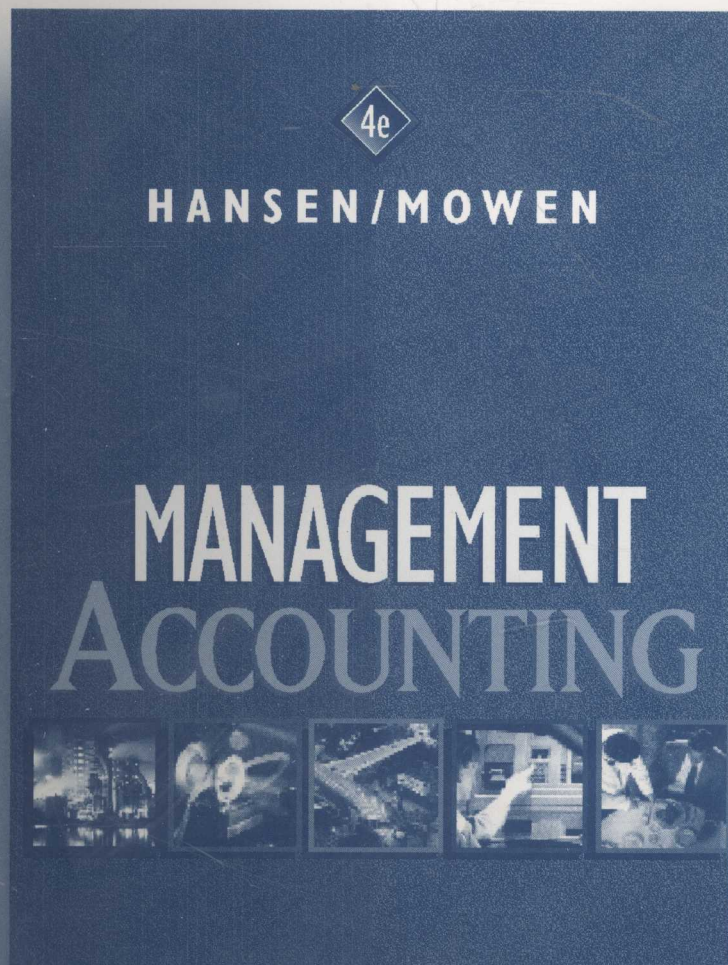


STUDY GUIDE

MANAGEMENT ACCOUNTING



HANSEN/MOWEN
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Prepared by Donna K. Ulmer

STUDY GUIDE

MANAGEMENT ACCOUNTING

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TO THE STUDENT

This study guide, a supplement to *Management Accounting, Fourth Edition* by Don R. Hansen and Maryanne M. Mowen, is designed to assist you in reviewing important concepts and testing your understanding of the material. The study guide contains the following:

- **CHAPTER REVIEW.** A summary of the important points in each chapter.
- **KEY TERMS TEST.** A test of your understanding of the key terms in each chapter.
- **CHAPTER QUIZ.** Multiple choice, true-false, and completion questions to test your comprehension of the chapter material.
- **LEARNING ORGANIZERS.** Graphical matrices developed to compare and contrast key concepts and aid in visual learning.
- **EXERCISES.** A test of your ability to apply the concepts.
- **ANSWERS.** Suggested solutions appear at the end of each chapter.

The following sequence is recommended to make the most effective use of your study time.

- Read the assigned chapter in the text.
- Read the Chapter Review in the study guide. Add your notes or questions to the Chapter Review.
- Complete the Key Terms Test, Chapter Quiz, and Exercises in the study guide.
- Review any difficult topics if necessary.
- Prepare text exercises and problems assigned by your instructor.

Additional suggestions to assist you in your course preparation are:

- Try to understand the important concepts and how they are applied. Do not try to memorize formulas and plug in numbers without first understanding *why* the formulas work.
- Ask questions when you do not understand. If you do not understand something, write your questions down so that you can ask at a later time. Simply formulating the questions may help you clarify your thinking.
- Always attempt to answer questions and problems before looking at the solution. This tests your understanding of the material and indicates the areas that need further study.

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CHAPTER 1

INTRODUCTION: THE ROLE, HISTORY, AND DIRECTION OF MANAGEMENT ACCOUNTING

CHAPTER REVIEW

⇒ Highlight or check ✓ the boxes ☐ preceding the material that you need to review again.

