

Distribution and Service

Enduring Understanding

- Quality service is a key element for a foodservice operation's success.

Learning Objectives

After reading and studying this chapter, you should be able to:

1. Explain the distribution and service subsystem.
2. Differentiate between centralized and decentralized service.
3. Describe benefits and constraints of various methods of distribution.
4. Compare and contrast counter, table, tray, quick, and self-service.
5. Compare and contrast service and experience economies.

Once food has been prepared in the production subsystem, it must be distributed to service areas and served to the customer. Attention to details in this process, or lack of it, can mean the difference between success and failure in a foodservice operation. In this chapter, we will review the distribution and service subsystem. Suggestions for service success are given.

FUNCTIONAL SUBSYSTEM: DISTRIBUTION AND SERVICE

Distribution and service is the third subsystem in the transformation element of the foodservice system (Figure 7-1). **Distribution** involves getting food from production to the point of service. **Service** is the presentation of food to the customer. Depending on the type of foodservice operation, distribution may or may not be a major function. Service, however, is a major component of all types of foodservice operations. Vending machines serve customers who want a snack or a quick meal, as does a waitperson in a fine dining restaurant under leisurely conditions.

Distribution is a major concern in hospital foodservices in which patients are served in individual rooms located on many floors and often in separate buildings. Ensuring that the appropriate food is sent to the appropriate place for service to a particular patient is a complex process, which is further complicated by the need to ensure that the food is at the right temperature and is aesthetically appealing. In contrast, in quick-service restaurant operations, where customers pick up the menu items directly after production and either go off premises for consumption or to a table in the facility, distribution is relatively simple. Takeout and home-delivered foods have become an important source of everyday meals.

Service takes many forms in a foodservice establishment, from that in the upscale fine dining restaurant involving several highly trained employees to that in the many self-service operations—cafeteria,

Distribution

Movement of food from production to service.

Service

Presentation of food to the customer.

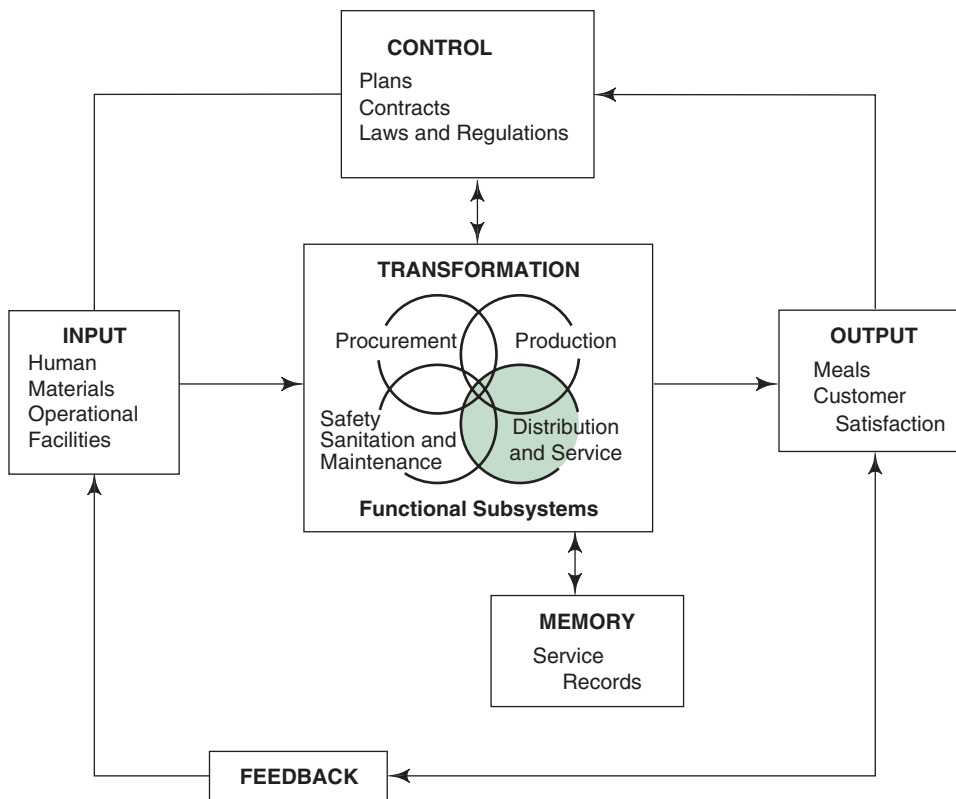


FIGURE 7-1 Foodservice systems model with the distribution and service subsystem highlighted.

vending, or buffet. The method, speed, and quality of the services provided impact the success of a foodservice establishment.

DISTRIBUTION

The distribution of food from production to the customer depends primarily on four factors:

- Type of production system in use
- Degree of meal preassembly prior to service
- Physical distance between production and service
- Amount of time between completion of production until the time of service

Foodservice managers must consider each when evaluating distribution options for their operation. Figure 4-1 (p. 65) illustrates the various process steps that can occur between production and service, creating the need for the distribution function.

Food that is prepared using conventional production and delivered immediately to the customer, as occurs in many restaurant operations, does not require special distribution equipment (Figure 4-3). The temperature and quality of the food are maintained because of the limited time between the completion of production of the food and its service to the customer.

