CHAPTER 1

MANAGERIAL ACCOUNTING IN THE INFORMATION AGE

# LEARNING OBJECTIVES

1. Explain the primary goal of managerial accounting and distinguish between financial and managerial accounting.
2. Define cost terms used in planning, control, and decision making.
3. Explain the two key ideas in managerial accounting.
4. Discuss the impact of information technology on business processes and the interactions companies have with suppliers and customers.
5. Describe a framework for ethical decision making and discuss the duties of the controller.

#### CHAPTER REVIEW

 1. This chapter provides an overview of the role of managerial accounting in planning, control, and decision making. It also introduces managerial accounting and how it differs from financial accounting. Also discussed are some basic managerial accounting terms, the two key ideas in managerial accounting, and where the Controller fits in a typical organizational structure.

### The Goal of Managerial Accounting

 2. (L.O.1) The primary goal of managerial accounting is to provide information needed for planning, control, and decision-making.

 3. (L.O.2) **Planning** is key to all companies and communicates a company’s goals to its employees. Budgets are financial plans and may be prepared for a variety of purposes, e.g., profit budgets, cash-flow budgets, and production budgets.

 4. (L.O.2) **Control** is achieved by evaluating the performance of managers and the operations for which they are responsible. Manager evaluation is performed in order to determine if their performance should be rewarded or punished. Operations are evaluated in order to determine if they should be changed, i.e., expanded, contracted, or modified in some way.

 5. **Performance reports** typically compare the current performance of a manager or operation to budgeted performance or performance from a prior period. Although the reports do not provide definitive answers for any differences, they are used to indicate where differences occurred. Managers then investigate those significant differences. This is called **management by exception**.

 6. **Decision-making** is an integral part of the planning and control process. Good decision-making is crucial to a company’s future profitability and survival.

**A Comparison of Managerial and Financial Accounting**

 7. (L.O.1) The primary differences between managerial and financial accounting are:

1. Managerial accounting is directed at internal rather than external users of accounting information.
2. Managerial accounting may deviate from generally accepted accounting principles (GAAP).
3. Managerial accounting may present more detailed information.
4. Managerial accounting may present more non-monetary information.
5. Managerial accounting places more emphasis on the future.

 8. However, managers make significant use of financial reports and external users may request internal reports occasionally.

**Cost Terms Used in Discussing Planning, Control, and Decision-Making**

 9. (L.O.2) A knowledge of cost terms is critical to understanding how they are used in planning, control, and decision making.

1. **Variable costs** are costs that increase or decrease in total, in direct proportion to changes in the level of business activity. The variable cost per unit remains constant.
2. **Fixed costs** are costs that do not change with changes in the level of business activity. Total fixed costs remain constant, but the fixed cost per unit varies inversely with changes in the level of business activity.
3. **Sunk costs** are costs that were incurred in the past. They are irrelevant to current decision-making.
4. **Opportunity costs** are the values of benefits foregone when one alternative is chosen over another.
5. **Direct costs** are costs that can be directly and easily traceable to some cost object, i.e., a product, activity, or department.
6. **Indirect costs** are costs that cannot be directly or easily traced to some cost object.
7. **Controllable costs** are costs that can be controlled, or influenced, by a specific manager. Managers should be evaluated only on the costs that they can control.
8. **Non-controllable** **costs** are costs that a manager has no control, or influence, over. Managers should not be evaluated on non-controllable costs.

**Two Key Ideas in Managerial Accounting**

 10. (L.O. 3) **Incremental analysis** involves the calculation of the difference in revenues and the difference in costs between alternatives. If **incremental revenues** exceed **incremental costs**, the alternative is acceptable.

 11. Performance measures drive behavior **(You get what you measure).** Because rewards usually depend on how well managers perform on a specific measure, they will concentrate on the activity being measured and ignore what isn’t measured.

**The Information Age and Managerial Accounting**

 12. (L.O. 4) Advances in information technology are redefining the meaning of intense competition. For example:

1. Web sites are used to conduct auctions.
2. Local companies face stiff competition from online companies operating in other states.
3. Advances in information technology have also created opportunities and cost savings for firms that use information for strategic advantage in dealing with customers, suppliers, and improving internal processes.
4. The **value chain** comprises the fundamental activities a firm engages in to create value
5. The primary activities are:

a. Inbound logistics (receiving and storing goods and materials).

b. Operations to transform materials into finished products.

c. Outbound logistics (storing and shipping products to customers).

d. Marketing and sales.

e. After sale customer service.