MANAGEMENT ACCOUNTING INFORMATION SYSTEM

- ☐ The management accounting information system has three broad objectives:
 1. To provide information for costing services, products, and other objects of interest to management
 2. To provide information for planning, control, and evaluation
 3. To provide information for decision making

Information Needs of Managers and Other Users

- ☐ Accounting information can be used to:
 - identify problems
 - identify solutions to problems
 - assess how well things are going within an organization, such as cost control or performance evaluation
- ☐ The need for greater accuracy has produced an improved management accounting information system called a *contemporary management accounting information system*.
- ☐ **Continuous improvement** involves searching for ways to increase overall efficiency and productivity of activities by reducing waste, increasing quality, and reducing costs. Information is needed to:
 1. Identify opportunities for improvement
 2. Evaluate progress made in implementing actions to create improvement

The Management Process

- ☐ The management process includes three activities:
 - planning
 - controlling
 - decision making

- ☐ Managers and empowered workers participate in the management process. **Employee empowerment** authorizes operational personnel to plan, control, and make decisions without explicit authorization from middle and higher-level management. It is based on the belief that the employee closest to the work can provide valuable input in ideas, plans, and problem solving.

See Exhibit 1-1 on the following page.

MANAGEMENT ACCOUNTING AND FINANCIAL ACCOUNTING

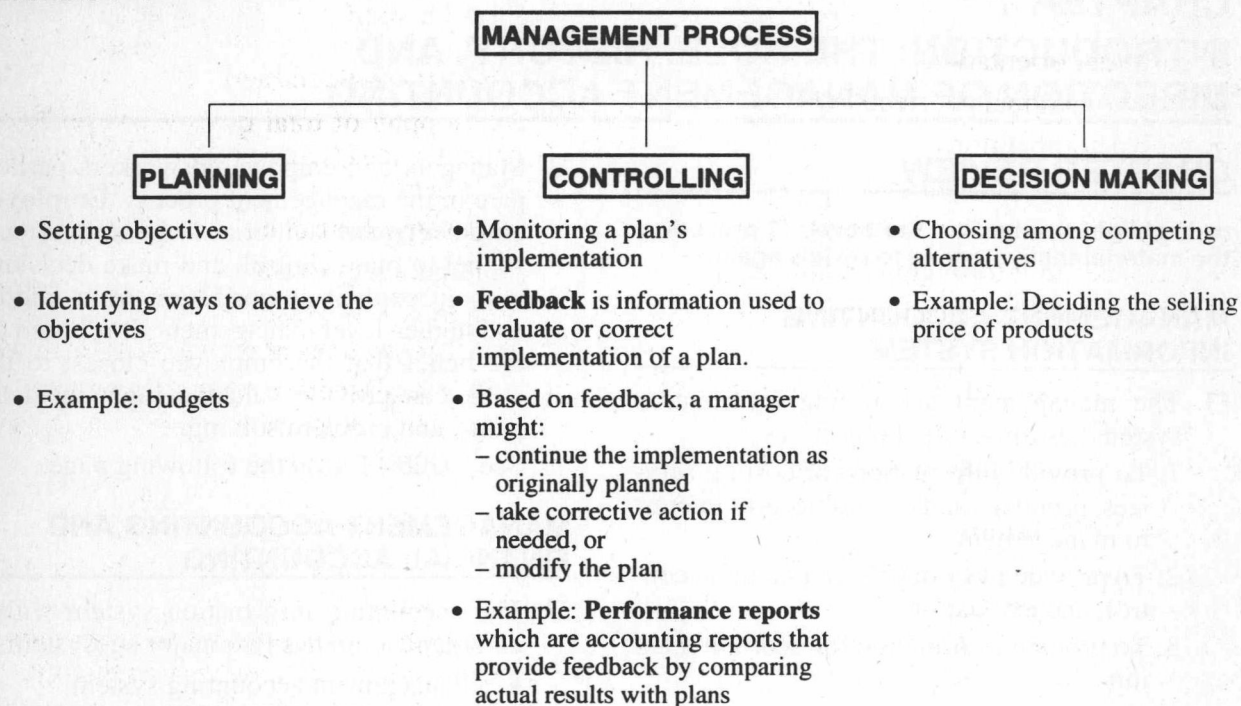
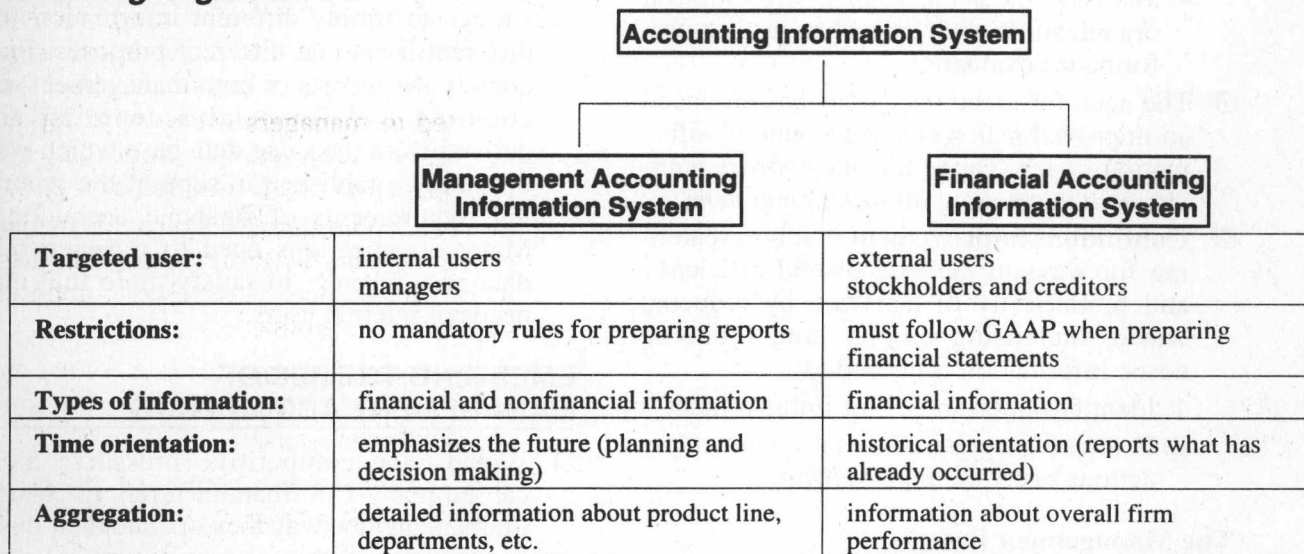
- ☐ The accounting information system within an organization has two major subsystems:
 - a management accounting system
 - a financial accounting system

