depreciation Methods

Three major methods exist for computing depreciation. These methods allocate different amounts of depreciation to each period, but they all result in the same total depreciation for the asset because they all need to account for the same depreciable cost.
3.1.1. Straight-Line (SL) Method

The straight-line (SL) method allocates an equal amount of depreciation to each year of a plant asset’s use. Depreciable cost is divided by useful life in years to determine annual depreciation. Straight-line depreciation remains the same in each year of the asset’s life; depreciation under this method can also be expressed as a rate that can be applied to depreciable cost.

3.1.2. Unit-Of-Production (UOP) Method

The units-of-production (UOP) method allocates a fixed amount of depreciation to each unit of output produced by a plant asset.

3.1.3. Double-Declining Balance (DDB) Method

The double-declining-balance (DDB) method is an accelerated depreciation method because it records more depreciation near the start of a plant asset’s life than at the end of its life, unlike the straight-line method. Although other accelerated methods are available, double-declining-balance is the one often used. This method multiplies the plant asset’s decreasing book value by a constant percentage that is double, or 2 times, the straight-line depreciation rate.

The DDB method differs from the other methods in two ways:

- Residual value is ignored at the start of the asset’s life. In the first year, depreciation is computed on the asset’s full cost.
- Final-year depreciation is the amount needed to bring the asset to residual value. Final-year depreciation is a “plug& figure; the residual value is known, and we work backwards to determine what the depreciation expense must be in this last year.
4. Disposing of a Plant Asset

Eventually, an asset stops being useful. The asset may be worn out or obsolete, and accordingly, the owner disposes of it. To account for the disposal properly, we first update the depreciation on the asset. We can then measure the asset’s final book value accurately and calculate any gain or loss that may result from the disposition. When recording the disposal of a plant asset, the business must do the following:

- Remove the balances in the asset account and its accumulated depreciation account.
- Assets accounts have debit balances, so to remove the value of the asset sold, the asset account is credited.
- Accumulated Depreciation accounts, as contra-asset accounts, have credit balances; to remove the accumulated depreciation on the asset sold, the accumulated depreciation account is debited.
- Record a gain or loss if the cash or trade-in value received differs from the asset’s book value. Gains and losses are reported on the income statement.
- A loss occurs when the cash or trade-in value received is less than the book value of the asset. Losses decrease net income and, like expenses, are recorded with debits.
- A gain occurs when the cash or trade-in value received is greater than the book value of the asset. Gains increase net income, and like revenues, are recorded with credits.
- Record the value of any cash received if the asset was sold.
- Record the value of any new asset obtained if the old asset was exchanged in trade, and also record any cash payment made in addition to the trade-in value of the asset exchanged.

4.1. Exchanging Plant Assets

Businesses often exchange old plant assets for newer, more efficient assets. The most common exchange transaction is the trade-in of an asset for a similar type of new asset. In these trades, no gains are recognized because the business still owns the same type of asset that it owned before the trade. The cost of the new asset becomes the book value of the old asset plus any cash paid in the exchange.
4.2. Retiring a Plant Asset

Sometimes a business is unable to sell or exchange an asset and must instead retire it without receiving cash or a trade-in value in return.

5. Accounting for Natural Resources

Natural resources are plant assets and are usually listed below Property, Plant, and Equipment on the balance sheet. Examples include iron ore, oil, natural gas, and timber. Natural resources are like inventories in the ground such as oil or on top of the ground such as timber. The acquisition cost of the natural resource is recorded as an asset. As the natural resources are extracted and sold, a portion of their cost is expensed through depletion. Depletion expense is that portion of the cost of natural resources that is used in a particular period. Account for depletion as follows:

- Compute depletion over the asset’s estimated useful life using the units-of-production method.
- Record depletion in Depletion Expense and Accumulated Depletion, a contra asset account similar to Accumulated Depreciation.

6. Accounting for Intangible Assets

Rather than having physical form, intangible assets provide benefit to their owners because they convey special rights. The acquisition cost of an intangible asset is recorded as an asset. Intangible assets are listed after the plant assets on the balance sheet. The cost of the intangible asset is transferred to expense through amortization; the systematic reduction of the intangible asset’s carrying value on the books. Account for most intangible assets as follows:

- Compute amortization over the asset’s estimated useful life, usually by the straight-line method. Obsolescence often shortens an intangible’s useful life.
- The residual value of most intangibles is zero.
- Amortization expense for an intangible asset can be recorded directly against the asset account without using a separate account for accumulated amortization.
6.1. Patents

A patent is a federal government grant giving the holder the exclusive 20-year right to produce and sell an invention. The invention may be a product or a process.

6.2. Copyrights

A copyright is the exclusive right to reproduce and sell a book, musical composition, film, or other work of art, or intellectual property. Copyrights also protect computer software programs. A company may pay a large sum to purchase an existing copyright.

6.3. Trademarks and Trade Names

Trademarks and trade names are assets that represent distinctive products or services, such as the CBS “eye& and NBC’s peacock. Legally protected slogans include Chevrolet’s “Like a Rock& and Avis Rent A Car’s “We try harder.& The cost of a trademark or trade name is amortized over its useful life.

6.4. Franchises and Licenses

Franchises and licenses are privileges granted by a private business or a government to sell products or services under specified conditions. The acquisition cost of a franchise or license is amortized over its useful life.

6.5. Goodwill

The term goodwill in accounting has a specific meaning, which is perhaps different from how it is used in everyday life. In accounting, goodwill is the excess of the cost to
purchase another company over the market value of the net assets purchased, where net assets are equal to total assets minus total liabilities. Goodwill has some special features:

- Goodwill is recorded only by a company that purchases another company. An outstanding reputation may create extra value or goodwill for a company, but that company never records goodwill for its own business. Instead, goodwill is recorded only by the acquiring entity when it buys another company, because it is the willingness of an entity to pay extra for goodwill that proves it exists.
- According to GAAP, goodwill is not amortized. Instead, the company measures the current value of its purchased goodwill each year. If the goodwill increases in value, the company does not record it because this extra goodwill was not purchased. On the other hand, if goodwill’s value decreases, then the company records a loss and reduces the value of goodwill.

7. Presenting Long-Term Assets on the Balance Sheet

The use of long-term assets in business operations affects the income statement and the balance sheet. The income statement can include depreciation, depletion, and amortization expense, as well as gains and losses on disposal of assets, and loss on goodwill. Footnotes to the financial statements will describe the methods used to compute depreciation, depletion, and amortization. When a business has an intangible asset, the balance sheet will show the amount after the Property, Plant, and Equipment section of the assets. The footnotes to the financials will include a description of the intangible asset and its estimated useful life.

Instructions

- In Section 3 of this course you will cover these topics:
  - Current Liabilities And Payroll
  - Corporations And Stockholders Equity
  - Long-Term Liabilities
  - The Statement Of Cash Flows
You may take as much time as you want to complete the topic covered in section 3. There is no time limit to finish any Section, however you must finish all Sections before semester end date.

If you want to continue remaining courses later, you may save the course and leave. You can continue later as per your convenience and this course will be available in your area to save and continue later.

: Current Liabilities And Payroll

Topic Objective:

At the end of this topic students will be able:

- Account for current liabilities of known amount.
- Account for estimated and contingent liabilities.
- Calculate the current ratio and working capital.
- Calculate payroll amounts.
- Describe the payroll process.
- Record basic payroll transactions.
- Report current liabilities on the balance sheet.

“Definition/Overview& :

**Current Liabilities:** In accounting, current liabilities are considered liabilities of the business that are to be settled in cash within the fiscal year or the operating cycle, whichever period is longer.

**Contingent liabilities:** Contingent liabilities are liabilities that may or may not be incurred by an entity depending on the outcome of a future event such as a court case. These liabilities are
recorded in a company's accounts and shown in the balance sheet when both probable and reasonably estimable. A footnote to the balance sheet describes the nature and extent of the contingent liabilities. The likelihood of loss is described as probable, reasonably possible, or remote. The ability to estimate a loss is described as known, reasonably estimable, or not reasonably estimable.

**Payroll:** In a company, payroll is the sum of all financial records of salaries, wages, bonuses, and deductions.

"**Key Points:**

**1. Current Liabilities of Known Amount**

Liabilities represent debts or obligations owed to others outside the business. Businesses may owe money for goods or services purchased on account. Businesses may also have the obligation to provide a good or service in the future or to repay principal and interest on loans received earlier. Payroll, payroll taxes, and sales tax also represent amounts due from most companies.

**1.1. Accounts Payable**

Amounts owed for products or services purchased on account are accounts payable, and are backed by the general reputation and credit standing of the debtor. Businesses increase the balance of accounts payable every time they purchase products or services on account. They decrease the balance of accounts payable as they make cash payments on the amounts they owe to their suppliers.
1.2. Short-Term Notes Payable and Interest Payable

Short-term notes provide a common way of obtaining operating funds or making purchases. Short-term notes payable are promissory notes that must be paid within one year. Interest payable represents the interest that is due on such notes. To record the purchase of inventory in exchange for a short-term note, companies increase Inventory and Notes Payable, Short-Term. If the note won’t be paid until the next fiscal year, they accrue the interest at year-end. This match’s interest expense against the revenues resulting from sale of the inventory financed through the note. Interest incurred on the note since the time of signing is recorded by increasing both Interest Expense and Interest Payable.

1.3. Sales Tax Payable

Most states levy sales tax on retail sales. The easiest way for the states to collect the tax is to require retailers to serve as collection agents and collect the sales tax from the customer in addition to the price of the item sold. The retailers keep track of the sales tax collected and then pay it to the state at regular intervals. In this way, sales tax represents a liability to retailers; they have collected tax that is paid by the consumer but is owed to the state government. As retailers collect the sales tax at the time of sale, they increase the current liability, Sales Tax Payable. Then the retailers pay the collected sales taxes to the state government and decrease Sales Tax Payable.

1.4. Current Portion of Long-Term Notes Payable

Some long-term notes payable and bonds payable are paid in installments. The current portion of long-term notes payable is the amount of the principal payable within one year, a current liability. The remaining portion of the long-term debt is a long-term liability. At the end of the fiscal year, the company may make an adjusting entry to shift the
installment of the long-term notes payable due in the next year to a current liability account.

1.5. Accrued Expenses

Accruals are revenues earned or expenses incurred before cash has been exchanged. Accrued expenses, such as salary, tax, and the interest we accounted for earlier in the chapter, are also called accrued liabilities because recording these amounts increases both expenses and liabilities. As in the case of interest, accrued expenses arise when an expense is matched against the revenue it produced in one time period, but the payment of the expense is made in a later period.

1.6. Unearned Revenues

Also remember from Chapter 3 that another term for unearned revenues is deferred revenues. By receiving cash from customers before earning the revenue, the business has an obligation to provide goods or services to the customer. Let’s consider an example. Business 2.0 sells three-year magazine subscriptions and collects cash in advance. By receiving cash before earning the revenue, Business 2.0 has a liability to provide magazines during the next three years. The liability account used to record this obligation is called Unearned Subscription Revenue.

2. Estimated and Contingent Liabilities

A business may know that a liability exists but not know the exact amount owed. This liability must be reported on the balance sheet. A prime example is a liability called Estimated Warranty Payable, which is common for companies that manufacture products.
2.1. Estimated Warranty Payable

Many companies guarantee their products against defects under warranty agreements. Ninety-day warranties and one-year warranties are common. If the product fails to perform within that time period, the customer may return it for repair or for a refund.

The matching principle says to record warranty expense in the same period that the revenue from the sale of the product is recorded. Therefore, the warranty expense occurs at the time of the sale, not at the time that the warranty claim is made by the customer. However, a challenge arises because, at the time of the sale, the company does not know the exact amount of warranty expense that will be incurred because it does not know how many products will fail to perform. Businesses handle this issue by estimating warranty expense and the related liability according to past experience with the product.