1. The secondary activities are:

a. Firm infrastructure (e.g., accounting, finance, and legal affairs).

 b. Human resource management (e.g., hiring, training, benefits administration).

 c. Technology development.

 d. Procurement of goods and services.

 17. When the value to the customer receiving the goods and services exceeds the cost of these activities, firm value is created.

1. Information flows between the company and its customers.
2. Information flows between a company and its suppliers.
3. Using information technology to gain internal efficiencies.

 14. Software systems that impact value chain management:

1. **Enterprise Resource Planning Systems** (ERP) update MRP systems with better integration, relational databases, and graphical user interfaces.
2. **Supply Chain Management Systems** (SCM) support the planning of the best way to fill orders and help tracking of products and components among companies in the supply chain.
3. **Customer Relationship Management Systems** (CRM) used to manage a variety of customer interactions.

**Ethical Considerations in Managerial Decision Making**

 15. Ethical behavior requires managers to recognize the difference between what’s right and what’s wrong and then to make decisions consistent with what’s right.

 16. Unethical and illegal actions by key managers in major companies has led to the enactment of the Sarbanes-Oxley Act. Important provisions include:

 a. The Chief Executive Officer and Chief Financial Officer of a company must certify that their financial statements do not contain any untrue statements or omissions of material facts that would make the statements misleading.

 b. A ban on certain types of work by a company’s auditors to ensure their independence.

 c. Longer jail sentences (up to 20 years) and larger fines (up to $5 million) for corporate executives who knowingly and willfully misstate financial statements.

 d. A requirement that companies report on the existence and reliability of their internal controls as they relate to financial reports.

 16. (L.O. 5) The framework for ethical decision-making consists of seven questions:

 **When evaluating a decision risk:**

1. What decision alternatives are available?
2. What individuals or organizations have a stake in the outcome of my decision?
3. Will an individual or an organization be harmed by any of the alternatives?
4. Which alternative will do the most good with the least harm?
5. Would someone I respect find any of the alternatives objectionable?

 **After deciding on a course of action, but before taking action, ask:**

1. At a “gut level,” am I comfortable with the decision I am about to make?
2. Will I be comfortable telling my friends and family about this decision?

**The Controller as the Top Management Accountant**

 17. (L.O. 5) The **Controller** is responsible for providing the information needed for planning, control, and decision-making. These include:

1. Budgets

 b. Performance reports

 c. Capital budgeting

 d. Financial accounting reports

 e. Tax reports

 18. The **Treasurer** is typically responsible for managing cash and marketable securities, preparing cash forecasts, and obtaining financing from banks and other lenders.

 19. The **Chief Information Officer** **(CIO)** is responsible for a company’s information technology and computer systems.

 20. Both the Controller and the Treasurer report to the **Chief Financial Officer** **(CFO)**

**The Institute of Management Accountants Code of Ethics**

 21. (Appendix) The code of ethical behavior presents the ethical standards that members of the IMA must abide by and provides guidelines on how to resolve any ethical conflict.

#### LECTURE OUTLINE

The material in this chapter is basic and straightforward. It can be covered in one or two class sessions.

1. The goal of managerial accounting.

1. (L.O. 1) To provide managers with the information they need for planning, control, and decision-making.
2. (L.O. 2) **Budgets** are the financial plans of a company.
3. Profit budget
4. Cash-flow budget
5. Production budget
6. (L.O. 2) **Control** is achieved by evaluating the performance of managers and the operations that they run.
7. Managers are evaluated to determine if their performance should be rewarded or punished.
8. Operations are evaluated to determine if they should be changed.
9. **Performance reports** compare actual results to planned (budgeted) results or a prior period’s results.

**- Management by exception** involves the investigation of significant differences between actual and planned performance.