⇒ **Learning Organizer 1-1 can be found on the following page. A learning organizer (also known as a mind map or concept map) is an advanced learning tool to help you organize, compare, and analyze information.**

- ☐ The accounting system should be flexible enough to supply different information for different users and different purposes. Frequently the reports of both management accounting and financial accounting are derived from the same data base which was originally established to support the reporting requirements of financial accounting. Many organizations need to redesign this data base in order to satisfy more fully the needs of internal users.

EMERGING THEMES OF MANAGEMENT ACCOUNTING

- ☐ World-wide competitive pressures have caused many U.S. manufacturers to change dramatically the way they operate their businesses.
- ☐ *Contemporary* management accounting systems provide greater detail and more accurate cost assignment than the *traditional* management accounting system.

Exhibit 1-1**Learning Organizer 1-1**

- ☐ The key factors bringing about these changes are:
 - customer orientation
 - cross-functional perspective
 - global competition
 - total quality management
 - time as a competitive element
 - advances in information technology
 - advances in the manufacturing environment
 - deregulation and growth in the service industry
 - activity-based management

Customer Orientation

- ☐ **Customer value** is the difference between what a customer receives (customer realization) and what the customer gives up (customer sacrifice). Increasing customer value means:
 - increasing what the customer receives (such as product features, service, quality, training) or
 - decreasing what the customer gives up (purchase cost, time to learn to use the product, post purchase costs of using and maintaining the product)
- ☐ The **value chain** consists of the activities required to design, develop, produce, market, and deliver products and services to customers. Emphasizing the value chain forces managers to determine which activities add value to customers.
- ☐ A good management accounting system ought to develop and measure indicators of customer satisfaction.

Cross-Functional Perspective

- ☐ Emphasis on the value chain means that today's management accountant must understand many functions of the business, from manufacturing to marketing to distribution to customer service.