2.2. Contingent Liabilities

A contingent liability is not an actual liability. Instead, it is a potential liability that depends on a future event. Companies must record contingent liabilities if the situation meets two criteria. A liability must be recorded for a contingency when:

- It is probable that the company will be liable, and
- The amount of the liability can be reasonably estimated.

Businesses use judgment in determining whether the two criteria are met. To assess the likelihood that they will become liable, entities use past experience and consult their attorneys.

3. More Ratios for Decision Making

Accounting is designed to provide information for decision making by stakeholders. For example, a bank considering lending money to a company must predict whether the company
can repay the loan. If the business already has a lot of debt, repayment is less certain than if it doesn’t owe too much money. Two of the most widely used decision aids in assessing the short-term liquidity of a business are the current ratio and the measure of working capital. The current ratio measures a company’s ability to pay its current liabilities by comparing those liabilities against current assets.

A company prefers to have a high current ratio because that means it has plenty of current assets to pay current liabilities. An increasing current ratio over time indicates improvement in a company’s ability to pay current debts. Working capital also measures a company’s ability to meet short-term obligations with current assets. A positive result indicates that the business has more current assets than it has current liabilities, and thus shows that current assets could pay current liabilities. A negative result indicates the opposite; current liabilities are greater than the current assets of the entity.

4. Accounting for Payroll

Large companies typically go through a formal process of hiring employees. When a new employee begins work, the payroll process begins. Businesses that hire employees need to properly account for employee compensation in order to comply with federal and state law. Accordingly, an accounting system should include a process that ensures the correct and timely payments to the following:

- Employees for work performed
- The federal and state governments for taxes due from employees and employers
- Third parties for employee benefits and charitable contributions

Employee compensation for work performed can take many forms:

- A salary is a set amount of pay for a period of time such as a year, month, or week.
- Wages are pay amounts stated at an hourly rate, such as $10 per hour, times the number of hours worked. The hours worked will vary among employees and may even vary from pay period to pay period for the same employee.
- A commission is pay stated as a percentage of a sale amount, such as 5% commission on a sale.
- A bonus is pay for exceptional performance over and above the base salary, wage, or commission. The bonus is often paid in a single amount after yearend for performance during that year.

### 4.1. Gross Pay and Net Pay

Businesses need to compute and account for two amounts of employee pay. Gross pay is the total amount of salary, wages, commission, and bonus earned by the employee during a pay period. Gross pay is the amount of pay before taxes or any other amounts are deducted. Gross pay is the expense to the employer for the employee’s efforts. In addition to regular earnings, gross pay may include overtime pay for an employee who works extra hours. For businesses involved in interstate commerce, overtime earnings must be computed according to a federal law called the Fair Labor Standards Act. The act says that most employees must be paid at least one and a half times their regular pay rate for any hours they work over 40 in one workweek.

### 4.2. Employee Payroll Deductions

The federal government requires businesses, as employers, to act as collection agents for employee taxes. Thus, employers subtract taxes and other amounts from employee gross pay to determine net pay. These amounts withheld from an employee’s pay are called deductions. Some deductions, such as taxes, are required; others, including union dues, insurance premiums, charitable contributions, and other amounts withheld at the employee’s request, are optional. Payroll deductions become the liability of employers, who collect the funds withheld then pay the government and other outside parties.
4.3. Optional Deductions

As a convenience to employees, many companies make payroll deductions and disburse cash according to employee instructions. Deductions for retirement savings plans, gifts to charitable organizations such as the United Way and Habit for Humanity, insurance payments, and union dues are some common examples. Like taxes withheld, these amounts represent liabilities to employers until they are turned over to the appropriate parties.

4.4. Employer Payroll Taxes

Payroll taxes that employers pay increase the cost of employee compensation, and thus represent an expense to the employer in addition to the cost of the compensation itself. They also are liabilities that the employer owes to the federal and state governments until paid.

4.5. Other Payroll Considerations

Our discussion to this point centered on the computation of payroll amounts based on federal payroll laws, such as the Fair Labor Standards Act and the FICA law that created social security and unemployment tax. You need to know that states also pass laws governing payroll. These laws can vary significantly from one state to another and create differences in the way that employers need to account for payroll.

5. The Payroll Process

The payroll process, which begins with the hiring of employees, requires many documents, including the W-4 form that employees complete upon hire. Employers keep the forms and wage or salary information for employees in employees’ personnel files. These data, along with
information from time sheets or time cards, are used to continue the payroll process through computation of employee gross pay, deduction amounts, and net pay.

5.1. Payroll Register

Each pay period, companies organize payroll data in a special record called the payroll register. The payroll register is a document containing information about the current pay period’s payroll, listing all employees and showing gross pay, withholding amounts, and net pay for each. The payroll register serves as a check register because it shows the check numbers of all checks used to pay payroll.

5.2. Payroll Checks

Most companies pay employees by check or by electronic fund transfer (EFT), sometimes referred to as automatic deposit. A paycheck has an attachment that details the payroll amounts. If the employee authorizes the company to make deposits directly to his or her own bank account, the employer still furnishes the employee with the attachment, or pay stub that shows the payroll amounts.

5.3. Employee Earnings Record

Employers must file payroll tax returns with the federal and state governments.

One important return, Form 941, Employer’s Quarterly Federal Tax Return, details total employee compensation, the amount of federal income tax withheld, as well as total FICA taxes owed on compensation. This report must be filed no later than one month after the end of a quarter. Another important form that must be filed is Form 940, Employer’s Annual Federal Unemployment (FUTA) Tax Return, an annual return showing compensation related to federal unemployment tax, and the tax due on this compensation.
5.4. Internal Control over Payroll

Two main types of internal controls are used in the payroll process. One set deals with ensuring the efficiency of the payroll process and the other protects disbursements of pay.

5.4.1. Efficiency

Reconciling the bank account can be time-consuming because of many outstanding payroll checks. To reduce the number of outstanding checks for the payroll bank account, many companies actually use two bank accounts for payroll transactions. They pay the payroll from one bank account one month and from the other payroll account the next month. This way they can reconcile each account every other month, which makes the reconciliation process faster and smoother.

5.4.2. Safeguarding Payroll Disbursements

Owners and managers of small businesses can monitor their payrolls by personal contact with employees. Large corporations cannot. A particular risk is that a paycheck may be written to a fictitious person and cashed by a dishonest employee. To guard against this and other crimes, large businesses typically adopt strict internal control policies for payrolls. The duties of hiring and firing employees should be separated from payroll accounting and from passing out paychecks. Issuing paychecks to employees with a photo ID ensures that only actual employees receive pay. A formal timekeeping system helps ensure that employees actually worked the number of hours claimed. Employees may punch time cards at the start and end of the workday to prove their attendance and number of hours worked.
6. Payroll Entries

Businesses continue the payroll process by recording payroll transactions. The payroll register serves as a key source of information necessary to record the three types of payroll transactions that occur on a regular basis.

6.1. Record Employee Compensation

Employers record the expense of compensating employees as well as the liabilities for amounts withheld from compensation. The payroll register serves as the source of the information necessary to make these journal entries.

6.2. Record Employer Payroll Taxes and Contributions to Employee Benefits

Remember that employers are obligated to pay social security and unemployment taxes. The tax amounts are also an expense of the employer because they add to the cost of having employees. Employers may choose to pay for health insurance, contribute to retirement plans, or provide other incentives to obtain and motivate employees. Again, these expenses are related to employees’ work.

6.3. Record Payments of Compensation, Taxes, and Benefits

Most employers must record at least three cash payments for payrolls.

- **Net Pay to Employees:** When companies pay employees, they decrease Salary Payable and Cash.

- **Payroll Taxes and Other Deductions:** Employers must send the government two sets of payroll taxes: those withheld from employees’ pay and those paid by the employer. Due dates vary depending on the tax being paid and the amount of the tax.
Benefits: Employers that pay for employees’ insurance coverage and retirement plans need to write checks to fulfill these obligations.

7. Reporting Current Liabilities

At the end of each accounting period, companies report all of their current liabilities on the balance sheet. Management can fraudulently report liabilities. Managers may be tempted to show a higher level of income in order to raise money from investors, obtain a bank loan, or to just keep their job by making the company look more successful than it is. Thus, managers may be tempted to overlook some expenses and liabilities at the end of the accounting period and deliberately not make necessary accruals.

: Corporations And Stockholders Equity

Topic Objective:

At the end of this topic students will be able:

- Compare the three forms of business organization.
- Describe stockholders’ equity and classes of stock.
- Record the issuance of stock.
- Account for cash dividends.
- Account for stock dividends and stock splits.
- Account for treasury stock.
- Report stockholders’ equity.
“Definition/Overview& :

Corporation: A corporation is a legal personality, usually used to conduct business. Corporations exist as a product of corporate law, and their rules balance the interests of the shareholders that invest their capital and the employees who contribute their labor. People work together in corporations to produce. In modern times, corporations have become an increasingly dominant part of economic life. People rely on corporations for employment, for their goods and services, for the value of the pensions, for economic growth and social development.

Stockholders’ Equity: Stockholders’ equity is this interest in remaining assets, spread among individual shareholders of common or preferred stock.

“Key Points& :

1. Forms of Business Organizations
   1.1. Proprietorship
   A proprietorship has a single owner who is an agent of the business and thus able to bind it to contracts. The owner is personally liable for the business’s debts and must pay personal income taxes on the business’s earnings. Many people start their own business because it is fairly easy to do so and sole owners typically enjoy the independence of running their own business. However, a proprietorship may have trouble raising capital to start or expand the business. Also, it may be managed with the limited expertise of the owner, and the life of the proprietorship is limited by the owner’s choice or death.
1.2. Partnership

A partnership joins two or more individuals as co-owners who, through mutual agency, may bind the business to contracts. Partners are personally liable for the business’s debts and must pay personal income taxes on the business’s earnings. A partnership can raise more money than a proprietorship and can also benefit from the collaboration of good partners. However, a partnership may have trouble finding responsible partners, and ones willing to be liable for partnership debts. Again, it may be difficult to get partners to agree on the terms of a partnership agreement and to maintain good relations among partners while running the business. Finally, the life of the partnership is limited by the partners’ choice or death.

1.3. Corporation

A corporation is a business usually owned by many stockholders. These people hold shares of stock as evidence of ownership in a business that is typically operated by managers chosen by a board of directors. The owners have no personal obligation for the corporation’s liabilities. At most, they can lose the amount they invested in the corporation when they bought stock. Because owners can freely buy and sell shares of stock, the ownership of a corporation is easily transferred and its life is separate from the life of its owners. In this way, the life of a corporation may be indefinite.

2. Corporations: An Overview

The corporation is the dominant form of business organization in the United States. Proprietorships and partnerships are more numerous, but corporations do much more business and are far larger.
2.1. Organizing a Corporation

A corporation is a business entity formed under the laws of a particular state. Formation of a corporation begins when the incorporators obtain a charter from the state in which the corporation will organize. The shares of stock represent an ownership interest in the corporation and will be offered for sale to the public; upon purchase, the buyers of these shares become stockholders or shareholders. The incorporators pay fees, sign the charter, and file documents with the state. The corporation then becomes a legal entity. The stockholders agree to a set of bylaws, which act as the constitution of the newly formed business. Ultimate control of the corporation rests with the stockholders as they vote their shares of stock.

The ownership of stock entitles stockholders to four basic rights, unless specific rights are withheld by contract:

- **Right to vote.** Stockholders participate in management by voting on matters that come before them. This is a stockholder’s sole right to manage the corporation. Each share of stock carries one vote.
- **Right to receive dividends.** Stockholders receive dividends in proportion to their ownership interest. Each share of stock receives an equal dividend with every other share of the same class.
- **Right to receive assets upon liquidation.** Stockholders receive their proportionate share of any assets remaining after the corporation pays its liabilities in liquidation, or in other words, when it goes out of business.
- **Right to preemption.** Stockholders can maintain their proportionate ownership in the corporation in the event that additional shares of stock are offered for sale.
### 2.2. Stockholders’ Equity

The balance sheet of a corporation reports assets and liabilities in the same way that the balance sheet of a proprietorship or a partnership does. However, the owners’ equity of a corporation, the stockholders’ equity, is reported differently. State laws require corporations to report the sources of their capital; the two basic types are the following:

#### 2.2.1 Paid-in capital

Paid-in capital, also called contributed capital, represents amounts received from, or paid in by, the stockholders. The sale of stock to stockholders increases stockholder investment in the business through the capital paid by stockholders in the purchase.