As the time between the completion of production and the time of service increases and/or the distance between the two increases, the options for distribution practices and equipment also increase. Hot- and cold-holding equipment will be needed to maintain the proper temperature for various menu items as the time between production and service increases. Adherence to critical control points for proper serving temperatures is critical during the distribution process. If standards are not met, utensils and equipment must be washed, rinsed, and sanitized and the food product reheated to 165°F. Depending on the service areas, this holding equipment may be stationary or mobile. Some equipment is versatile and can be used for distribution, holding, and service. In some operations, most commonly those using a commissary or base kitchen conventional production system as described in Chapter 4, heated and chilled

prepared foods must be transported some distance from production to service. Adding the transportation process necessitates having equipment designed for maintaining temperatures during transportation. In some operations, electrically heated or cooled carts or trucks are used for this transport. Other operations use insulated carts for this transportation. Proper Hazard Analysis Critical Control Point (HACCP) monitoring becomes increasingly important during this process. Temperatures should be recorded before items leave the production area, after they arrive at the satellite unit, prior to the start of service, and periodically throughout service to ensure the safety of foods served.

As shown in Figure 4-1, the process of meal assembly adds another step between production and service and greatly increases the distribution equipment options. Meal assembly may be centralized or decentralized.

In a facility using centralized meal assembly, food trays are assembled for service at a central location close to the main production area. This centralized tray assembly can be done using a trayline or pod assembly process.

An example of a centralized trayline assembly unit is shown in Figure 7-2. The layout uses mobile equipment, which has been widely accepted because of its flexibility and the ease of facility maintenance that it provides. This setup can be readily rearranged or moved for cleaning. A tray slide is an integral component of a centralized trayline assembly operation. Meal trays are moved along the tray slide, allowing the placement of food products on the tray at stations positioned along the tray slide. The tray slide could involve manually pushing trays along a tray slide; having skate wheels or rollers on the tray slide to facilitate the movement of trays; or, more commonly, the use of a motorized belt made of fabric, metal slats, or rubber bandvays. Motorized belts have been designed as straight line or circular.

The pod tray assembly process deconstructs the traditional trayline assembly process into several small units that each are involved in assembling trays. A pod typically is T- or U-shaped with a steam table at its tip, one or two work tables and portable refrigerated units running perpendicular to the steam table. The pods are typically staffed by two or three people, one to dish hot food items and one or two to assemble trays. Often those who pass trays are the ones to assemble the trays. Schilling (2009) describes use of the pod tray assembly system at WakeMed Health & Hospitals, Shands at the University of Florida, NYU Langone Medical Center, and Saint Peter's University Hospital. Foodservice directors at these facilities indicate that the pod system reduces time to assemble trays and increases staff accountability as fewer people are responsible for assembling a tray.

Once trays have been assembled, they are placed in some form of cart for transportation to the service area. A variety of techniques are used to maintain food temperatures during the

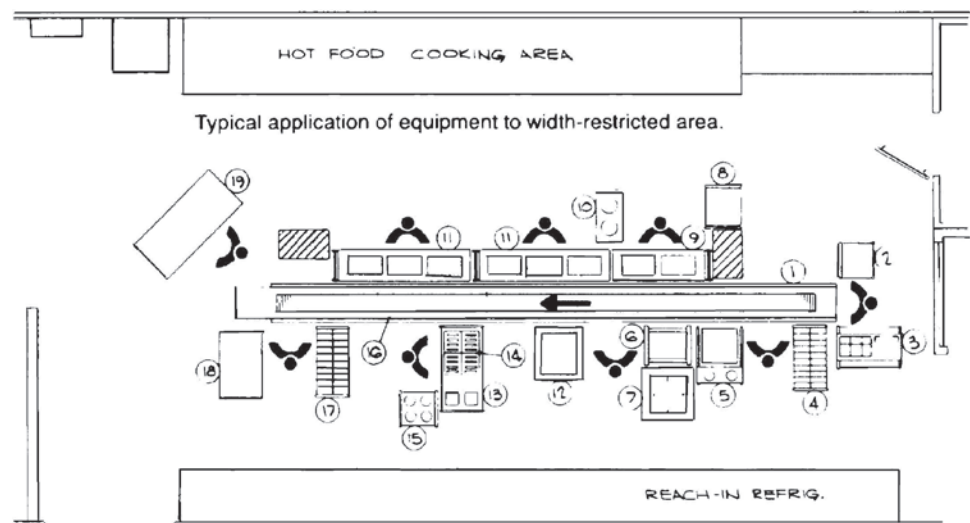


FIGURE 7-2 Centralized tray assembly unit. Source: Caddy Corporation of America, Pittman, NJ. Used by permission.

transportation process. Transportation carts may be motorized, pushed manually by employees, or moved with special moving equipment. **Automated guided vehicles (AGVs)**, or mobile robots, are being used in some large medical centers such as Ohio State University Medical Center to move meal carts from the kitchen to the patient units. Moving carts using AGVs greatly reduces the amount of labor needed in the delivery process.

Automated guided vehicles (AGVs)

Mobile robots used to move carts and supplies.

Meal trays assembled with foods produced in a conventional food production operation will need to have equipment designed for maintenance of both hot and cold temperatures. Methods of heat retention are described in Table 7-1. Heat maintenance can be achieved by placing plates of hot food items on specially designed bases that continue to generate heat during the transportation process or insulated bases designed to maintain current food temperatures. Chilled bases can be used to help maintain cold food temperatures. Food trays using heated or insulated bases typically are transported in closed carts, which do not have either heat or refrigeration. Insulated trays are used in many operations. Although these trays do not generate additional heat or refrigeration, they are designed with the insulation ability to maintain hot and cold temperatures for a period of time.