Global Competition

- ☐ Major improvements in productivity and quality by foreign firms have placed competitive pressures on U.S. firms, creating a

demand for improved management accounting information.

Total Quality Management

- ☐ A philosophy of total quality control is replacing the traditional philosophy of acceptable quality.
- ☐ Total quality control emphasizes:
 - continual improvement
 - elimination of waste
- ☐ The twin objectives of world-class firms are:
 1. producing products with little waste
 2. producing products that perform according to specifications

Time as a Competitive Element

- ☐ Time is a crucial element in all phases of the value chain.
- ☐ Decreasing nonvalue-added time appears to go hand in hand with increasing quality.
- ☐ Managers need information that enables them to respond quickly and decisively to changing market conditions.

Advances in Information Technology

- ☐ Two advances in information technology are:
 1. With automated manufacturing, computers are used to monitor and control operations. Information can be collected and reported to managers about what is happening on the production floor almost as it happens (on a real-time basis).
 2. Personal computers (PCs) provide managers with greater flexibility in assessing and using information. Increased computing capability is provided by:
 - the personal computer that serves as a communications link to the company's information system,
 - spreadsheets and graphics programs that supply managers with the analytical capability to use information.

Advances in the Manufacturing Environment

- ☐ **JIT manufacturing** is a demand-pull system that produces a product only when it is

needed and only in the quantities demanded by customers.

- ☐ Parts and materials arrive just in time to be used in production.
- ☐ JIT manufacturing typically:
 - reduces inventories
 - increases quality
 - focuses on continual improvement of the firm.

Growth and Deregulation in the Service Industry

- ☐ Deregulation of such services as airlines and telecommunications has increased competition.
- ☐ Increased competition has made managers more conscious of the need to use accounting information for planning, control, and decision making.

Activity-Based Management

- ☐ **Activity-based management** emphasizes:
 1. *activity-based costing (ABC)* which improves the accuracy of assigning costs by first tracing costs to activities and then to products.
 2. *process value analysis* which emphasizes activity analysis with the objective of performing necessary activities more efficiently and eliminating nonvalue-added activities.

THE ROLE OF THE MANAGEMENT ACCOUNTANT

- ☐ Management accountants provide support to individuals responsible for carrying out the organization's basic objectives.
- ☐ The **controller** is the chief accounting officer and has responsibility for both internal

and external accounting requirements. The controller may have direct responsibility for:

- internal auditing
 - cost accounting
 - financial accounting (including SEC reports and financial statements)
 - systems accounting (including analysis, design, and internal controls)
 - taxes
- ☐ The **treasurer** is responsible for raising capital and managing cash and investments.

MANAGEMENT ACCOUNTING AND ETHICAL CONDUCT

- ☐ One of the major goals of management accounting is to help managers increase the profitability of their organization.
- ☐ However, the objective of profit maximization should be constrained by the requirement that profits be achieved through legal and ethical means.
- ☐ The performance evaluation and reward system should be designed so that incentives to pursue undesirable behavior are minimized.
- ☐ The Standards of Ethical Conduct for Management Accountants address: competence, confidentiality, integrity, and objectivity.

CERTIFICATION

- ☐ The Certificate in Management Accounting (CMA) examination is sponsored by the Institute of Management Accountants (IMA).
- ☐ The Certificate in Public Accounting (CPA) is the minimal professional qualification for external auditors who provide assurance concerning the reliability of a firm's financial statements.
- ☐ The Certificate in Internal Auditing (CIA) is certification for internal auditors.

KEY TERMS TEST

Test your recall of the key terms as follows. Try to recall as many key terms as possible without assistance. If you need assistance, refer to the list of key terms at the end of this section.