#### 2.2.2. Retained earnings

Retained earnings are capital earned by the profitable operations of the corporation. The net income of the business increased owner’s equity while net loss decreased it. Again, the same is true for corporations, and Retained Earnings is the account used to hold the accumulated earnings or losses of the business over the corporation’s lifetime. Also, just as owner withdrawals decrease owner’s equity, distributions of earnings to corporate owners, called dividends, likewise decrease the retained earnings of a corporation. Hence, retained earnings are the cumulative profits earned and kept by the corporation.

### 2.3. Classes of Stock

Owner’s equity, or capital, is the insider claims to the assets of a business. Stock represents the capital of a corporation, so it is called capital stock. A corporation issues stock certificates to investors when they buy stock; stock certificates serve as evidence of
stock ownership. A share is the basic unit of stock and a corporation may issue a stock certificate for any number of shares based on the number of shares purchased. Stock that is held by the stockholders is said to be outstanding stock because it is out in the hands of the shareholders. The total shares of stock outstanding represent 100% ownership of the corporation.

2.3.1 A corporation can issue different types of stock. The two basic classes of stock are:

- **Common stock**, the basic ownership interest in a corporation, is issued by every corporation.
- **Preferred stock** is an ownership interest that may be preferred by investors because it gives its owners certain advantages over the common stockholders. Preferred stockholders receive dividends, usually at a fixed rate, before the common stockholders, and receive assets before the common stockholders if the corporation liquidates.

2.3.2 Stock may or may not be assigned a value at incorporation as follows:

- **Par value** is an arbitrary value assigned to a share of its stock by a company. Companies maintain a minimum amount of stockholders’ equity for the protection of creditors, called legal capital. For corporations with par-value stock, legal capital is usually the par value of the shares issued.
- **No-par stock** is stock that does not have a par value.
- **Stated value** is assigned to some no-par stock, which makes it comparable to par-value stock. The stated value is an arbitrary amount that is similar to par value.

3. Issuing Stock

Large corporations such require huge quantities of money to operate. They generally cannot finance all their operations through borrowing, so they raise capital by issuing stock. Corporations may sell the stock directly to stockholders or use the services of an underwriter. An underwriter agrees to buy all the stock it cannot sell to its clients. The price that the corporation
receives from issuing stock is called the issue price. Usually, the issue price exceeds the stock’s par value because, as previously mentioned, par value is typically set quite low.

3.1. Issuing Common Stock

Common stock may be issued at par value, at a premium, as no-par common stock, and as no-par common stock with a stated value. Common stock can also be exchanged for assets other than cash.

3.1.1. Common Stock at a Premium

Most corporations set par value low and issue common stock for a price above par. The amount received above par is called a premium. A premium is not income to the company because the entity is dealing with its own stockholders, not its customers.

3.1.2. No-Par Common Stock

When a company issues stock that has no par value, there can be no premium because there is no excess of the sale price of the stock over its par value. Less than 10% of corporations issuing stock will issue no-par stock. Regardless of the stock’s issue price, a company records the sale by increasing both Cash and Common Stock for the same amount. No Paid-In Capital in Excess of Par account is needed for no-par stock.
3.1.3. No-Par Common Stock with a Stated Value

Accounting for the sale of no-par stock that has a stated value is identical to accounting for par-value stock, except that the account Paid-In Capital in Excess of Stated Value is used to record any amount received above the stated value.

3.1.4. Common Stock for Assets Other Than Cash

A corporation may issue stock and receive assets other than cash in exchange. It records the assets received at their current market value and increases the capital accounts accordingly.

3.2. Issuing Preferred Stock

Accounting for preferred stock follows the pattern illustrated for common stock. Most preferred stock is issued at par value. Therefore, Paid-In Capital in Excess of Par is rare for preferred stock.

4. Accounting for Cash Dividends

If the corporation has been profitable and has sufficient cash, it may distribute earnings in the form of cash to the stockholders. Such distributions are cash dividends. Corporations declare dividends from retained earnings and then pay them with cash. The corporation must have enough retained earnings to declare dividends and also have enough cash to pay them.

4.1. Dividend Dates

The board of directors, as the policy setters of a corporation, declares a dividend before the corporation pays it. The corporation has no obligation to pay a dividend until it is declared because the board must first determine if it is in the best interest of the company.
to do so. However, once the dividend is declared, it becomes a legal liability of the entity. A dividend ultimately decreases both the assets and the retained earnings of the corporation. The three dates involved in the issuance of a dividend are the following:

- The date of declaration. On the declaration date, the board of directors announces the intention to pay the dividend. This declaration creates a liability for the corporation equal to the amount of the dividend declared.
- The date of record. Those stockholders owning the stock on the date of record, usually a week or two after declaration will receive the dividend when it’s paid.
- The date of payment. Payment of the dividend typically follows the date of record by a week or two.

4.2. Dividends on Preferred and Common Stock

On the date of declaration, the cash dividend is recorded by decreasing Retained Earnings and increasing Dividends Payable. Some accountants debit a Dividends account, which, like Withdrawals, is closed to Retained Earnings at the end of the fiscal year. Most businesses, however, debit Retained Earnings, as shown here. Dividends Payable is a current liability because it is usually paid within a few weeks of declaration.

4.3. Dividends on Cumulative and Non-cumulative Preferred Stock

The allocation of a dividend may be more complex if the preferred stock is cumulative. In some years, a corporation may not pay a dividend to their preferred stockholders. This practice is called passing the dividend, and the passed dividends are said to be dividends in arrears. The owners of cumulative preferred stock must receive all dividends in arrears plus the current year’s dividend before the common stockholders get a dividend.
5. Stock Dividends and Stock Splits

A corporation may dispense earnings to the stockholders of the company in several different ways. In addition to distributing a dividend in the form of cash, corporations can distribute a stock dividend or split their stock.

5.1. Stock Dividends

A stock dividend is a corporation’s distribution of its own stock to its stockholders. A company issues stock dividends:

- To provide dividends but conserve cash. A company may want to keep cash in the business, yet it may also wish to distribute dividends in some form.
- To reduce the market price of its stock. Stock dividends may cause the market price of the company’s stock to fall because of the increased supply of the stock. A company could Stock dividends make the stock less expensive and thus more attractive to investors.

5.2. Stock Splits

A stock split results when the number of shares authorized, issued, and outstanding is increased and the stock’s par value is reduced by the same proportion. A stock split decreases the market price of the stock because of the increase in its supply, so the intent of a split is often to make the stock more affordable.

5.3. Comparison of Cash Dividends, Stock Dividends, and Stock Splits

Cash dividends, stock dividends, and stock splits affect stockholders’ equity differently:

- A cash dividend decreases Retained Earnings and Cash. Common Stock and Paid-In Capital in Excess of Par are unchanged.
A stock dividend increases the number of shares of stock outstanding. It decreases Retained Earnings and increases Common Stock and Paid-In Capital in Excess of Par if the market price of the stock is greater than par at the date of declaration.

A stock split increases the number of shares of stock authorized, issued, and outstanding. Par value per share decreases. All account balances remain unchanged.

6. Treasury Stock

When a company issues stock and then buys its own stock back from stockholders, this reacquired stock is called treasury stock. In effect, the corporation holds the stock in its treasury. When a company buys its own stock back, the company gives up cash and becomes a smaller entity because of the reduced cash and shares outstanding. A corporation may repurchase its stock for several reasons:

- To increase net assets by buying its shares low and hoping to sell them for a higher price later.
- To decrease the supply of stock available to support the stock’s market price.
- To avoid a takeover by an outside party.
- To obtain stock that can be used to grant stock options to employees or purchase another company.
- To reduce the amount of dividends paid or distributed.

6.1. Purchase of Treasury Stock

A corporation purchasing treasury stock records the transaction by increasing Treasury Stock and decreasing Cash. Under the cost method, treasury stock is recorded at its acquisition cost without considering its par value or the value at which it was originally issued. The Treasury Stock account is a stockholders’ equity account that has a debit balance, which is the opposite of the other equity accounts, because it represents a
reduction in ownership interest. Therefore, Treasury Stock is a contra-equity account. The Treasury Stock account is reported beneath Retained Earnings in the stockholders’ equity section of the balance sheet, and its balance is subtracted from the sum of total paid-in capital and retained earnings.

6.2. Sale of Treasury Stock

A company may resell its treasury stock at its cost, above cost, or below cost.

6.2.1. Sale at Cost

If the treasury stock is resold for its cost, the entry to record the sale increases Cash and decreases Treasury Stock for the same amount that was used to record the purchase.

6.2.2. Sale above Cost

If treasury stock is resold for more than its cost, the difference is credited to a new account, Paid-In Capital from Treasury Stock; remember that paid-in capital represents amounts received from stockholders, and in this case too, the excess of the resale price over the cost of the stock comes from the company’s shareholders.

6.2.3. Sale below Cost

The resale price of treasury stock can be less than its cost. The shortfall first decreases Paid-In Capital from Treasury Stock. If this account’s balance is too small, then Retained Earnings is reduced for the remaining amount.
7. Reporting Stockholders’ Equity

7.1. Stockholders’ Equity Section of the Balance Sheet

We mentioned earlier in the chapter that capital comes from two basic sources, amounts received from stockholders and amounts earned by operating profitably. Accordingly, stockholders’ equity on the balance sheet is separated into two primary sections, paid-in capital and retained earnings, and may also reflect the reduction of equity for treasury stock purchased. Check out the order in which the equity accounts appear on the statement:

- Paid-In Capital
- Preferred Stock
- Common Stock
- Paid-In Capital in Excess of Par
- Paid-In Capital from Treasury Stock
- Retained Earnings
- Treasury Stock

Many companies label Paid-In Capital in Excess of Par as Additional Paid-In Capital on the balance sheet. However, they are careful not to include any excess of par related to preferred stock in this item because that paid-in capital belongs to the preferred stockholders. If preferred stock is issued at an amount above par, a separate paid-in capital account would hold this excess, and this account would be reported immediately below Preferred Stock. As we said previously, though, preferred stock issuance above par is rare.

7.2. Statement of Stockholders’ Equity

Rather than include a detailed stockholders’ equity section in the balance sheet, many companies choose to report a statement of stockholders’ equity. The statement of stockholders’ equity reports the changes in all categories of equity during the period.
**Topic Objective:**

At the end of this topic students will be able:

- Describe mortgages and leases and record mortgage and lease transactions.
- Describe bonds payable.
- Account for bond issuance and bond interest.
- Account for bond repayment.

**“Definition/Overview& :**

**Long-term Liabilities:** Long-term liabilities are liabilities with a future benefit over one year, such as notes payable that mature greater than one year. In accounting, the long-term liabilities are shown on the right wing of the balance-sheet representing the sources of funds, which are generally bounded in form of capital assets.

**“Key Points& :**

1. **Long-Term Liabilities: Mortgages and Leases**

   **1.1. Mortgage Notes Payable**

   Mortgage notes payable are amounts due on loans taken out for the purchase of land, buildings, or both that are repaid over a long-term period. A mortgage is an example of a secured note because it gives the lender the right to take specified assets, called collateral,
if the mortgagee is unable to repay the loan. A mortgage is paid off through specified periodic payments of principal and interest.

Recording mortgage note activity is largely the same as recording notes payable activity. A mortgage is recorded as a liability at the face amount borrowed. Periodic payments reduce the balance of the mortgage over the term of the note and also pay interest. An amortization schedule helps track the portion of each payment allocated to principal and to interest.

