

## **CHAPTER 2**

# **The Systems Approach**

### Chapter Overview

This chapter begins with the current status of the foodservice industry. The factors affecting the growth of some segments and the trends and challenges the industry faces are discussed. The trends that are shown provide some basis for anticipating the future. These trends should alert managers to the demands that new developments and changes in this field may bring, so that they can prepare to meet them. The systems approach to management is introduced in this chapter because it is then related to each subsequent foodservice management topic throughout the book. This concept is based on the idea that complex organizations are made up of interdependent parts (subsystems) that interact to achieve common goals. The four major types of foodservice operating systems are described and discussed.

### Chapter Outline

#### INTRODUCTION

#### KEY CONCEPTS

STATUS OF FOODSERVICE TODAY

FACTORS AFFECTING GROWTH

TRENDS IN FOODSERVICE

CHALLENGES FACING THE INDUSTRY

CLASSIFICATION OF FOODSERVICES

FOODSERVICE OPERATIONS

The Nature of Foodservice Management

THE SYSTEMS AND CONCEPT AND APPROACH

TYPES OF FOODSERVICE SYSTEMS

SUMMARY

APPLICATION OF CHAPTER CONCEPTS

CRITICAL-THINKING QUESTIONS

CHAPTER REVIEW QUESTIONS

SELECTED WEB SITES

### Learning Objectives

Following completion of this unit, the student will be able to:

- Delineate seven demographic changes and socioeconomic trends that affect the foodservice industry.
  - List the challenges facing the foodservice industry today.
  - Outline the current trends in the industry and describe how innovations are being used to address them.
  - Classify foodservices into three major categories and then group them by type of operation.
  - Describe the importance of a Mission Statement.
  - Diagram the Systems Model and define the term *System*.
- Discuss what is meant by Systems Thinking.
- Define the four major types of foodservice operations and list the advantages and disadvantages of each..

### Learning Enhancement Activities

1. Take students on fieldtrips to foodservice facilities that employ each of the types of foodservice systems described in the chapter.
2. Have students debate the advantages and disadvantages of each of the foodservice systems. For example, have one team of students who represent conventional foodservice debate a team that represents cook-chill.
3. To illustrate systems theory, develop some scenarios that include a change in one part of the system. Have students discuss the impact of such a change on the other parts of the system.
4. Have students identify the scope of service of the campus foodservice operation.
5. In small groups have students write a mission statement for their ideal foodservice operation.

### Test Questions

#### **Multiple Choice**

1. The primary function of an organization's mission statement is to:
  - A. attract customers
  - B. motivate employees
  - C. promote profit sharing
  - D. guide decision making

Ans: D Page 42

2. A collection of interrelated parts unified by design to obtain one or more objectives is best described by which of the following terms?
  - A. a social system
  - B. a subsystem
  - C. a system
  - D. dynamic homeostasis

Ans: C Page 44

3. In systems theory the process of changing inputs into outputs is known as
- A. dynamic equilibrium
  - B. homeostasis
  - C. equifinality
  - D. transformation

Ans: D Page 45

4. An example of an output is:
- A. bread for a bakery
  - B. fresh tomatoes for a catsup canner
  - C. pulp for a book publisher
  - D. seeds for a farmer
  - E. stainless steel for an equipment manufacturer

Ans: A Page 45

5. An ultra-stable system may be described as having
- A. homeostasis
  - B. wholism
  - C. entropy
  - D. synergy

Ans: C Page 46

6. Which of the following is the primary reason that managers of conventional foodservices have made changes in the form in which foods are purchased?
- A. to improve productivity
  - B. to improve quality of outputs
  - C. to reduce food cost
  - D. to reduce production time

Ans: D Page 47

7. Advantages of utilizing a ready prepared foodservice system include:
- 1. avoids peaks and valleys of production
  - 2. cost of equipment is generally low
  - 3. provides close control over menu items
  - 4. provides flexibility in menu planning
  - 5. reduces energy costs
- A. 1, 2, and 3                      C. 1, 4, and 5  
B. 1, 3, and 4                    D. 1, 2, and 5