1. A _____ or _____ is an accountant certified to possess the minimal professional qualifications for an external auditor. This type of accountant provides assurance concerning the reliability of a firm's financial statements.
2. _____ is the process of choosing among a set of competing alternatives.
3. _____ results in choices or actions that are right and proper and just.
4. A manufacturing system where each process produces only what is necessary to satisfy the demand of the succeeding process is called _____.
5. _____ involves setting objectives and identifying methods to achieve those objectives.
6. The chief accountant of an organization is called the _____.
7. _____ is monitoring a plan using feedback to ensure the plan is being implemented as expected.
8. Information that can be used to evaluate or correct steps being taken to implement a plan is called _____.
9. A(n) _____ is an accounting information subsystem primarily concerned with producing information for external users.
10. A(n) _____ is an information system that produces information to satisfy specific management objectives.
11. _____ are reports that provide feedback to managers by comparing planned data with actual data.
12. The _____ is responsible for the finance functions of raising capital and managing cash and investments.
13. _____ is a system-wide integrated approach that focuses management's attention on activities with the objective of improving customer value and the profit achieved by providing this value.
14. _____ is the process of searching for ways of increasing the overall efficiency and productivity of activities by reducing waste, increasing quality, and reducing costs.
15. _____ is the difference between what a customer receives and what a customer gives up.
16. The _____ is the set of activities required to design, develop, produce, market, and deliver products and services to customers.
17. _____ is an approach in which manufacturers strive to create an environment that will enable workers to manufacture perfect (zero-defect) products.
18. The costs of using, maintaining, and disposing of the product are _____.
19. _____ involves authorizing operational personnel to plan, control, and make decisions without explicit authorization from middle and higher-level management.

KEY TERMS:

activity-based management
 certified public accountant, CPA
 continuous improvement
 controller
 controlling
 customer value
 decision making
 employee empowerment
 ethical behavior
 feedback

financial accounting information system
 JIT manufacturing
 management accounting information system
 performance reports
 planning
 post-purchase costs
 total quality management
 treasurer
 value chain

⇒ Review any key terms missed. If you missed several key terms, retake the key terms test after reviewing.

CHAPTER QUIZ

Write your answers in the spaces provided.

1. Complete the learning organizer shown.

Accounting Information System		
Management Accounting Information System		Financial Accounting Information System
Targeted user:		
Restrictions:		
Types of information:		
Time orientation:		
Aggregation:		

2. Managers need accounting information in order to be effective in fulfilling the management functions of:

- a. _____
 b. _____
 c. _____

3. Control is the process of comparing _____ with _____.

4. Feedback is information that can be used to evaluate implementation of a plan. Based on feedback, a manager might take one of the following actions:
- a. _____
 - b. _____
 - c. _____
5. Just-in-time (JIT) manufacturing is a demand-pull system that produces a product only when it is needed and in quantities demanded by customers. Three characteristics of JIT manufacturing are:
- a. _____
 - b. _____
 - c. _____
6. A philosophy of total quality control is replacing the conventional philosophy of acceptable quality. Total quality control emphasizes:
- a. _____
 - b. _____
7. The objective of maximizing profits should be constrained by _____ and _____ considerations.

Circle the single best answer.

8. Developing a cash budget for next year is an example of the management function of: (a) planning; (b) control; (c) decision making; (d) none of the above
9. Determining whether to buy new production equipment is an example of: (a) planning; (b) control; (c) decision making; (d) none of the above
10. Management accountants are considered: (a) line positions; (b) staff positions
11. Marketing is considered a: (a) line position; (b) staff position

⇒ **Compare your answers to those at the end of the chapter and review any questions missed.**

ANSWERS

KEY TERMS TEST

1. certified public accountant, CPA
2. Decision making
3. Ethical behavior
4. JIT manufacturing
5. Planning
6. controller
7. Controlling
8. feedback
9. financial accounting information system
10. management accounting information system
11. Performance reports
12. treasurer
13. Activity-based management
14. Continuous improvement
15. Customer value
16. value chain
17. Total quality management
18. post-purchase costs
19. Employee empowerment

CHAPTER QUIZ

1. See the learning organizer on page xx.
2. a. planning
b. controlling
c. decision making
3. actual results, plans
4. a. continue the implementation as originally planned
b. take corrective action
c. modify the original plan
5. a. reduced or zero inventories
b. improved quality
c. improved productivity
6. a. continual improvement
b. elimination of waste
7. legal, ethical
8. a
9. c
10. b
11. a

CHAPTER 2

BASIC COST CONCEPTS

CHAPTER REVIEW

COST ASSIGNMENT: DIRECT TRACING, DRIVER TRACING, AND ALLOCATION

- ☐ A major development in management accounting has been to increase the accuracy of cost assignments, producing higher quality information for decision making.