1.2. Lease Liabilities

A lease is a rental agreement in which the lessee obtains the use of an asset by paying rent to the property owner, the lessor. Examples of assets leased include the following:

- Real estate, such as offices, warehouses, parking lots, and antenna sites
- Vehicles, such as automobiles, trucks, and trailers
- Equipment including computers, copiers, and fax machines, as well as machines used in providing services

A business may prefer to lease rather than obtain a loan to purchase an asset for several reasons:

- **It can obtain financing more easily**: A lease is generally easier to obtain than a loan.
- **It may want to save cash**: Making monthly lease payments uses less cash initially than paying the full cost of an asset or making a large down payment at the time of purchase. Monthly lease payments may also preserve cash because the loan obtained to purchase an asset probably specifies a higher interest rate than the rate charged in a lease agreement.
- **It can adapt to changes in technology**: Leasing assets affected by changes in technology, such as computers, allows a business to upgrade to new models more easily. The lessor is responsible for selling or scrapping the old equipment, thus relieving the lessee of another responsibility of ownership.

- **It can take advantage of tax savings**: A company can expense each entire lease payment of some leases as they incur them. Because expenses reduce net income, the ability to expense leasing costs may reduce income taxes owed by the business.

Some leases are rentals, while others are really purchases. Accordingly, accountants divide leases into two types:

- An operating lease is a rental agreement for the use of an asset.
- A capital lease is an agreement for the purchase of land, depreciable assets, or both with a loan. Capital leases often occur when the lessor sees that the asset will have little or no value at the end of the lease period, so these agreements are typically both long-term and non-cancelable.

### 2. Bonds Payable

Successful companies are always seeking ways to expand or grow their businesses. Expansion might include purchasing land, building, or equipment costing millions of dollars. To obtain the funding needed for expansion, companies can sell stock, borrow cash from a lending institution, or issue bonds to the public. Issuing bonds is a way of borrowing a large amount of money because bonds payable are loans issued to multiple bondholders, and a bond issue is the total amount of all bonds sold to bondholders. Bonds Payable thus represents the total of all bonds owed. Interest on bonds is typically paid semiannually, and the bond is usually repaid on its maturity date.
2.1. Types of Bonds

Bonds can be issued with different characteristics or features, as follows:

- All the bonds in a particular issue may mature at a specified time, as term bonds.
- Alternately, they may mature in installments, called serial bonds.
- Secured, or mortgage, bonds give the bondholder the right to take specified assets of the issuer, called collateral, if the company fails to pay interest or principal.
- Unsecured bonds, called debentures, are backed only by the good faith of the borrower.
- Normally, companies wait until maturity to pay off, or retire, their bonds payable. However, sometimes companies retire their bonds prior to maturity, usually to relieve the pressure of paying interest. Bonds may be callable bonds, which means that the corporation may call, or pay off, those bonds at a specified price whenever it chooses. Callable bonds give the issuer the flexibility to pay off the bonds whenever it is beneficial for them to do so.
- Convertible bonds may be converted into the common stock of the issuing company at the option of the investor. By issuing convertible bonds, companies can borrow at lower interest rates than if they issued nonconvertible bonds. If a company’s stock price increases, investors can then swap the bonds for stock.

2.2. Present Value

Money earns income over time, a fact called the time value of money. The time value of money idea is based on the thought that $1 today is worth more than $1 in the future because $1 today can be invested and, with interest, become more than $1 at a later date.

2.3. Bond Interest Rates

Bonds are issued, or sold, at market price, which is the amount an investor is willing to pay for a bond. Because bonds involve the payment of interest, usually semiannually, plus the repayment of principal at maturity, the market price is the present value of these
two sets of payments to be received by bondholders in the future. In other words, the bond price is the sum of the present value of the principal payment plus the present value of all the stated interest payments; the investor is willing to pay this amount because this is exactly what he will receive in the future. The two interest rates work together to set the price of a bond. Target may issue its 10% bonds when the market rate has risen to 11%. Will the Target bonds attract investors in this market? No, because investors can earn 11% on other bonds. Therefore, Target will have to discount its bonds, offering them to investors at a price less than maturity value. The difference between the lower market price and the bond’s maturity value is a discount. Conversely, if the market interest rate is 8%, Target’s 10% bonds will be so attractive that investors will pay more than maturity value for them. The difference between the higher market price paid by the bondholder and the maturity value is a premium.

2.4. Bond Prices

A bond issued at a price above its maturity, or par, value is issued at a premium, and a bond issued at a price below maturity value is sold at a discount. As a bond nears maturity, its market price moves toward its maturity value. On the maturity date, the market value of a bond exactly equals its maturity value because the company pays that amount to retire the bond. After a bond is issued, investors may buy and sell it through the bond market just as they buy and sell stocks through the stock market. Bond prices are quoted at a percentage of their maturity value.

3. Issuing Bonds Payable and Paying Interest

A company may sell bonds at maturity value, at a discount, or at a premium.
3.1. Issuing Bonds Payable at Maturity Value

A company issuing bonds at maturity, or par, value increases Cash and Bonds Payable for the maturity amount of the bonds.

3.2. Issuing Bonds Payable at a Discount

Bonds are often issued at a discount because market conditions may force the issuing corporation to accept a discounted price for its bonds. The reduced amount received is recorded as Discount on Bonds Payable, which is a contra account to Bonds Payable.

3.3. Issuing Bonds Payable at a Premium

Bonds may be issued at a premium because the bond market may allow the issuing corporation to capture a price for its bonds above their maturity value. The additional amount received is recorded as Premium on Bonds Payable, which is a liability account. The issuance of bonds at a premium is rare because companies don’t like to pay a stated interest rate higher than the market rate.

3.4. Adjusting Entries for Interest Expense

Companies issue bonds when they need cash, so the dates of the semiannual interest payments seldom coincide with the end of a fiscal year. Accordingly, interest expense must be accrued at the end of the accounting period to measure income accurately. In the case of bonds, however, the accrual entry to recognize interest expense should also include the amortization of any bond discount or premium.
4. Retirement of Bonds

4.1. Early Retirement of Bonds Payable

Whether the bonds are called or purchased in the open market, the journal entry made to record their early repayment is the same. To account for the retirement of bonds before their maturity date, a company must:

- Record interest expense and amortization of any discount or premium up to the retirement date.
- Record the retirement:
  - Remove the maturity value of the bonds.
  - Remove any discount or premium remaining.
  - Decrease cash for the market price paid to redeem the bonds.
- Compute the gain or loss on retiring the bonds.
  - Gain on Retirement of Bonds Payable = Carrying Value – Market Price When Carrying Value > Market Price
  - Loss on Retirement of Bonds Payable = Market Price – Carrying Value When Carrying Value < Market Price

5. Reporting Liabilities on the Balance Sheet

Long-term liabilities on the balance sheet include mortgages, capital leases, and bonds payable. Any interest payable on these items will be shown as a current liability. The current portions of mortgage notes payable, leases payable, and bonds payable due within the next fiscal year will also be shown as current liabilities. Bonds payable are reported on the balance sheet at maturity value plus bond premium or minus bond discount.
: The Statement Of Cash Flows

**Topic Objective:**

At the end of this topic students will be able:

- Explain the purposes of the statement of cash flows and describe its elements.
- Distinguish among operating, investing, and financing cash flows.
- Prepare a statement of cash flows by the indirect method.
- Prepare a statement of cash flows by the direct method.

**“Definition/Overview& :**

**Cash Flows:** Cash flow (also called net cash flow) is the balance of the amounts of cash being received and paid by a business during a defined period of time, sometimes tied to a specific project. Cash flow as a generic term may be used differently depending on context, and certain cash flow definitions may be adapted by analysts and users for their own uses. Common terms (with relatively standardized definitions) include operating cash flow and free cash flow.

**“Key Points& :**

1. **Basic Concepts: Statement of Cash Flows**

   A balance sheet reports financial position and balance sheets for two periods show whether cash increased or decreased. The statement of cash flows reports cash flows, cash receipts and cash payments, during the period. It shows where cash came from and where it went. It explains the causes of the change in cash during any given time period and is therefore dated “Year Ended December 31, 2008” or “Month Ended June 30, 2008.”
1.1. Purpose of Cash Flow Statement

The statement of cash flows serves several purposes:

- Predicts future cash flows. Past cash receipts and payments are good predictors of future cash flows.
- Evaluates management decisions. If managers make wise decisions, the business prospers. If they make unwise choices, the business suffers. The statement of cash flows reports cash flows resulting from the operating, investing, and financing decisions the company is making. Stakeholders use cash flow information to evaluate managers’ decisions.
- Predicts ability to make debt payments to lenders and to pay dividends to stockholders. Lenders want to collect interest and principal on their loans. Stockholders want dividends on their investments. The statement of cash flows helps predict whether the business can make these payments.

2. Operating, Investing, and Financing Activities

Consider that businesses engage in three types of activities affecting cash flows:

- Operating activities create revenues, expenses, gains, and losses, and thus include the daily activities of buying and selling products and services. In addition to staying liquid, the other, major goal of businesses is to operate profitably; these operating activities are the business events that affect net income on the income statement as the result of accrual accounting. Because companies use resources and incur debt to run on a daily basis, operating activities also affect the current assets and current liabilities shown on the balance sheet.
- Investing activities increase and decrease long-term assets, such as land, buildings, and equipment, and even stock investments in other entities. The purchases and sales of these assets are investing activities. Loans to others and collections of
loans are also investing activities. Investing activities are less vital to the life of the business than operating activities.

- Financing activities obtain cash to launch a business and keep it running. Financing includes issuing stock, borrowing money, buying and selling treasury stock, and paying dividends. Paying off borrowings is another financing activity. Financing cash flows relate to long-term liabilities and owners’ equity. They are the least important of the three categories of cash flows, which is why they are reported last.

### 2.1. Two Formats for Operating Activities

Accountants can report operating activities on the statement of cash flows in either or two formats:

- The indirect method, which reconciles net income to net cash provided by operating activities.
- The direct method, which reports all cash receipts and cash payments from operating activities.

The two methods use different computations but produce the same amount of cash flows from operations. The indirect and direct methods have no effect on investing or financing activities.

### 2.2. Non-cash Investing and Financing Activities

Companies sometimes make investments that do not require cash. They also finance without exchanging cash. Examples of investing and financing activities that do not require cash include:

- Acquisition of an asset by issuing common stock
- Acquisition of an asset by issuing a note payable
3. Preparing the Statement of Cash Flows by the Indirect Method

To prepare the statement of cash flows, you need data from the income statement and the balance sheet. To prepare the statement of cash flows by the indirect method, use information from preceding financial statements to perform the following steps:

- **STEP 1:** Lay out the template
- **STEP 2:** Use the comparative balance sheet to determine the increase or decrease in cash. The change in cash is the “check figure” for the statement of cash flows.
- **STEP 3:** From the income statement, take net income, depreciation, depletion, and amortization expense, and any gains or losses on the sale of assets.
- **STEP 4:** Use data from the income statement and balance sheet to complete the statement of cash flows. The statement is complete only after the year-to-year changes in all balance sheet accounts have been explained.

3.1. Cash Flows from Operating Activities

The operating section of the cash flow statement begins with net income, taken from the income statement. Additions and subtractions, which follow, are labeled “Adjustments to reconcile net income to net cash provided by operating activities.” Operating activities are related to the transactions that determine net income: Revenues, expenses, gains, and losses.

3.1.1. Depreciation, Depletion, and Amortization Expenses

These expenses do not affect cash, and are sometimes referred to as “non-cash expenses.” They are added back to net income to reconcile net income to cash flow.
3.1.2. Gains and Losses on the Sale of Long-Term Assets

Sales of long-term assets are investing activities. A gain or loss on a sale is included in net income in the operating activities section and therefore must be adjusted out of net income on the statement of cash flows.