1. **Decision-making** is an integral part of the planning and control process.
2. Decisions are made to reward or punish managers.
3. Decisions are made to change operations or revise plans.
4. (L.O. 1) Comparison of managerial and financial accounting
5. Managerial accounting is directed at internal rather than external users.
6. Managerial accounting may deviate from GAAP.
7. Managerial accounting may present more detailed information.
8. Managerial accounting may present more non-monetary information.
9. Managerial accounting places more emphasis on the future.
10. (L.O. 2) Cost terms used in planning, control, and decision-making.
11. **Variable costs** increase or decrease, in total, with increases or decreases in the level of business activity.
12. The variable cost per unit remains constant.
13. Examples include:
14. Direct materials
15. Direct Labor
16. Commissions
17. **Fixed costs** remain constant, in total, with changes in the level of business activity.
18. The fixed cost per unit varies inversely with changes in the level of business activity.
19. Examples include:
20. Salaries
21. Depreciation
22. Rent
23. **Sunk costs** are costs that were incurred in the past.
24. **Opportunity costs** are the benefits foregone from choosing one alternative over another.
25. **Direct costs** are costs that are directly and easily traceable to a specific cost object, i.e., a product, activity, or department.
26. **Indirect costs** are costs that cannot be directly or easily traceable to some cost object.
27. **Controllable costs** are costs that can be influenced (controlled) by a specific manager.

- Managers should be evaluated on these costs.

1. **Non-controllable costs** are costs that cannot be influenced (controlled) by a specific manager.
2. (L.O. 3) Two key ideas in managerial accounting.
3. Decision-making relies on **incremental analysis**.

- Incremental analysis involves the calculation of the difference in revenues and the difference in costs between alternatives.

1. **You get what you measure**.

- Performance measures influence manager behavior.

1. (L.O. 4) The Information Age and Managerial Accounting

1. Advances in information technology have redefined intense competition.

1. Web sites used to conduct auctions.
2. Online companies from other states and countries competing with local firms.

2. The **value chain** comprises the fundamental activities a firm engages in to create value

1. The primary activities are:

a. Inbound logistics (receiving and storing goods and materials).

b. Operations to transform materials into finished products.

c. Outbound logistics (storing and shipping products to customers).

d. Marketing and sales.

e. After sale customer service.

1. The secondary activities are:

a. Firm infrastructure (e.g., accounting, finance, and legal affairs).

 b. Human resource management (e.g., hiring, training, benefits administration).

 c. Technology development.

 d. Procurement of goods and services.

5. When the value to the customer receiving the goods and services exceeds the cost of these activities, firm value is created.

1. Information flows between the company and its customers.
2. Information flows between the company and its suppliers.
3. Using information technology to gain internal efficiencies.
4. Software systems that impact value chain management:
5. **Enterprise Resource Planning Systems** (ERP): updated MRP systems dealing with computerized inventory control and production planning.
6. **Supply Chain Management Systems** (SCM): support the planning of the best way to fill orders and help tracking of products and components among companies in the supply chain.
7. **Customer Relationship Management Systems** (CRM): used to manage a variety of customer interactions.

F. (L.O. 5) Ethical considerations in Managerial Decision Making

 1. Ethical behavior requires that managers recognize the difference between what’s right and what’s wrong and then make decisions consistent with what’s right.

2. Company codes of ethics usually specify what can’t be done rather than what should be done, or

3. Focus on what’s legal rather than what’s right.

4. Framework for ethical decision making

1. When evaluating a decision ask:

(1) What decision alternatives are available?

(2) What individuals or organizations have a stake in the outcome of my decision?

(3) Will an individual or an organization be harmed by any of the alternatives?

1. Which alternative will do the most good with the least harm?
2. Would someone I respect find any of the alternatives objectionable?
3. After deciding on a course of action, but before taking the action, ask:
4. At a “gut level,” am I comfortable with the decision I am about to make?
5. Will I be comfortable telling my friends and family about this decision?

G. (L.O. 5) The controller is the top management accountant.

1. The **Controller** prepares reports for planning and evaluating company activities. Also:
2. Financial accounting reports
3. Tax reports
4. Coordinating with the external auditors.
5. The **Treasurer** has custody of cash and funds invested in various marketable securities. Also:
6. Cash forecasts
7. Obtaining financing from banks and other lenders.

3. The **Chief Information Officer** (CIO) is responsible for the company’s information technology and computer systems.

4. The **Chief Financial Officer** (CFO) is the senior executive responsible for both accounting and financial operations.

H. (Appendix) The code of ethical behavior provides ethical standards that all members of the IMA must abide by and guidelines to resolve any ethical conflict.