Several types of carts have been developed for maintaining both the hot and cold temperatures of food items. In some, often termed *split-tray carts*, all of the food items are placed on a single tray with hot foods on one half of the food tray and cold items on the other. This tray is inserted into a special cart that will maintain heat to half of the tray and refrigeration on the other

Table 7-1 Benefits and Constraints of Various Meal Distribution Methods

Type of Meal Distribution	Benefits	Constraints
Hot Thermal Retention		
Heated base (pellet, unitized base, induction heat base)	Support equipment and system operation are uncomplicated. No requirement for a special plate: any standard-size china. No special delivery cart is required.	Provisions for maintenance of cold items such as milk, salads, gelatin, ice cream are not made. Hot food cannot be held for a long period of time (more than 45 minutes). Additional service ware pieces need to be inventoried, stored, transported, and washed. Induction heat bases: difficult to determine if heating process initiated.
Insulated components	Only the dinner plate and food are insulated; there are no special bases to heat. Simple in operation. No burn hazard to the attendant or customer. No special delivery cart is required.	Additional service ware pieces need to be inventoried, stored, transported, and washed. Attractive insulated components are often taken home by patients as useful mementos of their hospital experience.
Heat support cart	Foods remain heated until tray is removed for service to the patient.	The potential for maintenance/repair problems is high. Carts can be heavy and difficult to maneuver. No provisions are made for maintenance of cold food items at proper temperatures.
Hot and Cold Thermal Retention		
Split tray	Centralized supervision and control of the meal assembly process. No reassembly of tray components is required in the service areas. Good temperature retention of both hot and cold items. System accommodates late trays within a reasonable period.	Cart is heavy and bulky. A motorized version may be required if any ramps are to be negotiated. Carts are difficult to sanitize. Initial cost of the cart is high and maintenance costs can be high. Due to the relatively heavy weight and limited maneuverability, carts and wall surfaces are subject to damage.

(Continued)

Table 7-1 (Continued)

Type of Meal Distribution	Benefits	Constraints
Match-a-tray insulated tray	<p>Same as described for split tray except that decentralized assembly of meal trays is required prior to service.</p> <p>Maintains hot and cold zones well without external heat or refrigerant sources.</p> <p>Simplicity of transport is achieved. Does not require a heavy, enclosed delivery cart. Stacked trays protect and insulate food.</p> <p>Less load on the dishwashing facility due to disposables.</p> <p>No complex components to repair, replace, or maintain.</p>	<p>Same as described for split tray.</p> <p>Additional labor prior to service is needed to reassemble the complete patient meal.</p> <p>Purchase of special disposable dishes results in higher-operational costs.</p> <p>Food-holding time is limited to 45 minutes.</p> <p>Long-range cost could be substantially higher than other systems due to disposable and lease costs.</p> <p>Hot foods may take on a “steamed” appearance in the hot compartment due to relatively small volume and lack of venting.</p> <p>Possible adverse patient reaction to eating from a compartmentalized tray.</p> <p>Trays can be difficult to sanitize completely due to deep cavity construction.</p> <p>Top and bottom tray compartments do not nest; more storage area required.</p> <p>Rigid presentation and placement of dishes is a limitation of the system.</p>
Insulated components	<p>Only the dinner plate and food are insulated. No bases to heat. Hot and cold foods are placed in insulated containers.</p> <p>There is no burn hazard to the attendant or customer.</p> <p>Cold food items can be held longer than 30 minutes.</p> <p>No special insulated delivery cart is required.</p>	<p>Additional service ware pieces need to be inventoried, stored, transported, and washed.</p> <p>Attractive insulated components are often taken home by patients as useful mementos of their hospital experience.</p> <p>Hot food-holding time is limited to 30 minutes.</p>
Cold Thermal Retention/Food Reheating		
Refrigerated carts with conduction heat units	<p>Centralized supervision and control of the meal assembly process.</p> <p>No reassembly of tray components in service area.</p> <p>Good refrigerated temperature retention.</p> <p>Good reheating of hot food items.</p>	<p>Carts can be difficult to sanitize.</p> <p>Initial cost of carts is high and maintenance cost can be high.</p> <p>Hot beverages must be added just prior to service.</p> <p>All hot food items must fit on plate or bowl to be on conduction base.</p>
Split cart—refrigerated and convection heat	<p>Same as described for refrigerated carts with conduction units.</p> <p>All food items, including hot beverages, can be placed on tray in central assembly area.</p>	<p>Cart is heavy and bulky.</p> <p>Initial cost of cart and refrigeration/reheating units very high.</p> <p>Space needed near point of service for refrigerated heating units.</p>
No Thermal Support		
Covered tray	<p>Tray is a simple standard unit.</p> <p>Equipment cost of the system is low.</p>	<p>Requires an immediate and responsive transportation system.</p> <p>High-labor component is required for transportation process.</p> <p>No thermal support is available for entrée and other food items.</p>

Source: Information from “State-of-the-Art Review of Health Care Patient Feeding System Equipment” in *Hospital Patient Feeding Systems* (pp. 168–172) by P. Hysen & J. Harrison, 1982. Washington, DC: National Academy Press.

half. *Match-a-tray* types of carts require that hot food items be placed in a heated compartment separate from the refrigerated portion of the tray. Tray delivery personnel then need to “match” the hot food items with the correct cold food tray prior to serving the meal tray.

In facilities using either a cook-chill or cook-freeze production system, a reheating process may be added between production and service (Figure 4-1). Table 7-2 details benefits and constraints of various reheating methods. Traditionally this reheating often took place in galley kitchens close to the point of service in microwave or convection ovens. Tray delivery personnel heated the food items for a meal tray before serving the tray. Equipment innovation has resulted in the development of carts that allow this reheating to occur in the carts used to transport assembled meal trays. One cart design has chilled plates or bowls of food being placed on food trays with cut-out openings. These openings allow for dishes to have contact with conduction heat plates when placed in special carts. These heating units heat the plate or bowl and its contents while the remainder of the tray remains chilled in the refrigerated cart. Separate conduction heat units also are available in which all food items to be heated are placed on heated shelves that transfer the heat to the plates or bowls of food. The tray delivery personnel must then assemble the trays prior to service. A newer concept incorporates the split-tray concept with convected heat, allowing cold foods on half of the tray to be held at refrigerated temperatures while the hot food items on the other half of the tray are reheated in a convected heat oven.