Cost

- ☐ A **cost** is the cash (or cash equivalent) value sacrificed for goods or services that are expected to produce current or future benefits.
- ☐ Firms achieve a competitive advantage by providing the same or greater customer value for lower cost than their competitors.
- ☐ An **opportunity cost** is the benefit given up when one alternative is chosen over another. Opportunity costs are not usually recorded in the accounting system; however, opportunity costs should be considered when evaluating alternatives for decision making.
- ☐ **Expenses** are expired costs. Expenses are costs that are used up when generating revenue.
- ☐ The selling price charged must exceed the cost so that sufficient income is earned for a firm to remain in business. Therefore, managers need to know the cost of products.

Cost Objects

- ☐ A **cost object** is any item such as products, departments, and activities for which costs are measured and assigned.
- ☐ An **activity** is a basic unit of work performed within an organization. Activities are cost objects. Examples of activities include equipment setup, materials handling, and product inspection.

Accuracy of Assignments

- ☐ Distorted cost assignments can produce erroneous decisions.

Traceability

- ☐ **Traceability** is the ability to assign a cost to a cost object in an economically feasible way by means of a cause-and-effect relationship.
- ☐ **Direct costs** can be easily and accurately traced to a cost object.
- ☐ **Indirect costs** cannot be easily and accurately traced to a cost object.

Methods of Cost Assignment

- ☐ Methods of cost assignment are summarized in Learning Organizer 2-1.

PRODUCT AND SERVICE COSTS

- ☐ Two types of output of organizations are summarized in Learning Organizer 2-2.

Different Costs for Different Purposes

- ☐ **Product costs** consist of costs assigned to a product that satisfies a particular managerial objective. Since managerial objectives can differ, product cost definitions can differ--each depending on the managerial objective being served.
- ☐ Different cost information might be needed for internal managerial use than for external reporting.
- ☐ The **value chain** is the set of activities required to design, develop, produce, market, distribute, and service a product.

Product Costs and External Financial Reporting

- ☐ For external product costing, costs are classified by the function they serve. See Learning Organizer 2-3.
- ☐ Product costs, for external financial reporting, are manufacturing costs (direct materials, direct labor, and manufacturing overhead) that attach to the product and are first inventoried and then expensed when the product is sold.
- ☐ Period costs are nonproduction (selling and administrative) costs and are expensed when incurred.

Learning Organizer 2-1

Methods of Cost Assignment

Direct Tracing

Driver Tracing

Allocation

Description:	identifying and assigning costs to a cost object that are specifically or physically associated with the cost object relies on physical observation	use of drivers to assign costs to cost objects 2 types of drivers: resource drivers measure the demands placed on resources by activities, and are used to assign the cost of resources to activities. activity drivers measure the demands placed on activities by cost objects and are used to assign the cost of activities to cost objects. Activity-based costing first traces costs to activities and then traces costs to cost objects.	assignment of indirect costs to cost objects
Cost Assignment Accuracy:	most precise	depends on the quality of the causal relationship described by the driver	least accurate