3.1.3. Changes in the Current Asset and Current Liability Accounts

Most current assets and current liabilities result from operating activities. For example, accounts receivable result from sales, inventory relates to cost of goods sold, and so on. Changes in the current accounts are reported as adjustments to net income on the cash flow statement.

3.2. Cash Flows from Investing Activities

Investing activities affect long-term asset accounts, such as Plant Assets and Investments. Let’s see how to compute the investing cash flows.

3.2.1. Computing Acquisitions and Sales of Plant Assets

Companies keep separate accounts for Land, Buildings, Equipment, and other plant assets. But for computing investing cash flows, it is helpful to combine these accounts into a single Plant Assets account. Also, we subtract accumulated depreciation from the assets’ cost and work with a single net figure for plant assets. This practice simplifies the computations.

3.3. Cash Flows from Financing Activities

Financing activities affect the liability and stockholders’ equity accounts, such as
Long-Term Notes Payable, Bonds Payable, Common Stock, and Retained Earnings.

3.3.1. Computing Issuances and Payments of Long-Term Notes Payable

In computing the cash flows related to the issuance and payment of long-term debt, the beginning and ending balances of Long-Term Notes Payable or Bonds Payable are taken from the balance sheet. If either the amount of new issuances or the payments is known, the other amount can be calculated.

3.3.2. Computing Issuances of Stock and Purchases of Treasury Stock

Cash flows for these financing activities can be determined by analyzing the stock accounts. For example, the amount of a new issuance of common stock is determined from Common Stock.

4. Preparing the Statement of Cash Flows by the Direct Method

The Financial Accounting Standards Board (FASB), as the organization that determines how accounting is practiced in the United States, has expressed a preference for the direct method of reporting cash flows from operating activities. Unfortunately, few companies use this method because it takes more computations than the indirect method. A recent survey indicated that almost 80% of managers, investors, and analysts polled preferred the indirect method. However, the direct method provides clearer information about the sources and uses of cash. Remember that investing and financing cash flows are exactly the same regardless of whether the direct or indirect method is used to report operating cash flows.

The following steps to prepare the statement of cash flows using the direct method to report cash flow from operating activities:
**STEP 1:** Lay out the template of the statement of cash flows by the direct method.

**STEP 2:** Use the comparative balance sheet to determine the increase or decrease in cash.

The change in cash is the “check figure” for the statement of cash flows.

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In Section 4 of this course you will cover these topics:
- Financial Statement Analysis
- Introduction To Management Accounting
- Job Order Costing
- Process Costing

You may take as much time as you want to complete the topic covered in section 4. There is no time limit to finish any Section, however you must finish All Sections before semester end date.

If you want to continue remaining courses later, you may save the course and leave. You can continue later as per your convenience and this course will be available in your area to save and continue later.

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**Financial Statement Analysis**

**Topic Objective:**

At the end of this topic students will be able:

- Explain the purpose of financial statement analysis.
- Perform a horizontal analysis of comparative financial statements.
- Perform a vertical analysis of financial statements and prepare common-size financial statements.
- Compute commonly used financial ratios.
- Measure economic value added.
- Utilize non-financial data in analyzing financial statements.

“Definition/Overview&:

Financial Statement: Financial statements (or financial reports) are formal records of a business' financial activities.

“Key Points&:

1. Purpose of Financial Statement Analysis

Many different parties or stakeholders have an interest in a business’s performance. These people range from creditors, such as banks or bondholders, to individual investors, to professional Wall Street analysts. Financial statement analysis is the process that these parties utilize when they examine financial statements and other data in order to predict the future of a firm. By determining the financial outlook of a business, stakeholders or users of financial information are able to make informed decisions about it.

Examination of financial statements enables the following comparisons of a company’s performance:

- From one year to another
- With a competing company
- Within its industry

Evaluation of a business’s financial well-being is based on the two fundamental goals of business entities, profitability and liquidity, and how well the business is meeting each of these goals. The
importance of these goals is underscored by red flags, or warning signs, that may signal financial trouble. If the following conditions are present, the company may be a risky investment and not particularly creditworthy.

- **Earnings problems:** Have income from operations and net income decreased significantly for several years in a row? Has income turned into a loss? Most companies cannot survive many consecutive loss years.

- **Decreased cash flow:** Cash flow validates earnings. Is cash flow from operations consistently lower than net income? Are the sales of plant assets a major source of cash? If so, the company may face a cash shortage.

- **Too much debt:** How does the company’s debt ratio compare to that of major competitors and to the industry average? If the debt ratio is much higher than average, the company may be unable to pay its debts.

- **Inability to collect receivables:** Is the average number of days it takes to collect accounts receivables growing faster than for other companies in the industry? Again, a cash shortage may be looming.

- **Buildup of inventories:** Is inventory turnover slowing down? If so, the company may be unable to sell goods, or it may be overstating inventory.

- **Movement of sales, inventory, and receivables:** Sales, receivables, and inventory generally move together. Increased sales lead to higher receivables and usually require more inventories to meet demand. Strange movements among these items may spell trouble.

2. **Horizontal Analysis**

Many decisions hinge on whether financial statement amounts are increasing or decreasing. Users want to know:

- Have amounts risen or fallen compared to last year?
- By how much?

The study of percentage changes in comparative statements is called horizontal analysis. Computing a percentage change in comparative statements requires two steps:
• **STEP 1:** Compute the dollar amount of the change from the earlier base period to the later period.
• **STEP 2:** Divide the dollar amount of change by the earlier, base-period amount; it is against this base that the comparison is being made.

2.1. Trend Percentages

Trend percentages are a form of horizontal analysis because they too are computed by comparing financial statement amounts over time, perhaps the most recent three to five years. Trend percentages indicate the direction a business is taking. They are computed by first selecting a base year and setting its amounts equal to 100%; the earliest year studied is the base year.

3. Vertical Analysis

Horizontal analysis highlights changes over time. In contrast, vertical analysis of a financial statement shows the relationship of each item to a common, base amount; every item on the statement is reported as a percentage of that base. For an income statement, net sales are the base. For a balance sheet, total assets are the base. By expressing all financial statement amounts as a percentage of the base, these amounts are presented in proportion to it. Suppose, for instance, that a company’s gross profit is 70% of net sales under normal conditions. A drop to 60% may cause the company to suffer a loss. Investors typically view a large decline in gross profit with alarm.

3.1. How Do We Compare One Company with Another?

Benchmarking is this practice of comparing a company with others. Common-size statements help us benchmark a company’s performance against the industry average or against another company, maybe an industry leader or key competitor.
3.1.1. Benchmarking Against the Industry Average

We study a company to gain insight into past results and future performance. To this point, our analysis has been limited to comparing one company to itself. This information is helpful, but it does not consider how other companies performed over the same time period. If a company’s net income is increasing as a percentage of sales, for example, is this attributable to good management, a favorable economic environment for the industry, or both?

3.1.2. Benchmarking Against a Key Competitor

You can also use common-size statements to compare two or more companies. Converting the two companies’ income statements to common size enables direct comparison not meaningfully accomplished in dollar amounts; the dollar amounts vary and are not easily comparable because of the difference in the sizes of the firms.

4. Using Ratios to Make Decisions

Ratios represent comparisons between financial statement amounts. Analyzing ratios is an important part of finding any red flags indicating financial problems so that meaningful conclusions can be reached and informed decisions can be made about a business. Although many different financial ratios can be computed, we will examine some of the ones most commonly used.

4.1. Liquidity Ratios

4.1.1. Working Capital

Working capital measures the ability to meet short-term obligations with current assets, and is calculated by subtracting current liabilities from current assets.
4.1.2. Current Ratio

The current ratio is a measure related to working capital, and probably represents the tool most widely used to evaluate liquidity. This ratio is equal to current assets divided by current liabilities. The current ratio measures ability to pay current liabilities with current assets.

4.1.3. Quick Ratio

Another measure associated with liquidity is the quick, or acid-test, ratio. This stricter indicator of bill-paying ability than the current ratio tells whether the entity could pay all its current liabilities if they came due immediately. To compute the quick ratio, add cash, short-term investments, and net current receivables and divide this sum by current liabilities. Inventory and prepaid expenses are two current assets not included in the acid test because they are the least-liquid current assets.

4.2. Profitability Ratios

4.2.1. Profit Margin or Rate of Return on Net Sales

In business, the term return is used broadly as a measure of profitability. Consider a ratio called the profit margin, also called rate of return on net sales, or simply return on sales. This ratio shows the percentage of each sales dollar earned as net income.
4.2.2. Rate of Return on Total Assets

The rate of return on total assets, or simply return on assets, measures how well a business is using its assets to earn a profit. Two groups finance a company’s assets, the creditors and the stockholders. Creditors typically earn interest on the money they loan. Stockholders invest in stock and expect a return on their investment in the form of the company’s net income. The sum of interest expense and net income is thus the return to the two groups that have financed the company’s assets, and is measured against the assets used to produce this return.

4.2.3. Rate of Return on Common Stockholders’ Equity

A popular measure of profitability is rate of return on common stockholders’ equity, often shortened to return on equity. This ratio shows the relationship between net income and common stockholders’ equity, how much income is earned for every $1 invested by the common stockholders. To compute this ratio, we first subtract any preferred dividends from net income to get net income available to the common stockholders. We then divide net income available to common stockholders by average common equity during the year. Common equity is total stockholders’ equity minus preferred equity.

4.2.4. Earnings per Share of Common Stock

An earnings per share of common stock, or simply earnings per share (EPS), is perhaps the most widely quoted of all financial statistics. EPS is the only ratio that must appear on the face of the income statement for publicly owned companies. EPS is the amount of net income earned for each share of the company’s outstanding common stock. Earnings per share is computed by dividing net income available to common stockholders by the number of common shares outstanding during the year. Preferred dividends are subtracted from net income because the preferred stockholders have a prior claim to dividends.
4.3. Asset Utilization Ratios

4.3.1. Inventory Turnover

Inventory turnover measures the number of times a company sells its average level of inventory during a year. A high rate of turnover indicates that a company can sell its inventory fairly easily, but a low rate indicates difficulty in selling merchandise. To compute inventory turnover, we divide cost of goods sold by the average inventory for the period.

4.3.2. Accounts Receivable Turnover

Accounts receivable turnover measures the ability to collect cash from credit customers. The higher the ratio, the more successful the business is in collecting cash. However, a receivable turnover that is too high may indicate that a company is not extending credit freely enough to make sales to all potentially good customers. To compute the accounts receivable turnover, we divide net credit sales by average net accounts receivable.

4.3.3. Days’ Sales in Receivables

The days’ sales in receivables ratio also measures the ability to collect receivables. This ratio tells us how many days’ sales remain in Accounts Receivable. To compute the ratio, we follow a two-step process:

- **STEP 1:** Divide net sales by 365 days to figure average sales for one day.
- **STEP 2:** Divide this average day’s sales amount into average net accounts receivable.
4.4. Debt Utilization Ratios

4.4.1. Debt Ratio

This relationship between total liabilities and total assets is called the debt ratio. This ratio shows the proportion of assets financed with debt and thus allows lenders to evaluate the risk of loaning funds to a business.

4.4.2. Times-Interest-Earned Ratio

The debt ratio says nothing about a company’s ability to pay interest. Analysts use the times-interest-earned ratio to relate income to interest expense. This ratio is also called the interest-coverage ratio. It measures the number of times operating income can cover interest expense and is calculated by dividing income from operations, or operating income, by interest expense. A high interest coverage ratio indicates ease in paying interest expense, while a low ratio suggests difficulty.

4.5. Analyzing Stock Investments

In addition to analyzing liquidity, profitability, and asset and debt utilization, investors may want to evaluate stock investments based on the return provided by the investments. Investors purchase stock to earn a return in one of two ways:

- Receiving a gain from selling the stock at a price above the purchase price paid
- Receiving dividends

The ratios we examine in this section help analysts assess stock in terms of market price appreciation or dividends.
4.5.1. Price/Earnings Ratio

The price/earnings ratio is the ratio of the market price of a share of common stock to the company’s earnings per share. It shows the market price of $1 of earnings. This ratio, abbreviated P/E, appears in the Wall Street Journal stock listings for publicly-owned companies. P/E ratios play an important part in decisions to buy, hold, and sell stocks.