In **decentralized meal assembly**, the food products are produced in one location and transported to various locations for assembly at sites near the customer. Equipment to maintain proper temperatures—food warmers, hot food counters, and/or refrigerated equipment—must be provided at each location. Because some foods, such as grilled or fried menu items, do not transport or hold well, some cooking equipment may be available in the service units for these difficult-to-hold foods.

In **centralized meal assembly**, food items are prepared and assembled on trays before being transported to other locations for service. Even in centralized meal assembly, a few items such as coffee and toast may be prepared at point of service. Centralized assembly has the advantages of eliminating double handling of food and facilitating supervision of meal assembly because the activity takes place in one location rather than throughout the facility. In addition, centralized assembly allows for standardization of portions, uniformity of presentation, and decreased waste. Finally, less staff time is needed, and the space occupied by decentralized kitchens can be

Decentralized meal assembly

Food is prepared in one location and transported in bulk to a location separate from production and plates or trays of food are assembled in that location.

Centralized meal assembly

Plates or trays of food are assembled in area close to production.

Table 7-2 Benefits and Constraints of Various Heat Processing Methods

Method	Benefits	Constraints
Microwave ovens	Food is cooked very rapidly. “On-demand” patient feeding can be achieved.	Food is easily overcooked, and some foods tend to rethermalize unevenly, leaving hot and cold spots. Food does not brown, causing some foods to have an unnatural appearance. Trained operator is required to rethermalize all food products. Employee training is essential to the success of the program. Maintenance of microwave ovens can be a significant cost factor.
Convection ovens	Oven cavities can accommodate 12 to 30 meals at a time; thus higher efficiency can be achieved in the rethermalization and reassembly process as compared to a microwave system.	Speed is increased as compared to a conventional still-air oven; however, the process is not as fast as a microwave oven. Some food products experience excessive cooking losses; in others, there is a thickened surface layer on the food from the rethermalization process. Some food products do not rethermalize to a uniform temperature.
Conduction heat units	Equipment cavities can accommodate 12 to 24 meals at a time; thus all meals are ready for service at same time.	Cooking surfaces get very hot; employee burns possible. Cooking surfaces can be hard to clean when food is cooked onto surface. Reheating time can be 45 minutes.

used for other purposes. Decentralized meal assembly is still used in some institutions, however, because it offers the advantage of less time between meal assembly and service to patients, allowing for potentially higher-quality food. Decentralized facilities also offer greater flexibility in providing for individual customer needs and in making last-minute substitutions and changes.

Depending on the layout and design of the facility, a combination of meal assembly and distribution methods may be used. Some facilities may serve customers in groups onsite, conduct centralized meal assembly of individual meals, and transport foods to satellite units for service off-site.

CATEGORIES OF SERVICE

Service can be categorized in a variety of ways; in fact, a number of combination services exist. Service will be categorized as table service, counter service, quick service, self-service, tray service, takeout service, and delivery for discussion in this text. The table service restaurant with a self-service salad bar is an example of a combination of service types.

Service of food and beverages is one of the most diverse activities imaginable, assuming many forms and occurring in a wide range of places, at all hours of the day and night. Because of today's lifestyles, options can range from fine service with tableside preparation, to coffee and doughnuts in the factory, to hot dogs at the beach.

Table Service

Table service is a very common form of service in the commercial segment of the industry. Table service can be very simple or extremely elaborate; its distinguishing characteristic is service by a waitperson. In most table service operations, a hostess, host, or maître d'hôtel is responsible for seating guests in the dining room. Waitstaff personnel take orders from customers and deliver meals. Often separate bus staff are responsible for refilling beverages and clearing and cleaning tables.

The most common method of table service in the United States, often referred to as *American-style* service, involves plating the food in the kitchen or service kitchen and then presenting it to the guest. In more elaborate service, often referred to as *French style*, food is prepared at the table—as with bananas Foster or steak Diane. Another type of table service is called *family style*, in which food is brought to the table on platters or in bowls by the waitstaff and then passed around the table by guests. Restaurants featuring country fried chicken or barbecue ribs will frequently feature family-style service, as do some elementary schools, residential psychiatric facilities, and nursing homes.

A well-trained and courteous waitstaff and other service employees are the keys to successful table service operations. In upscale restaurants offering sophisticated service, the job of the waitstaff is highly specialized and truly an art.

Counter Service

Counter service often is found in diners, coffee shops, and other establishments in which patrons are looking for speedy service. People eating alone can join others at a counter and enjoy the companionship. The common arrangements of counter service provide not only fast service for a customer but also efficiency for the establishment. The counter attendant is usually responsible for taking the orders, serving the meals, busing dishes, and cleaning the counter and may even serve as cashier except at peak periods.

Self-Service

Self-service foodservice operations cover a wide spectrum; cafeteria service is one of the most commonly used forms. In self-service, the customer chooses what they want from displayed food items or service counters and goes to a central point to pay for the items. Other self-service operations include buffets, vending machines, refreshment stands in recreational and sports facilities, and mobile foodservice units that range from the small hot dog cart rolled down the street by the operator to sophisticated operations in motorized vans equipped for preparing a variety of menu items. Today's round-the-clock eating patterns in every imaginable place have created a demand that self-service satisfies.

Cafeteria service is characterized by advance preparation and self-service or employee-served of most, if not all, menu items. It is the predominant form of service used in onsite foodservice and employee-feeding operations. Self-busing of trays and dishes is also a common practice as a means of reducing labor costs. A great deal of emphasis is placed on food display, merchandising, and marketing of menu items.