#### ILLUSTRATION 1-1

##### PLANNING AND CONTROL CYCLE

Plan

 Decisions to Action taken to

 **change operations implement plan**

 **or revise plan**

 **Decisions to Results**

 **reward or punish**

 **managers**

**Comparison and**

**evaluation of plan**

**to actual results**

# ILLUSTRATION 1-2

**PERFORMANCE REPORT**

 **Actual**

 **minus**

 **Actual Budget Budget**

Production 100,000 units 100,000 units

 Materials $ 140,000 $ 125,000 $ 15,000

 Labor 145,000 150,000 ( 5,000 )

 Rent 40,000 40,000 - 0 -

 Depreciation 60,000 60,000 - 0 -

 Other 70,000 75,000 ( 5,000 )

 Totals $ 455,000 $ 450,000 $ 5,000

# ILLUSTRATION 1-3

##### MANAGERIAL ACCOUNTING VS FINANCIAL ACCOUNTING

#  Managerial Financial

1. Users Internal External

 2. GAAP May deviate Must comply

 3. Focus of More detailed Summarized

 information emphasis on emphasis on

 presented segments total company

 4. Nonmonetary Emphasized Not emphasized

 information

 5. Time focus Future oriented Basically historical

**ILLUSTRATION 1 – 4**

**A FRAMEWORK FOR ETHICAL DECISION-MAKING**

**When evaluating a decision ask:**

1. What decision alternatives are available?

 2. What individuals or organizations have a stake in the outcome of my decision?

3. Will an individual or an organization be harmed by any of the alternatives?

4. Which alternative will do the most good with the least harm?

5. Would someone I respect find any of the alternatives objectionable?

**After deciding on a course of action, but before taking action, ask:**

6. At a “gut level” am I comfortable with the decision I am about to make?

7. Will I be comfortable telling my friends and family about this decision?

**MATCHING – A**

Match the following terms to the statements shown below. Use capital letters for your answers. Each term can only be used once.

1. Budget E. Enterprise Resource H. Managerial Accounting
2. CIO Planning Systems I. Nonmonetary Information
3. Controllable Cost F. Financial Accounting J. Performance Report
4. Direct Cost G. Incremental Analysis

\_\_\_\_\_\_ 1. Updated MRP systems.

\_\_\_\_\_\_ 2. A cost that a manager can influence.

\_\_\_\_\_\_ 3. Aimed primarily at external users of accounting information.

\_\_\_\_\_\_ 4. Compares actual performance to budgeted performance.

\_\_\_\_\_\_ 5. The number of product defects.

\_\_\_\_\_\_ 6. A cost that is easily traceable to some cost object.

\_\_\_\_\_\_ 7. Focuses on preparing reports for internal users of accounting information.

\_\_\_\_\_\_ 8. A financial plan for a company.

\_\_\_\_\_\_ 9. Manages the information technology and computer systems of a company.

\_\_\_\_\_\_ 10. Calculating the differences in revenues between alternatives.

# MATCHING – B

Match the following terms to the statements shown below. Use each term only once. Use capital letters for your answers.

1. CFO F. Opportunity Cost
2. Fixed Cost G. Sunk Cost
3. Indirect Cost H. Supply Chain Management Systems
4. Management by Exception I. Value Chain
5. Non-controllable Cost J. Variable cost

\_\_\_\_\_\_ 1. The benefits foregone when one alternative is selected over another.

\_\_\_\_\_\_ 2. Organizes the activities between a company and its suppliers.

\_\_\_\_\_\_ 3. A cost that does not change, in total, with changes in the level of business activity.

\_\_\_\_\_\_ 4. Investigating departures from the plan that are significant.

\_\_\_\_\_\_ 5. A cost that was incurred in the past.

\_\_\_\_\_\_ 6. A cost that cannot be easily traced to a particular cost object.

\_\_\_\_\_\_ 7. A cost that does **not** change on a per unit basis with changes in the level of business activity.

\_\_\_\_\_\_ 8. The senior executive responsible for accounting and financial operations.

\_\_\_\_\_\_ 9. A company’s internal operations and its relationships and interactions with suppliers and customers.

\_\_\_\_\_\_ 10. A cost that a manager **cannot** influence.

**MULTIPLE CHOICE – A**

\_\_\_\_\_\_ 1. Which of the following is **not** a goal of managerial accounting?

1. Provide information needed for decision making.
2. Provide information needed for creditors.
3. Provide information needed for planning.
4. Provide information needed for control.