4.5.2. Dividend Yield

Dividend yield is the ratio of dividends per share to the stock’s market price per share. This ratio measures the percentage of a stock’s market value that is returned annually as dividends. Preferred stockholders, who invest primarily to receive dividends, pay special attention to dividend yield.

5. Economic Value Added

EVA measures whether a business’s operations have increased its stockholder wealth. The idea behind EVA is that the returns to the company’s stockholders as net income and to its creditors as interest expense should exceed the company’s capital charge. The capital charge is the amount that lenders and stockholders charge for the use of their money. A positive EVA amount suggests an increase in stockholder wealth, and the company’s stock should remain attractive. A negative EVA indicates a decrease in stockholder wealth, resulting in stockholders who will probably be unhappy and sell the stock, causing a decrease in the stock price.

6. Analyzing Non-financial Data

Analyzing financial statements requires more than performing horizontal and vertical analysis and computing the standard ratios. The non-quantitative parts of the annual report may hold
more important information than the financial statements. For example, the president’s letter may describe a turnover of top managers. The management discussion and analysis will reveal management’s opinion of the year’s results. The auditor’s report may indicate a major problem with the company.

6.1. President’s Letter to the Stockholders

The president of the company gives his or her view of the year’s results and outlines the direction top management is charting for the company. Often, the president will highlight the major decisions made during the year.

6.2. Management Discussion and Analysis (MD&A)

Management is accountable for its actions. The MD&A section of the annual report discusses why net income was up or down, how the company invested the stockholders’ money, and plans for future spending. Through the MD&A, investors may learn of the company’s plan to discontinue a product line or to expand into new markets. These forward-looking data are not permitted in the historical financial statements, which are based on past transactions.

6.3. Auditor Report

Investors are aware of the possibility for management bias in the financial statements. For this reason, the Securities and Exchange Commission, a federal agency, requires that all financial statements of public corporations be audited by independent Certified Public Accountants. Investors want to know whether the company followed Generally Accepted Accounting Principles and presented its financial statement amounts fairly. The auditor’s report is how stakeholders gain assurance that they can rely on a company’s financial statements to make decisions.
Introduction To Management Accounting

Topic Objective:

At the end of this topic students will be able:

- Distinguish management accounting from financial accounting.
- Identify trends in the business environment and the role of management accountability.
- Classify costs and prepare an income statement for a service company.
- Classify costs and prepare an income statement for a merchandising company.
- Classify costs and prepare an income statement for a manufacturing company.
- Use reasonable standards to make ethical judgments.

“Definition/Overview& :

Management Accounting: Management accounting is concerned with the provisions and use of accounting information to managers within organizations, to provide them with the basis to make informed business decisions that will allow them to be better equipped in their management and control functions.
“Key Points&:

1. Management Accountability

Accountability is responsibility for one’s actions. Management accountability is the manager’s responsibility to the various stakeholders of the company. Many different stakeholders have an interest in an organization.

To keep the stakeholders happy, managers provide information about their decisions and the results of those decisions. Thus, management accountability requires two forms of accounting:

- Financial accounting for external reporting
- Management accounting for internal planning and control

Financial accounting satisfies management’s accountability to:

- Owners and creditors for their investment decisions
- Regulatory agencies, such as the Securities Exchange Commission, the Federal Trade Commission, and the Internal Revenue Service
- Customers and society to ensure that the company acts responsibly

Managers are responsible to external stakeholders, so they must plan and control operations carefully.

- Planning means choosing goals and deciding how to achieve them.
- Controlling means evaluating operations by comparing actual results to the budget.

2. Today’s Business Environment

Today’s business environment affects everyone. Managers of both large corporations and mom-and-pop businesses must consider recent trends, such as the following.
- **Shift toward a Service Economy:** Service companies provide healthcare, communication, banking, and other important benefits to society.

- **Global Competition:** To be competitive, many companies are moving operations to other countries to be closer to new markets. Other companies are partnering with foreign companies to meet local needs.

- **Time-Based Competition:** The Internet, electronic commerce (e-commerce), and express delivery speed the pace of business. Customers who instant message around the world won’t wait two weeks to receive DVDs purchased on Amazon.com. Time is the new competitive turf for world-class business. To compete, companies have developed the following:

- **Advanced Information Systems:** Many companies use enterprise resource planning (ERP) systems to integrate all their worldwide functions, departments, and data. ERP systems help to streamline operations, and that enables companies to respond quickly to changes in the marketplace.

- **E-Commerce:** Companies use the Internet in everyday operations of selling and customer service.

- **Just-in-Time Management:** Inventory held too long becomes obsolete. Storing goods takes space that costs money. The just-in-time philosophy helps managers cut costs by speeding the transformation of raw materials into finished products. Just-in-time (JIT) means producing just in time to satisfy needs. Ideally, suppliers deliver materials for today’s production in exactly the right quantities just in time for you to begin production, and finished units are completed just in time for delivery to customers.

- **Total Quality Management:** Companies must deliver high-quality goods and services to stay alive. Total quality management (TQM) is a philosophy designed to provide customers with superior products and services. Companies achieve this goal by continuously improving quality and reducing or eliminating defects and waste. In TQM, each business function sets higher and higher goals.
3. Service Companies, Merchandising Companies, and Manufacturing Companies

Compare and contrast the accounting by three different types of businesses. We begin with service companies. As with other types of businesses, service companies seek to provide these things:

- Quality services
- At a reasonable price
- In a timely manner

Management is accountable to owners to generate a profit and provide a reasonable return on the owner’s investment in the company. Service companies have the simplest accounting. Service companies carry no inventories of products for sale. All of their costs are period costs. Period costs are those costs that are incurred and expensed in the same accounting period.

3.1. Merchandising Companies

Merchandising companies, resell products they buy from suppliers. Merchandisers keep an inventory of products. So, managers are accountable for the purchasing, storage, and sale of the products. Merchandising companies’ inventoriable product costs include only the goods’ purchase cost plus freight in. In a perpetual inventory system, the activity in the Inventory account provides the information for the cost-of-goods-sold section of the income statement.

3.2. Manufacturing Companies

Manufacturing companies use labor, equipment, supplies, and facilities to convert raw materials into finished products. Managers in manufacturing companies must use these resources to create a product that customers want. They are responsible for generating profits and maintaining positive cash flows. In contrast with service and merchandising companies, manufacturing companies have a broad range of production activities. That requires tracking costs in three kinds of inventory:
Materials inventory: Raw materials used in making a product.

Work in process inventory: Goods that are in the manufacturing process but not yet complete. Some production activities have transformed the raw materials, but the product is not yet ready for sale. A baker’s work in process inventory includes dough ready for cooking. A boat manufacturer’s work in process could include a frame without an engine or seats.

Finished goods inventory: Completed goods that have not yet been sold. Finished goods are the products that the manufacturer sells to a merchandiser.

3.2.1. Inventoriable Product Costs

The completed product in finished goods inventory holds inventoriable product cost. The inventoriable product cost includes three components of manufacturing costs:

- Direct materials
- Direct labor
- Manufacturing overhead

Direct materials and direct labor are examples of direct costs. A direct cost is a cost that can be directly traced to a cost object, such as a product. A cost object is something that managers want to monitor. Managers may want to know the cost of a product or of a department, a sales territory, or an activity. Costs that cannot be traced directly to a cost object are indirect costs. In manufacturing companies, product costs include direct costs and indirect costs.

3.2.2. A Closer Look at Manufacturing Overhead

- Manufacturing overhead includes only those indirect costs that are related to the manufacturing operation. Insurance and depreciation on the manufacturing plant’s building and equipment are indirect manufacturing costs, so they are part of manufacturing overhead. In contrast, depreciation
on delivery trucks is not part of manufacturing overhead. Instead, depreciation on delivery trucks is a cost of moving the product to the customer. Its cost is delivery expense (a period cost), not an inventoriable product cost. Similarly, the cost of auto insurance for the sales force is marketing expense (a period cost), not manufacturing overhead.

- Manufacturing overhead also includes indirect materials and indirect labor. The spices used in cakes become physical parts of the finished product. But these costs are minor compared with flour and sugar for the cake. Since those low-priced materials’ costs can’t conveniently be traced to particular finished products, these costs are called indirect materials and become part of manufacturing overhead.

**Job Order Costing**

**Topic Objective:**

At the end of this topic students will be able:

- Distinguish between job order costing and process costing.
- Record materials and labor in a job order costing system.
- Record manufacturing overhead in a job order costing system.
- Record completion and sales of finished goods and the adjustment for under- or over allocated overhead.
- Calculate unit costs for a service company.

**“Definition/Overview & :**

**Job Order Costing:** Job order costing is a fundamental managerial accounting. It differs from process costing in that the flow of costs is traced by job instead of by process. For instance, think
of an assembly line making cookies. Job order costing would track how much material is placed in each cookie. Process costing tracks the amount of dough used, the baking time, and other aspects of the process of making cookies. Job costing is typically used for special orders or when the product made is unique. Process costing is used when the products are more homogeneous in nature.

“Key Points&:

1. How Much Does It Cost to Make a Product? Two Approaches

Cost accounting systems accumulate cost information so that managers can measure how much it costs to produce each unit of merchandise. These unit costs help managers

- Set selling prices that will lead to profits
- Compute cost of goods sold for the income statement
- Compute the cost of inventory for the balance sheet

1.1. Job Order Costing

Some companies manufacture batches of unique products or specialized services. A job order costing system accumulates costs for each batch, or job. Law firms, music studios, health-care providers, building contractors, and furniture manufacturers are examples of companies that use job order costing systems.

1.2. Process Costing

Other companies such as Procter and Gamble and PepsiCo, produce identical units through a series of production steps or processes. A process costing system accumulates the costs of each process needed to complete the product.
2. Job Order Costing for Manufacturing Products

2.1. How Job Costs Flow Through the Accounts: An Overview

The job order costing system tracks costs as raw materials move from the storeroom to the production floor to finished products. When the job’s units are sold, the costing system moves the costs from Finished Goods Inventory to Cost of Goods Sold.

3. Job Order Costing: Allocating Manufacturing Overhead

All manufacturing overhead costs are accumulated as debits to a single general ledger account—Manufacturing Overhead. We have already assigned the costs of indirect materials and indirect labor to manufacturing overhead. The actual manufacturing overhead costs (such as indirect materials, indirect labor, plus depreciation, utilities, insurance and property taxes on the plant) are debited to Manufacturing Overhead as they occur throughout the year. By the end of the year, the Manufacturing Overhead account has accumulated all the actual overhead costs as debits.

3.1. Allocating Manufacturing Overhead to Jobs

Companies perform two steps in allocating manufacturing overhead:

- Compute the predetermined overhead rate. The predetermined manufacturing overhead rate (sometimes called the budgeted overhead rate) is computed.
- Allocate manufacturing overhead costs to jobs as the company makes its products.
4. Accounting for Completion and Sale of Finished Goods and Adjusting Manufacturing Overhead

Now you know how to accumulate and assign the cost of direct materials, direct labor, and overhead to jobs. To complete the process, we must:

- Account for the completion and sale of finished goods
- Adjust manufacturing overhead at the end of the period

5. Job Order Costing in a Service Company

Service firms have no inventory. These firms incur only non-inventoriable costs. But their managers still need to know the costs of different jobs in order to set prices for their services. Merchandising company can set the selling price of its products this same way.

: Process Costing

Topic Objective:

At the end of this topic students will be able:

- Distinguish between process costing and job order costing.
- Compute equivalent units.
- Use process costing to assign costs to units completed and to units in ending work in process inventory.
- Use the weighted-average method to assign costs to units completed and to units in ending work in process inventory in a second department.