The straight-line counter, which may vary greatly in length, was the most common cafeteria counter arrangement. Generally, the length of the counter varied with the quantity and variety of menu items instead of being dependent on the number of persons to be served.

An alternative arrangement to the straight-line counter is the hollow square, sometimes called the scramble or food court system. In this layout, the various stations or food counters are positioned to form three or four sides of a square, with space between the counters and perhaps a center island of food. This layout allows customers to move from one station to another without being held up by the entire line. The hollow square layout not only decreases lines but also permits more people to be served in a smaller space.

Quick service is used to describe service situations where the customer comes to a central ordering/pickup location to order and pay for food. Service staff take the order and collect payment for the order and then the order is assembled and given to the customer. In some cases the service staff assemble all or parts of the order; in other situations separate staff are used to take orders/collect payment and assemble orders. In some quick-service operations, the guest is given a number and their order is delivered to their table. Drive-through service is a form of quick service in which the customer places an order from their vehicle and “drives through” a designated area to pay for and pick up their order.

Buffet service has enjoyed increasing popularity in recent years in all types of foodservice. A buffet is a type of service where guests obtain all or a portion of their food from a buffet table. Periodic scheduling of buffets in a college residence hall foodservice, an employee cafeteria in a hospital, or an industrial foodservice operation can serve as a monotony breaker and a means of creating goodwill.

Buffet service enables a facility to serve more people in a given time with fewer employees. The usual procedure in commercial operations is for guests to select the entrée, vegetables, and salad from the buffet table before going to the dining table set with flatware, napkins, and water.

Vending machines, dubbed the silent salesperson with a built-in cash register, annually move billions of dollars of products and services to customers around the world. Selling items from machines is nearly as old as recorded history, but the impact of vending machines on the U.S. economy was not recognized before the middle 1940s. Even though the external customer communicates only with the vending machines, employees, the internal customer, work behind the scenes to ensure that customer needs are being met. Temperatures must be recorded daily on all perishable food, and strict adherence to the coding, product handling, and rotation procedures must be maintained. Sanitation procedures and schedules must be developed and checked. Employees servicing the machines also must be trained in customer relations because they represent the vending operation when interacting with the customer.

Many organizations use a contract company rather than setting up their own vending operation. The contract should be reviewed periodically as should the accident, liability, and hazard insurance carried by the vending supplier (Beasley, 1990). Also, the supplier’s compliance with city, county, state, and other regulatory agency standards should be checked. Before selecting a supplier, it can be helpful to visit the headquarters to see how and under what conditions the food is prepared. Competitive bidding has proven beneficial to the purchaser of the service, who can negotiate commission rates and replacement of equipment when necessary.

Foodservice directors who operate their own vending business have the opportunity to tailor a vending program to their customers’ needs. These directors should be innovative and creative in finding ways to make vending a profit center.

As markets shift and change, customer needs and preferences also change (Friedland, 1997). A study on snack vending revealed that customers wanted the following improvements: brand-name items, healthier selections, new items, and greater variety. These improvements and attractive machines are enhancing the perception of vending. Multiple-choice machines and a beverage machine often are teamed together to provide variety for the customer.

Vending machines have been modified to accept credit and debit cards. Other new payment options include the use of charge cards that permit customers or a department to be billed. The use of a debit card permits the customer's balance on hand to be reduced after each transaction.

Tray Service

Tray service, in which food is carried on a tray to a person by a foodservice employee, is used primarily in healthcare institutions and for in-flight meal service in the airline industry. Room service, in which food is served on a tray or on a cart in a customer's hotel or motel room or hospital room, is a variation of tray service.

In airline service, food is produced in a commissary by a food contractor that provides meals or snacks according to airline specifications. Specialized tray assembly equipment is tailored to the needs of the operation. In flight, thermal support is needed for heat processing of menu items and cold support for chilled items. Controls are required to ensure that the proper number of meals is provided and to monitor other items, ranging from dishes and flatware to individual tea bags. As an illustration of the complexity of airline service, the food may be loaded onto a plane at its departure location and the empty trays unloaded at the destination.

Many hospitals are shifting their traditional centrally assembled tray service process to an on-demand room service program. This room service program allows hospital patients to call the foodservice department and order their meals when they are ready to eat, similar to what a guest might do when staying in a hotel. The food and nutrition services department at Memorial Sloan Kettering Cancer Center in New York City changed to an on-demand room service-delivery process for its patients in 2001 and patient satisfaction and patient meal consumption increased. Cox (2005) indicated that the department's Press Ganey satisfaction scores increased from the 24th percentile to the 99th percentile and patient food consumption increased from 29 to 88% of patients consuming half of their food or more when the hospital implemented the on-demand room service option for patients.

Maintaining appropriate food temperatures and food quality are particular challenges with tray and/or room service. Often food is placed on the tray at a location separate from the point of service, requiring that food be transported to the point of service.

In healthcare facilities, the patient or resident often has selected food items from a menu for each meal. When centralized tray assembly is used, these menus usually precede the meal tray down the tray assembly line. Computerized diet office systems transfer the selected menu items into a printed tray ticket that organizes the selected menu items by station along the tray line, facilitating assembly of trays.

Another item of importance in hospitals is verifying the identification of the patient using two identifiers to ensure that the correct tray is going to the patient. A variety of identifiers are used, most often the patient's name, medical identification number, and/or birthday.

The staff serving meals often have limited contact with customers, so training of service staff is important. Often this service training includes **scripting**, the use of predetermined text designed for particular situations. For example, employees may have preset scripts for what to say when entering a patient room, when greeting a customer in the cafeteria, and so on. Training should focus on ways to create a positive experience for the customer during this brief encounter.