Ans: B Page 48

8. Food is prepared in the main kitchen. Trays are assembled and sent from the main kitchen. This is called:
- A. cafeteria-type service
  - B. centralized foodservice
  - C. convenience foodservice
  - D. scramble system

Ans: B Page 50

9. Choose the statement that best describes the commissary foodservice system?
- A. centralized production with highly automated equipment
  - B. decentralized production and centralized service
  - C. procurement of food that is completely processed
  - D. the type of foodservice found on military bases

Ans: A Page 50

10. Which of the following types of foodservice operations is best suited to a commissary system?
- A. operations where a large number of people must be served in one place
  - B. operations where service is close to production
  - C. operations with a large number of serving units
  - D. operations with unique food requirements

Ans: C Page 50,51

11. Choose the phrase that best states the primary objective of the assembly/serve system?
- A. a desire for individuality
  - B. minimize labor cost
  - C. serve rural healthcare facilities
  - D. suited to multiple serving units

Ans: B Page 54

12. Which of the following is the key difference between ready prepared and conventional systems?
- A. degree of processing of purchased foods
  - B. lag time between production and service
  - C. type of service system used
  - D. type of storage used for prepared food items

Ans: B Page 50, 54

**True / False** (Circle the appropriate response.)

1. T F An organization's mission statement should be written after its objectives have been developed.

Ans: F Page 42, 47

2. T F The human relations theory of management developed following research conducted by Elton Mayo.

Ans: T Page 43

3. T F Scientific management theory held that social and psychological factors were important to worker satisfaction and productivity.

Ans: F Page 42,43

4. T F The human body may be thought of as a system.

Ans: T Page 44

5. T F Communication and decision making are linking processes in an organizational system.

Ans: T Page 45,46

6. T F A foodservice organization is considered a closed system.

Ans: F Page 46

7. T F The term "equifinality" means that there is more than one way to achieve desired goals.

Ans: T Page 45

8. T F Rethermalization is the process of quick freezing prepared foods.

Ans: F Page 50,51

9. T F Food cost is more likely to be higher in an assembly serve system.

Ans: T Page 51

10. T F A ready prepared foodservice system would be the best choice where there is a shortage of skilled labor.

Ans: T Page 50

### **Matching**

(Match the part of the systems model with the term that belongs in this part of the system.)

- |                      |                           |
|----------------------|---------------------------|
| 1. environment       | A. comment cards          |
| 2. feedback          | B. contracts              |
| 3. inputs            | C. decision making        |
| 4. linking processes | D. information            |
| 5. outputs           | E. historical data        |
| 6. transformations   | F. personnel satisfaction |
| 7. memory            | G. production             |
| 8. controls          | H. suppliers              |

Answers:	1-H	Pages:	45
	2-A		45
	3-D		45
	4-C		45
	5-F		45
	6-G		45
	7-E		45
	8-B		45

(Match the type of foodservice system with the appropriate description.)

- |                   |  |
|-------------------|--|
| 1. assembly serve | A. time of preparation and service are separated               |
| 2. commissary     | C. time and place of preparation and service are not separated |
| 3. conventional   | B. place of preparation and service are separated              |
| 4. ready prepared | D. no on-premise food production                               |

Answers:	1-D	Pages:	47-51
	2-C		47-51
	3 B		47-48
	4-A		47-48

**Short Answer / Essay** (Answer the question completely and concisely in the space provided.)

1. Compare and contrast managerial effectiveness and efficiency. Give an example of each.

#### **Key Points**

- effectiveness may be measured by how well the organization achieves its objectives over time
- efficiency is a measure of achievement of short term objectives

Part 1: The Foundations---Chapter 2: The Systems Approach

2. Diagram the campus foodservice using the systems model

Page 45

3. Discuss the unique aspects of quality control in each of the four foodservice systems.

Key Points

- conventional: quality control is of primary importance; standard of quality is achieved through selection of recipes, menus, and ingredients and close monitoring of production
- commissary: only one unit to supervise rather than many; food safety and distribution are of concern in mass production; many areas of possible contamination; transport of food must be carefully monitored
- ready prepared: one unit to supervise, no delivery off premise required, close control possible over production, bacteriological hazards possible, must carefully control time/temperature relationships
- assembly serve: little control possible over food quality except in the selection of prepared items

Pages 47-54