“Definition/Overview & :

Process Costing: Process costing is an accounting methodology that traces and accumulates direct costs, and allocates indirect costs of a manufacturing process. Costs are assigned to
products, usually in a large batch, which might include an entire month's production. Eventually, costs have to be allocated to individual units of product. It assigns average costs to each unit, and is the opposite extreme of Job costing which attempts to measure individual costs of production of each unit. Process costing is usually a significant chapter-length topic in textbooks of Cost accounting. Process costing is a type of operation costing which is used to ascertain the cost of a product at each process or stage of manufacture. CIMA defines process costing as "The costing method applicable where goods or services result from a sequence of continuous or repetitive operations or processes. Costs are averaged over the units produced during the period". Process costing is suitable for industries producing homogeneous products and where production is a continuous flow. A process can be referred to as the sub-unit of an organization specifically defined for cost collection purpose.

“Key Points& :

1. Process Costing in a Second Department

1.1. The Weighted-Average Process Costing Method

Companies may use different inventory methods. For manufacturing companies, two methods are commonly used for process costing:

- Weighted-average
- FIFO (first-in, first-out)

The difference in the two methods involves the treatment of the costs of beginning inventory.

2. How Managers Use a Production Cost Report

Accountants prepare cost reports to help production managers evaluate the efficiency of their manufacturing operations. Both job order and process costing are similar in that they
Accumulate costs as the product moves through production
Assign costs to the units (such as gallons of gasoline or number of crayons) passing through that process

The difference between job order costing and process costing lies in the way costs are accumulated. Job order costing uses a job cost sheet and process costing uses a production cost report.

How do managers use the production cost report?

- **Controlling cost:** For materials the company may need to change suppliers or a certain component. Labor may need different employee job requirements. New production equipment may help save on labor cost.
- **Evaluating performance:** Managers are often rewarded based on how well they meet the budget.
- **Pricing products:** Must set its selling price high enough to cover the manufacturing cost, plus marketing and distribution costs.
- **Identifying the most profitable products:** Selling price and cost data help managers figure out which products are most profitable. They can then promote the most profitable products.
- **Preparing the financial statements:** Finally, the production cost report aids financial reporting. It provides inventory data for the balance sheet and cost of goods sold for the income statement.

**Instructions**

In Section 5 of this course you will cover these topics:
- Cost-Volume-Profit Analysis
- The Master Budget And Responsibility Accounting
- Flexible Budgets And Standard Costs
- Special Business Decisions And Capital Budgeting

You may take as much time as you want to complete the topic covered in section 5.
There is no time limit to finish any Section, However you must finish All Sections before semester end date.

- If you want to continue remaining courses later, you may save the course and leave. You can continue later as per your convenience and this course will be available in your area to save and continue later.

: Cost-Volume-Profit Analysis

**Topic Objective:**

At the end of this topic students will be able:

- Identify how changes in volume affect costs.
- Use CVP analysis to compute breakeven points.
- Use CVP analysis for profit planning, and graph the CVP relations.
- Use CVP methods to perform sensitivity analyses.
- Calculate the breakeven point for multiple product lines or services.

“Definition/Overview & :

**Cost-Volume-Profit Analysis:** In management accounting, Cost-Volume-Profit Analysis (CVP) is a form of cost accounting. It is a simplified model, useful for elementary instruction and for short-run decisions. Cost-volume-profit (CVP) analysis expands the use of information provided by breakeven analysis. A critical part of CVP analysis is the point where total revenues equal total costs (both fixed and variable costs). At this breakeven point (BEP), a company will experience no income or loss. This BEP can be an initial examination that precedes more detailed CVP analyses.
“Key Points&:

1. Cost Behavior

Some costs increase as the volume of activity increases. Other costs are not affected by volume changes. Managers need to know how a business’s costs are affected by changes in its volume of activity. Let’s look at the three different types of costs.

- Variable
- Fixed
- Mixed

1.1. Variable Costs

Total variable costs change in direct proportion to changes in the volume of activity. For our purposes, an activity is a business action that affects costs. Those activities include selling, producing, driving, and calling. These activities can be measured by units sold, units produced, miles driven, and the number of phone calls placed. So variable costs are those cost that increase or decrease in total as the volume of activity increases or decreases.

1.2. Fixed Costs

In contrast, total fixed costs are costs that do not change over wide ranges of volume. Mi Tierra’s fixed costs include depreciation on the cars, as well as the salaries of the driving instructors. The number of students will not affect the amount paid for any of these fixed costs.

1.3. Mixed Costs

Costs that have both variable and fixed components are called mixed costs.
2. High-Low Method to Separate Fixed Cost from Variable Cost

An easy method to separate mixed costs into variable and fixed components is the high-low method. This method requires you to identify the highest and lowest levels of activity over a period of time. Using this information, you complete three steps:

- **STEP 1**: Calculate the Variable Cost per Unit.
- **STEP 2**: Calculate Total Fixed Costs.
- **STEP 3**: Create and use an equation to show the behavior of a mixed cost.

3. Relevant Range

The relevant range is the band of volume where total fixed costs remain constant and the variable cost per unit remains constant. To estimate costs, managers need to know the relevant range. Why? Because

- Total “fixed& costs can differ from one relevant range to another
- The variable cost per unit can differ in different relevant ranges

4. Basic CVP Analysis: What Must We Sell to Break Even?

4.1. Assumptions

CVP analysis assumes that

- Managers can classify each cost as either variable or fixed.
- The only factor that affects costs is change in volume. Fixed costs don’t change.

4.2. How Much Must Chan Sell to Break Even? Three Approaches

Virtually all businesses want to know their breakeven point. The breakeven point is the sales level at which operating income is zero: Total revenues equal total costs. Sales
below the breakeven point result in a loss. Sales above breakeven provide a profit. Chan needs to know how many posters she must sell to break even.

There are several ways to figure the breakeven point, including the

- Income statement approach
- Contribution margin approach

5. Using CVP to Plan Profits

For established products and services, managers are more interested in the sales level needed to earn a target profit than in the breakeven point. Managers of new business ventures are also interested in the profits they can expect to earn.

6. Using CVP for Sensitivity Analysis

Managers often want to predict how changes in sale price, costs, or volume affect their profits. Managers can use CVP relationships to conduct sensitivity analysis. Sensitivity analysis is a “what if” technique that asks what results are likely if selling price or costs change, or if an underlying assumption changes.

6.1. Margin of Safety

The margin of safety is the excess of expected sales over breakeven sales. The margin of safety is therefore the “cushion” or drop in sales the company can absorb without incurring a loss. Managers use the margin of safety to evaluate the risk of both their current operations and their plans for the future.
6.2. Information Technology and Sensitivity Analysis

Information technology allows managers to perform lots of sensitivity analyses before launching a new product or shutting down a plant. Excel spreadsheets are useful for sensitivity analyses. Spreadsheets can show how one change (or several changes simultaneously) affects operations. Managers can plot basic CVP data to show profit-planning graphs.

7. Effect of Sales Mix on CVP Analysis

Most companies sell more than one product. Selling price and variable costs differ for each product, so each product line makes a different contribution to profits. The same CVP formulas we used earlier apply to a company with multiple products. To calculate breakeven for each product line, we must compute the weighted average contribution margin of all the company’s products. The sales mix provides the weights. Sales mix is the combination of products that make up total sales.

: The Master Budget And Responsibility Accounting

Topic Objective:

At the end of this topic students will be able:

- Learn how to use a budget.
- Prepare an operating budget.
- Prepare a financial budget.
- Prepare performance reports for responsibility centers.
“Definition/Overview& :

**Budget:** Budget generally refers to a list of all planned expenses and revenues. A budget is an important concept in microeconomics, which uses a budget line to illustrate the trade-offs between two or more goods. In other terms, a budget is an organizational plan stated in monetary terms. In summary, the purpose of budgeting is to: Provide a forecast of revenues and expenditures i.e. construct a model of how our business might perform financially speaking if certain strategies, events and plans are carried out and enable the actual financial operation of the business to be measured against the forecast.

“Key Points& :

1. Why Managers Use Budgets

   1.1. Using Budgets to Plan and Control

Large international companies like Procter & Gamble and nonprofit organizations use budgets for the same reasons you do. Everyone needs to plan and control their actions and the related revenues and expenses.

How managers use a budget.

   - First, they develop strategies, such as Procter & Gamble’s goal to expand its international operations.
   - Then companies plan ways to achieve those goals.
   - The next step is to act. Procter & Gamble develops new products and works with suppliers to cut costs.
   - After acting, managers compare actual results with the budget. Feedback helps managers improve operations.
Most companies, budget cash flows monthly, weekly, and even daily to ensure they have enough cash. They budget revenues and expenses and thus operating income for months, quarters, and years.

1.2. The Benefits of Budgeting

Three key benefits of budgeting are that budgeting

- Forces managers to plan for the future
- Promotes coordination and communication within the organization
- Provides a benchmark for evaluating performance

1.2.1. Planning

Your expected income from the online travel business falls short of the target. The sooner you see this, the sooner you can plan how to increase revenues or cut expenses. The better your plan, the more likely you can meet your target.

1.2.2. Coordination and Communication

Companies have limited resources. Budgets require managers to coordinate activities so as to focus on achieving the goals of the organization. Knowledgeable employees and a reliable online system are valuable resources. The budget helps you decide how much to spend on these items. Budgets also communicate consistent plans throughout the company. This communication provides direction for the achievement of the organization’s goals. The budget will help a salesperson plan how to obtain customers. It helps the office manager assign jobs to provide the best service for clients.
1.2.3. Benchmarking

Budgets provide a benchmark a performance target that motivates employees and helps managers evaluate actual results. Companies, compare their actual results to the budget. The managers are motivated to beat their budgeted figures.

2. Preparing the Master Budget

The overall budget for an organization is called the master budget and has several components.

2.1. Components of the Master Budget

The master budget is the financial plan for the entire organization. It includes budgeted financial statements and supporting schedules. The master budget includes three types of budgets:

- The operating budget
- The capital expenditures budget
- The financial budget

The cash budget combines figures from the budgeted income statement, the capital expenditures budget, and plans for raising cash and paying debts. The cash budget projects cash receipts and payments and feeds into the budgeted balance sheet. The budgeted balance sheet looks exactly like an ordinary balance sheet. The only difference is that it lists budgeted (projected) figures rather than actual amounts.

3. Preparing the Operating Budget

The budgeted income statement shows planned revenues and expenses for a future period. The components of the operating budget are:
The Sales Budget

We begin the master budget with the sales budget. The sales budget is the detailed plan for sales revenue in a future period. Sales managers use this information to plan their selling and advertising activities. The operations manager uses this information to plan for purchasing goods, scheduling employees, and renting space. Sales information helps accountants anticipate cash collections for the cash budget. You can see the critical nature of the sales budget. It drives almost everything in the organization. The estimated sale price may be the current price, or it may change to meet competition. Sales forecast projects the sales demand, or estimated sales, based on external and internal factors. External factors include the condition of the economy and competitors’ products and prices. Internal factors may include the prior year’s sales and your company’s credit policies.

The Inventory, Purchases, and Cost of Goods Sold Budget

Once we know budgeted sales, we can prepare the budget for

- Cost of goods sold on the budgeted income statement
- Ending inventory on the budgeted balance sheet
- Purchases of inventory

This information guides the purchase and the management of inventory.
4. Preparing the Financial Budget

4.1. Preparing the Cash Budget

The cash budget is also called the statement of budgeted cash receipts and payments. The cash budget details how the business expects to go from its beginning cash balance to the desired ending balance. The cash budget has four major parts:

- Cash collections from customers
- Cash payments for purchases
- Cash payments for operating expenses
- Cash payments for capital expenditures

Cash collections and payments depend on revenues and expenses, which appear in the operating budget. This is why the operating budget comes before the cash budget.