Takeout Service

One of the rapidly growing areas of foodservice operations is takeout service. American consumers are cooking less at home in part because of an increase in the number of family members who work outside of the home and the pressure to balance work and family life. Takeout service allows consumers to purchase food at one location and then enjoy that food in a location of their choice. According to Sloan (2005), more than half of all Americans purchase food each week through takeout or delivery services; 20% of restaurant orders are made from a vehicle. Quick-service restaurants are the primary provider of takeout food. Many onsite foodservice operations now offer **home meal replacement** programs, in which food items are packaged and sold as meals for consumption in the home. Often customers will call in advance to place a food order so that the food items can be quickly purchased from the foodservice operation.

Scripting

Employee saying predetermined text designed for particular situations.

Home meal replacement

Meal similar to one that is prepared in the home that can be purchased from a foodservice operation and taken or delivered to the home.

Delivery Service

Delivery service is another rapidly growing aspect of foodservice operations. Delivery service involves transporting prepared food items from the foodservice operation to the customer. Typically, delivery service is either to a customer's home or office location. A fee often is charged for this service. One challenge foodservice operators face in the delivery process is ensuring that proper food temperatures are maintained during the delivery process. Transportation equipment, such as a special cart or insulated container, usually is needed to facilitate the delivery process.

SERVICE MANAGEMENT

Service management is a philosophy, a thought process, a set of values and attitudes, and a set of methods, according to Albrecht and Zemke (1995). Transforming an organization to a customer-driven one takes time, resources, planning, imagination, and tremendous commitment by management.

Total Quality Service

Albrecht (1993, 1995) and Albrecht and Zemke (2001) suggest that organizations need to focus on creating a **total quality service (TQS)** model. The emphasis then is to take the long view and focus on the reason the organization exists, which is to serve. The TQS philosophy emphasizes that all quality standards and measures should be customer referenced and should help people guide the organization to deliver outstanding value to its customers. Quality standards should be a means to an end but not ends in themselves.

Since World War II, the world has been embracing a quality paradigm. Albrecht (1993) defines a **paradigm** as a mental frame of reference that dominates the way people think and act. The quality movement has focused primarily on zero defects in a product and very little on service quality. In the twenty-first century, the distinction between product and service will become obsolete. Those terms will be replaced by **total customer value**, the combination of the tangible and intangible experienced by customers at the various moments of truth that become their perception of doing business with an organization (Albrecht, 1993). Quality must start with the customer, not with the product or work process that creates it. A **paradigm shift**, which Barker (1992) defined as a new set of rules, from a quality to a total customer value paradigm is occurring in organizations.

Eating a meal in a restaurant often is a one-time, special event for a customer, but serving it is a repetitive, mundane occurrence for an employee. Customers cannot forget a bad experience; even if employees agree to do better the next time, it is too late. Good service may satisfy a customer but not always give total customer value. Exemplary service, however, delights customers by totally exceeding their expectations (Marvin, 1992). Customers keep a mental score and assign a subconscious point value to their experience; the more positive the experience, the higher the score. If the score is higher for one restaurant than for its competitors, the high-score operation becomes the restaurant of choice. If a competitor has a higher score, the original restaurant is in trouble. Any foodservice operation and its service are only as good as its staff.

The U.S. Department of Commerce has found that more than 90% of dissatisfied customers will drift over to the competition, but not always silently (Bode, 1993). This customer will tell as many as nine other people about the bad experience.

THE STAFF Delivering consistent, quality service requires having a well-trained staff. Staff employees need to have knowledge of service procedures, a friendly and concerned-for-customer attitude, and an ability to perform the needed service tasks. Many foodservice managers are empowering employees to make decisions that will contribute to a positive customer experience.

Cross-training is a technique being used by foodservice managers to involve employees in the total customer value concept. It usually results in a loyal staff because employees have the opportunity to understand how the foodservice operation works and to find out what is happening in each unit (Weinstein, 1992). Some operations have established a cross-training program in which a front-of-the-house employee starts as a buser at a minimum wage and progresses rapidly to a runner and finally a head runner at a higher salary. Then the employee works in

Service management

Philosophy, thought process, set of values and attitudes, and methods that focuses managers on the importance of service.

Total quality service (TQS)

Based on the assumption that all quality standards and measures should be customer referenced and help employees guide the organization to deliver outstanding value to customers.

Paradigm

Mental frame of reference that dominates the way people think and act.

Total customer value

Combination of the tangible and intangible experienced by customers that become their perception of doing business with an organization.

Paradigm shift

Changing the way one views a situation.

Cross-training

Training employees to be able to perform multiple jobs in the organization.

the kitchen at yet a higher salary to see how it operates, learns the computer program, and observes how management handles relationships between front- and back-of-the-house employees. Kitchen employees are given the same opportunity in the dining areas. This cross-training can break down barriers between employees in the front and back of the house, creating a climate that adds to total customer value. For example, cooks who have been cross-trained begin to realize that demands of the waitstaff are not personal demands but are demands of customers.

In some of the fine dining restaurants patterned after those in Europe, service is considered an honorable profession and a career (Ryan, 1993). All new staff, regardless of experience, must go through an apprenticeship program that might last a year to become a fully qualified waitperson. Other operations often have a rigorous and lengthy training program that uses written tests covering a general knowledge of the restaurant and its foods and wines and essays on hypothetical situations that might happen in the restaurant.

Burnout, emotional exhaustion, and loss of enthusiasm for the job are common among many employees in the workforce. Satisfaction of employees with their jobs should be thoroughly examined by management because it can have a great effect on the quality of service. Often managers take advantage of good employees and overload them with tasks. Employees should be praised when they do a good job.