Learning Organizer 2-2

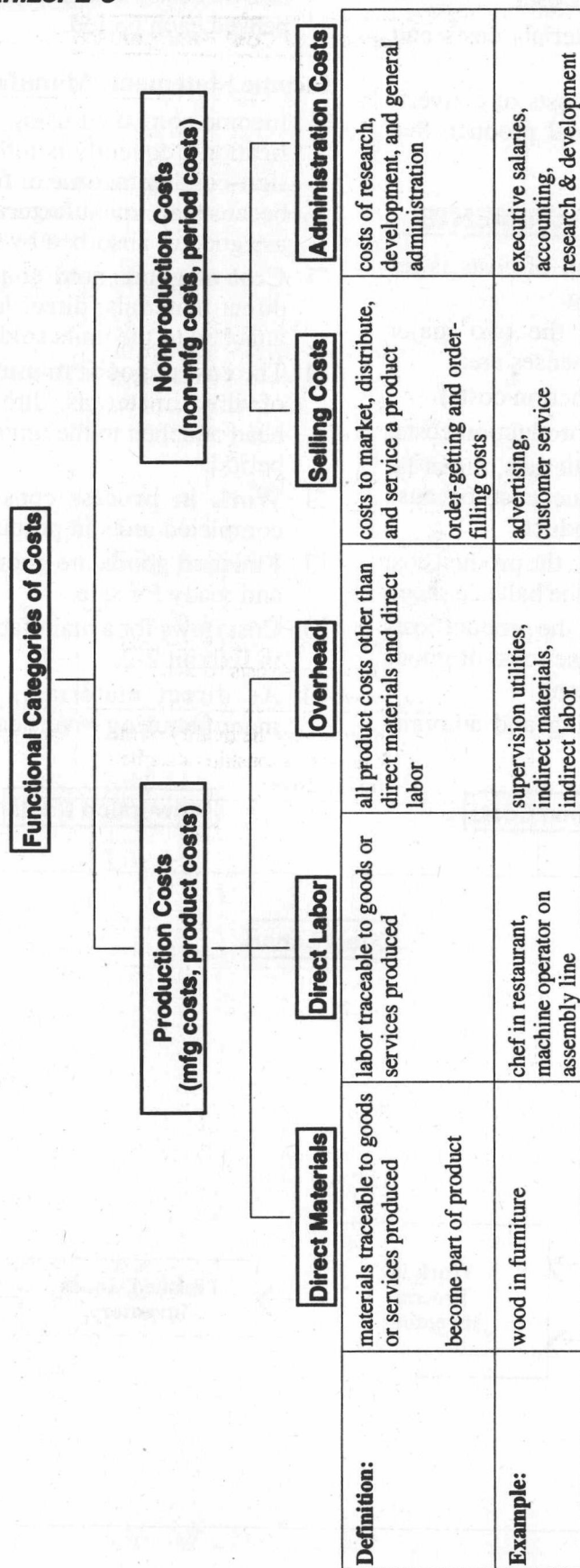
Output of Organizations

Goods
(tangible products)

Services

Definition:	goods produced by converting raw materials using labor and capital (plant, land, and machinery)	(1) activities performed for a customer or (2) activity performed by a customer using the organization's products or facilities
Examples:	laundry detergent televisions bicycles	(1) accounting services dry cleaning services (2) video rental

Learning Organizer 2-3



Prime Costs and Conversion Costs

- ☐ **Prime costs** are direct materials costs and direct labor costs
- ☐ **Conversion Costs** are the costs of converting raw materials into a final product. See Exhibit 2-1.

EXTERNAL FINANCIAL STATEMENTS

- ☐ The functional classification of costs is required for external reporting.
- ☐ Under absorption costing the two major functional categories of expenses are:
 1. cost of goods sold (production costs)
 2. operating expenses (nonproduction costs)
- ☐ Production costs (direct materials, direct labor, and overhead) are product costs because these costs attach to the product.
- ☐ If the product is in inventory, the product cost is reported as inventory on the balance sheet.
- ☐ If the product has been sold, the product costs are recognized as an expense (cost of goods sold) on the income statement.
- ☐ Nonproduction costs (selling and adminis-

trative costs) are period costs that are expensed each period.

Income Statement: Manufacturing Firms

- ☐ Income computed using a functional classification frequently is referred to as **absorption-costing income** or **full-costing income** because all manufacturing costs are fully assigned or absorbed by the product.
- ☐ **Cost of goods sold** consists of the cost of direct materials, direct labor, and overhead attached to the units sold during a period.
- ☐ The **cost of goods manufactured** is the cost of direct materials, direct labor, and overhead attached to the units produced during a period.
- ☐ **Work in process** consists of all partially completed units in production.
- ☐ **Finished goods** are goods that are complete and ready for sale.
- ☐ Cost flows for a manufacturer are diagrammed in Exhibit 2-2.
- ☐ As direct materials, direct labor, and manufacturing overhead are used in the

Exhibit 2-1

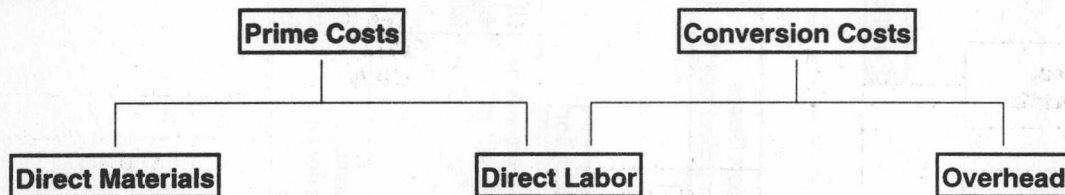


Exhibit 2-2