\_\_\_\_\_\_ 2. Which of the following is part of planning?

1. Departmental performance report.
2. Incremental analysis
3. Cash-flow budget.
4. Management by exception.

\_\_\_\_\_\_ 3. Comparing actual results to expected results is an example of:

1. decision making.
2. planning.
3. incremental analysis.
4. control.

\_\_\_\_\_\_ 4. Which of the following is **not** part of the planning and control process?

1. Preparing financial statements.
2. Deciding whether to reward or punish managers.
3. Implementing the plan.
4. Comparing actual results to planned results.

\_\_\_\_\_\_ 5. Management by exception is an example of:

1. decision making.
2. incremental analysis.
3. planning.
4. control.

\_\_\_\_\_\_ 6. Which of the following is a characteristic of managerial accounting?

1. Must comply with GAAP
2. Generates reports primarily for internal users
3. Contains monetary information only
4. Emphasizes historical transactions

\_\_\_\_\_\_ 7. Which of the following is an example of a variable cost?

1. Direct labor
2. Depreciation
3. Rent
4. Salaries

\_\_\_\_\_\_ 8. Which of the following is an example of a fixed cost?

1. Materials
2. Commissions
3. Depreciation
4. Direct Labor

\_\_\_\_\_\_ 9. Which of the following questions is **not** included in the framework for ethical decision-making?

 A. What decision alternatives are available?

 B. Which alternative has the least cost?

 C. Which alternative will do the most good with the least harm?

 D. Will I be comfortable telling my friends and family about this decision?

\_\_\_\_\_\_ 10. The position responsible for the custody of cash and funds invested in various marketable securities is the:

1. controller.
2. treasurer.
3. CFO
4. managerial accountant.

# MULTIPLE CHOICE – B

\_\_\_\_\_\_ 1. Which of the following is **not** part of the planning and control process?

1. Budgeting
2. Performance evaluation
3. Management by exception
4. Incremental analysis

\_\_\_\_\_\_ 2. Control of organizations is achieved by evaluating the performance of:

1. managers only.
2. operations only.
3. managers and operations.
4. none of the above are true.

\_\_\_\_\_\_ 3. Performance reports facilitate the use of:

1. incremental analysis.
2. management by exception.
3. budgeting.
4. Non-monetary data.

\_\_\_\_\_\_ 4. An example of non-monetary information is the:

1. cost of materials.
2. fixed costs for a period of time.
3. number of product defects.
4. value of the benefit foregone from selecting one alternative over another.

\_\_\_\_\_\_ 5. Which of the following is **not** a characteristic of managerial accounting?

1. It must comply with GAAP.
2. It stresses future transactions.
3. It emphasizes detailed information.
4. It is aimed primarily at internal users.

\_\_\_\_\_\_ 6. The wages lost when you give up your job to attend school full-time is an example of a(n):

1. fixed costs.
2. opportunity cost.
3. direct cost.
4. sunk cost.

\_\_\_\_\_\_ 7. The cost of a machine purchased last year is an example of a(n):

1. opportunity cost.
2. variable cost.
3. fixed cost.
4. sunk cost.

\_\_\_\_\_\_ 8. Assume a company incurs $100,000 for total variable costs and $150,000 for total fixed costs to produce 10,000 units. What would the total cost be to produce 12,000 units?

1. $270,000
2. $300,000
3. $250,000
4. $280,000

\_\_\_\_\_\_ 9. Company codes of ethics are **not** always a good guide to ethical behavior because:

1. they often specify what should be done.
2. they often specify what can’t be done.
3. they focus more on what’s right than legal.
4. they focus more on cost than on profit.

\_\_\_\_\_\_ 10. The top managerial accounting position is held by the:

1. CFO.
2. treasurer.
3. controller.
4. auditor.

##### ANSWER SHEET

 **MULTIPLE MULTIPLE**

 **MATCHING-A MATCHING-B CHOICE-A CHOICE-B**

1. E 1. F 1. B 1. D
2. C 2. H 2. C 2. C
3. F 3. B 3. D 3. B
4. J 4. D 4. A 4. C
5. I 5. G 5. D 5. A
6. D 6. C 6. B 6. B
7. H 7. J 7. A 7. D
8. A 8. A 8. C 8. A
9. B 9. I 9. B 9. B
10. G 10. E 10. B 10. C