THE SPECIAL CUSTOMER Customers have been mentioned many times in this text—their demographics, lifestyles, and menu preferences. The importance of pleasing customers has been discussed in every chapter, but what about customers who don't fit the typical pattern but fit into special groups and have to, or choose to, eat away from home?

Restaurant customers often are considered transient, especially during vacation times when they stop to eat in a restaurant on the way to their destination. Most restaurants could not survive if customers only visit during vacations or for special events. Restaurateurs find many ways to thank their regular customers for being loyal and steady customers. A chain of restaurants in California rewards its customers who dine regularly at their restaurants with priority reservations by giving them a plastic card with special telephone numbers. When that telephone rings, the front-of-the-house employee knows a steady customer is calling for a reservation, usually for the same day. Top priority is given to that customer.

A restaurant in Virginia Beach has created a TLC (The Local Customer) program. Locals qualify as frequent diners by eating at the restaurant 10 times during off-season, which runs from September through February. They become card-bearing regulars, which qualifies them to reserve a table during peak season, when reservations are not accepted. They also receive bonuses including a complimentary special, such as an appetizer or a glass of wine. The secret of getting customers to return is to make them feel special.

Staff in many operations are being trained to be more sensitive to solo diners. Dining room designers have come up with ideas to make these customers comfortable. Booths are desired by many of these customers, who usually come prepared with a book or magazine and appreciate more space. Another design idea that gives flexibility to single diners is a banquette, which is an upholstered sofa that runs along a wall and forms a long seating space. Small tables for one to four customers are placed in front of the banquette. Tables for one are no longer being placed in corners or outside the kitchen door, but are being distributed throughout the area. Single-dining areas that cater to travelers and local singles are being incorporated into some main dining rooms. Also, place settings often are laid out at the bar, especially at lunchtime, for businesspeople dining alone.

Many restaurants now have children's menus and games to keep children busy while parents eat. Some foodservice operations are even offering childcare to customers.

People with disabilities often were not able to eat away from home because restaurants and transportation were not accessible to them, especially if they were in wheelchairs. Hearing and visual impairments also are considered disabilities. With the passage of the Americans with Disabilities Act (ADA) in 1992, public accommodation rules took effect. Front door, aisle, table, self-service, and restroom access must be available to customers with disabilities. ADA rules apply not only to restaurants but also to all onsite foodservice operations. Hospital and nursing home foodservice managers have had more experience in feeding people with disabilities than have any other managers, but they still must comply with the ADA rules.

Managing Service

Romm (1989) stated that the business of the restaurant takes place in the social space created between the guest and the server. Improving the consistency and quality of the service staff and treatment of customers can be a problem facing the foodservice industry. Managers would like to generate friendly behavior that will be perceived as authentic between the waitstaff and customers. This process requires two steps. First, more attention must be focused on service employees, and their place in the business structure should be reexamined; and second, techniques being used to change employees' behavior need to be examined. Service employees are expected to nurture and entertain customers, but management seldom nurtures employees. The most common response to a need for increasing profits is to reduce payroll expenses by reducing labor hours; yet the employee is expected to deliver good service to customers.

According to Martin (2002), achieving quality customer service requires excellence in both the procedural and personal dimensions of customer service. His model of quality service describes four basic patterns of customer service:

- **Freezer.** A pattern of service in which there is poor procedural and personal service; it conveys the message, "We don't really care about you."
- **Factory.** A pattern of service that is skewed toward procedural efficiency; service may be timely and efficient but employees are cold and impersonal, leaving customers with the impression, "You are a number. We are here to process you as efficiently as we can."
- **Friendly zoo.** A pattern of service in which employees are very friendly, genuine, and caring, but service is slow, inconsistent, and disorganized; it sends a message to the customer that "We are trying hard, but we don't really know what we are doing."
- **Quality customer service.** A pattern of service in which both personal and procedural dimensions are handled well; it conveys the message, "We care about you, and we deliver."

The procedural dimension of service quality focuses on the type and timing of service and includes timeliness, incremental flow, anticipation, communication, feedback, accommodation, and organization and supervision. The personal dimension focuses on the style of service and includes three key indicators: attitude, verbal skills, and behavior.

Martin (2002) suggests a six-step approach to quality customer service. The desired outcome is not only the proper service knowledge and attitude but also server behavior patterns necessary for providing quality service. Martin's six-step approach is as follows:

1. Understand customer procedural and personal service expectations.
2. Establish a quality service culture and leadership climate.
3. Institute clear and concise service-delivery standards.
4. Incorporate service standards into organizational systems.
5. Assess progress and reward successes.
6. Continually work on improving quality service.

No matter how well service employees have been trained, they will be challenged at some point to handle service failure situations. According to Ford and Heaton (2000), how the service recovery is handled is much more important to customers than the original failure. A company's ability to recover from a service failure impacts customer likeliness to return to that operation. Martin (2002) recommends a seven-step gracious problem-solving process to help increase the potential for a positive service recovery:

1. The service provider **LISTENS** carefully to the complaint or problem.
2. The service provider **REPEATS** the complaint or problem to get acknowledgment that the customer has been heard correctly.
3. Somewhere along the way, the service provider **APOLOGIZES** to the customer, regardless of who is responsible for the problem or complaint.
4. The service provider **ACKNOWLEDGES** the guest's feelings (anger, frustration, disappointment, etc.). This is an important step that helps establish a nondefensive problem-solving approach.

5. The service provider **MAKES** problem solving a two-way process by asking the customer how he or she would like the problem resolved.
6. The service provider **EXPLAINS** what action can be taken to solve the problem or revert a wrong into a right.
7. The service provider **SAYS** “thank you” to the guest for bringing the problem or complaint to his or her attention.