4.2. The Cash Budget

The cash budget projects cash receipts and payments for a future period. For most companies, cash receipts include:

- Cash collected from customers
- Cash received from the sale of long-term assets, such as equipment, land, and buildings
- Cash received from borrowing
- Cash received from owners of the business

Cash payments include:

- Cash payments for inventory purchases
- Cash payments for operating expenses
- Cash payments to purchase long-term assets, such as equipment, land, and buildings
- Cash payments on loans
5. Cash payments to the owners of the business

5. Using Information Technology for Sensitivity Analysis and Rolling Up Unit Budgets

5.1. Sensitivity Analysis

The master budget models the company’s planned activities. Top managers pay special attention to ensure that the results of the budgeted income statement, the cash budget, and the budgeted balance sheet support key strategies.

5.2. Rolling Up Individual Unit Budgets into the Companywide Budget

Companies like Intel often turn to budget-management software to solve this problem. The company’s Enterprise Resource Planning (ERP) system (or data warehouse) should include software to help managers develop and analyze budgets. Across the globe, managers sit at their desks, log onto the company’s system, and enter their numbers. The software allows them to analyze their unit’s data. When the manager is satisfied with her unit budget, she can enter it in the companywide budget with the click of a mouse. The unit’s budget automatically rolls up with the budgets from all other company units around the world.

6. Responsibility Accounting

You’ve now seen how managers set strategic goals and then budget resources to reach those goals. Let’s look more closely at how managers use budgets to control operations. Each manager is responsible for planning and controlling some part of the firm. A responsibility center is a part of an organization whose manager is accountable for its activities. Lower-level managers are often responsible for budgeting and controlling the costs of a single function.
6.1. Four Types of Responsibility Centers

Responsibility accounting is a system for evaluating the performance of each responsibility center and its manager. As we have seen, managers use performance reports to compare plans (budgets) with actions (actual results) for each center. Superiors then evaluate how well each manager

- Used his or her budgeted resources to achieve the responsibility center’s goals
- Controlled the operations for which he or she was responsible

: Flexible Budgets And Standard Costs

Topic Objective:

At the end of this topic students will be able:

- Prepare a flexible budget for the income statement.
- Prepare an income statement performance report.
- Identify the benefits of standard costs and learn how to set standards.
- Compute standard cost variances for direct materials and direct labor.
- Analyze manufacturing overhead in a standard cost system.
- Record transactions at standard cost and prepare a standard cost income statement.

“Definition/Overview& :

Flexible Budget: The flexible budget is a performance evaluation tool. It cannot be prepared before the end of the period. A flexible budget adjusts the static budget for the actual level of output. A flexible budget summarizes costs and revenues for several different volume levels within a relevant range. Flexible budgets separate variable costs from fixed costs; it is the variable costs that put the “flex” in the flexible budget.
“Key Points&:

1. Create a Flexible Budget

To create a flexible budget, you need to know your

- Budgeted selling price per unit
- Variable cost per unit
- Total fixed costs
- Different volume levels within the relevant range

2. Using the Flexible Budget

Why Do Actual Results Differ from the Static Budget? It’s not enough to know that a variance occurred. That’s like knowing you have a fever. The doctor needs to know why your temperature is above normal. Managers must know why a variance occurred—to pinpoint problems and take corrective action. To develop more useful information, managers divide the static budget variance into two broad categories:

- **Sales volume variance:** arises because the number of units actually sold differed from the number of units on which the static budget was based.
- **Flexible budget variance:** arises because the company had more or less revenue, or more or less cost, than expected for the actual level of output.

3. Standard Costing

Most companies use standard costs to develop their flexible budgets. Think of a standard cost as a budget for a single unit. In a standard cost system, each input has both a quantity standard and a price standard. Pluto Pools has a standard for the following:
• Amount of gunite—a concrete derivative—used per pool (this determines the quantity standard)
• Price it pays per cubic foot of gunite (this determines the price standard)

3.1. Price Standards

The price standard for direct materials starts with the base purchase cost of each unit of inventory. Accountants help managers set a price standard for materials after considering early-pay discounts, freight in, and receiving costs. World-class businesses demand continuous reductions in costs. This can be achieved several ways. You can work with suppliers to cut their costs. You can use the Internet to solicit price quotes from suppliers around the world, and you can share information. For direct labor, accountants work with human resource managers to determine standard labor rates. They must consider basic pay rates, payroll taxes, and fringe benefits. Job descriptions reveal the level of experience needed for each task. Accountants work with production managers to estimate manufacturing overhead costs. Production managers identify an appropriate allocation base such as direct labor house or direct labor cost.

3.2. Why Do Companies Use Standard Costs?

U.S. surveys show that more than 80% of responding companies use standard costing. Over half of responding companies in the United Kingdom, Ireland, Sweden, and Japan use standard costing. Why? Standard costing helps managers

  o Prepare the budget
  o Set target levels of performance
  o Identify performance standards
  o Set sales prices of products and services
  o Decrease accounting costs

Standard cost systems might appear to be expensive. Indeed, the company must invest up front to develop the standards. But standards can save accounting costs. It is cheaper to
value inventories at standard rather than actual costs. With standard costs, accountants avoid the LIFO, FIFO, or average-cost computations.

3.3. Variance Analysis

Once we establish standard costs, we can use the standards to assign costs to production. At least once a year, we will compare our actual production costs to the standards to locate variances. A price or rate variance measures how well the business keeps unit prices of material and labor inputs within standards. As the name suggests, the price variance is the difference in prices (actual price per unit – standard price per unit) of an input, multiplied by the actual quantity of the input. A quantity or efficiency variance measures how well the business uses its materials or human resources. The efficiency variance is the difference in quantities (actual quantity of input used – standard quantity of input allowed for the actual number of outputs) multiplied by the standard price per unit of the input.

: Special Business Decisions And Capital Budgeting

Topic Objective:

At the end of this topic students will be able:

- Identify the relevant information for a special business decision.
- Make five types of short-term special decisions.
- Use payback and accounting rate of return to make longer-term capital budgeting decisions.
- Use discounted cash-flow models to make longer-term capital budgeting decisions.
- Compare and contrast the four capital budgeting methods.
“Definition/Overview& :

Capital Budgeting: Capital budgeting (or investment appraisal) is the planning process used to determine whether a firm's long term investments such as new machinery, replacement machinery, new plants, new products, and research and development projects are worth pursuing.

“Key Points& :

1. Relevant Information

The goal of business is to maximize profits. In this chapter, you’ll see how managers use information to guide important decisions toward that goal.

1.1. What Information Is Relevant to a Special Business Decision?

Relevant information makes a difference to a decision and has two distinguishing characteristics. Relevant information

- Affects the future, and
- Differs among your alternative courses of action.

2. How to Make Short-Term Special Decisions

Making short-term decisions is called the relevant information approach, or the incremental approach. Under this approach, we consider only the information that’s relevant to the decision. To be relevant, the information must make a difference to a decision. We’ll show you how to make five kinds of decisions:

- Special sales orders
- Dropping a business segment (a product, a department, or a territory)
2.1. Special Sales Order Decision

A potential customer may approach a company to buy some wristwatches at a sale price lower than the regular price. Company must decide whether to accept the special sales order. One of the factors in making the decision is whether the special order will increase net income. To answer this question Timex compares the increase in additional revenue to the increase in additional cost. If the additional revenue exceeds the additional cost, then net income will increase. In that case, company should accept the order. But if the additional revenue is less than the additional cost, then net income will decrease, and company will reject the order.

2.2. Dropping a Business Segment (a Product, a Department, or a Territory)

Some of a company’s product lines, departments, or sales territories may be unprofitable. Managers need to eliminate the unprofitable business segments. Can the manager find ways to reduce costs or increase revenues? Dropping the segment may improve the company’s profits. To make this decision, calculate the change in net income if the segment is dropped. Keep the segment if its revenues are more than its relevant costs. Drop the segment if its revenues are less than the relevant costs.

2.3. Product Mix: Which Product to Emphasize

Companies have limited resources. Constraints that restrict production or sale of a product vary from company to company. For a manufacturer, the constraint may be labor hours, machine hours, or available materials. For a merchandiser, the primary constraint is cubic feet of display space. Most companies are constrained by sales. The market may
be very competitive, which may limit the number of units the company can sell. To manage production constraints, managers must decide which products to make first. Once again, managers want to maximize profits in the short run, so the most profitable products will be manufactured first. This product-mix decision requires two steps.

- Compute the contribution margin per unit for each product line.
- Convert the contribution margin per unit into the contribution margin per constrained resource.

2.4. Outsourcing (Make or Buy) Decisions

To compete in global markets companies identify their core competencies, what they do best and focus on these activities. As with the other decisions, managers want to know if outsourcing is more expensive than producing in-house. The goal is to minimize costs and maximize profits. The decision process involves comparing the relevant costs to make the item with the relevant costs to outsource (buy from an outside supplier). If the cost to make is less than the costs to outsource (buy), a company will continue making the product. But if the cost to make exceeds the costs to outsource, a company will buy from the outside supplier.

2.5. How Do Short-Term and Long-Term Special Decisions Differ?

The special decisions we reviewed pertain to short periods of time, such as a year or less. In this time frame

- Many costs are fixed and do not vary with the volume of goods or services produced. This is why short-term special decisions use the contribution margin approach, which distinguishes variable from fixed costs.
- There is no need to worry about the time value of money. Managers don’t bother computing present values of revenues and expenses for these decisions because the time period is so short.
In the remainder of the chapter, we turn to longer-term decisions. For long term decisions

- Few, if any, costs are fixed.
- Managers often take into account the time value of money.

3. Using Payback and Accounting Rate of Return to Make Capital Budgeting Decisions

Business expansion usually requires the purchase of additional plant and equipment. Managers must evaluate various investments, and that leads to what we call capital budgeting. Capital (expenditures) budgeting is budgeting for the acquisition of capital assets; assets used for the long term i.e. several years. We use the word capital here in the sense of capital expenditures on long-term assets. In this context, capital does not refer to common stock or owners' equity. Capital budgeting is not exact. The calculations may appear precise, but they are based on predictions about an uncertain future. Managers must consider many unknown factors, such as changing consumer preferences, competition, and inflation. The further into the future the decision goes, the more likely that actual result will differ from predictions. Long-term decisions become riskier than short-term decisions. We now discuss four popular capital budgeting models:

- Payback
- Accounting rate of return
- Net present value
- Internal rate of return

Three of these models compare the net cash inflows from operations each alternative generates. Generally Accepted Accounting Principles are based on accrual accounting, but capital budgeting focuses on cash flows. An asset’s desirability depends on its ability to generate net cash inflows—that is, inflows in excess of outflows—over the asset’s useful life. In capital budgeting, we use the terms

- cash inflows
- cash outflows
3.1. Payback Period

Payback is the length of time it takes to recover, in net cash inflows, the dollars of an investment in a long-term asset. The payback model measures how quickly managers expect to recover their investment dollars. The shorter the payback period, the more attractive the asset, all else being equal.

3.2. Accounting Rate of Return

Companies operate to earn profits. One measure of profitability is the accounting rate of return on an asset or other investment. Accounting rate of return measures the average rate of return over the asset’s entire life, computed.

4. Internal Rate of Return

Another discounted cash-flow model for capital budgeting is the internal rate of return. The internal rate of return (IRR) is the rate of return (based on discounted cash flows) a company can expect to earn by investing in the project. It is the discount rate that makes the net present value of the project’s cash flows equal to zero. The higher the IRR, the more attractive the project.

5. Comparing Capital Budgeting Methods

Only net present value and internal rate of return consider both profitability and the time value of money, and that makes these methods superior. How do the net present value and IRR approaches compare? Net present value indicates the amount of the excess (or deficiency) of a project’s present value of net cash inflows over (or under) its cost—at a specified discount rate. But net present value does not show the project’s unique rate of return. The internal rate of return shows the project’s rate but does not indicate the dollar difference between the project’s present value and its cost. In most cases, the two discounted cash-flow methods lead to the same investment decision.