Tipping

Tipping waitstaff has been a common practice in table and counter service restaurants and for hotel room service delivery in the United States. In Europe, a common practice is to add a service charge to restaurant or hotel bills. Tipping is becoming more common for employees who deliver foods to office or home locations. Tips are voluntary; service charges are not. The service charge is a predetermined amount added to each customer's check and is considered part of the restaurant's gross receipts subject to income tax; it is not a tip. The employer is under no obligation to give the service charge to the waitstaff. In most cases, however, all employees benefit from it by increases in wages. Tips left in addition to service charges belong to the waitstaff and are treated the same as all voluntary tips by wage and tax laws.

The foodservice manager must be aware of federal and state legislation and regulations that have provisions covering tipping and tipped employees. Employee tips are a source of income. This income must be reported to all applicable agencies. Although ultimately the responsibility of tip reporting is an employee's, foodservice operations can be required to pay payroll tax on tip income if unreporting is found.

The Internal Revenue Service (IRS) has established three types of voluntary compliance agreements for reporting tips: Tip Reporting Alternative Commitment (TRAC), Tip Rate Determination Agreement (TRDA), and Employer-designed Tip Reporting Alternative Commitment (EmTRAC). Each varies according to whether employees sign agreements, what type of employee training is needed, how tips will be reported, and what information is provided to the IRS. Additional information is available at www.irs.gov.

Service Controls

Handling and controlling guest checks is another concern of managers in using a waitstaff. One element of effective control is to ensure that all menu items are charged to the customer. Traditionally a duplicate check procedure was widely used in which the waitperson wrote the order on a customer check, simultaneously preparing a carbon duplicate that was submitted to the production area to obtain menu items. Computers are now much more commonly used as a means of documenting customer orders and transmitting orders to the production area.

Another element of control is to charge proper prices for menu items. Electronic cash registers with preprogrammed prices and computerized systems are widely used for this reason. The prices are stored in the electronic system and do not allow staff to charge differential pricing.

Many restaurants accept credit cards as a means of payment. Most restaurant chains use the swipe method of authorizing credit card transactions. The credit card number is used to authorize the transaction and check the card against a computer file of lost or stolen cards within seconds. Customers ordering home or office delivery of food by telephone can give the order taker their card number, and authorization is obtained while they wait.

EXPERIENCE ECONOMY

Pine and Gilmore (1999) contend that we have moved from a service economy to an experience and transformative economy. In their book *The Experience Economy*, the authors describe the movement of the U.S. economy from one based on commodities to one in which value is gained by experiences. As an example, they describe the commodity economy as one in which people grew/raised their own food products such as vegetables and livestock. In the late 1800s, we

began to manufacture goods and people began to buy food products at the local market or grocery store. This launched what the authors refer to as a goods economy. By the 1950s, we had moved into the service economy, where people would go out to restaurants to eat their food. In the 1990s, the experience economy became more prevalent, which involves creating an experience for the customer such as that created in places like Hard Rock Café, Rainforest Café, and Starbucks. Creating an experience for customers in restaurants and onsite foodservice operations involves engaging them. Pine and Gilmore describe this engagement using two dimensions: participation and connection/environmental relationship. Participation ranges from passive to active and environmental relationship from absorption (mental engagement) to immersion (physical involvement).

Using these two dimensions, Pine and Gilmore propose four realms for creating an experience: entertainment, education, escapism, and estheticism. *Entertainment* (passive participation and absorption connection) provides a way to help people enjoy themselves while eating. The animated stage characters that perform at Chuck E. Cheese's are one such example. *Education* (active participation and absorption connection) involves experiences that engage the mind. For example, signage in a hospital cafeteria sharing nutrition information and information about the local growers/producers who supplied the food being served are ways in which education can occur with a dining experience. A guest experiencing *escapism* would actively participate and be immersed in the experience. The Mars 2112 restaurant offered such an experience; guests were "transported" to the planet Mars for their dining experience. The final experience realm, *estheticism*, involves passive participation but immersion in the environment. A meal at Rainforest Café is an esthetic experience.

Foodservice managers should consider ways to incorporate the four Es into their operations. Moving beyond the service economy to the experience economy will require managers to consider ways to incorporate entertainment, education, escapism, and estheticism into their dining operation.

Gilmore and Pine (2007) suggest that in the experience economy, consumers are looking for authenticity. They describe five genres of perceived authenticity and suggest businesses will be more successful if they incorporate authenticity in their strategic planning:

- **Natural authenticity.** Perceived as authentic because it is in its natural state, not artificial or synthetic; for example, organic foods and handmade soap.
- **Original authenticity.** Perceived as authentic because of its original design or being first of its kind, not a copy, such as the iPod and Coca-Cola in glass bottles.
- **Exceptional authenticity.** Perceived as authentic because what they do is done exceptionally well, executed individually; for example, Nordstrom, Ritz-Carlton, and Cuban cigars.
- **Referential authenticity.** Perceived as authentic because of the inspiration from human history or shared memories; for example, the Chinese tea ceremony and neon lights in Las Vegas.
- **Influential authenticity.** Perceived as authentic because of influence exerted on others, calling human beings to a higher goal; for example, Hard Rock Café's "Save the Planet" environmental slogan and The Eden Alternative elderly housing.

The Foodservice Institute of America hosted a national conference of foodservice industry professionals to discuss the concepts of experience economy and authenticity and how they might be incorporated into foodservice operations. A white paper published from the conference (Barsamian & Hammar, 2009) details strategies for foodservice operators to provide more authentic experiences for customers including:

- Craft and stage memorable customer experiences
- Customize product and service offerings for each customer
- Be authentic in products and services provided
- Train employees to provide the desired experience for customers
- Use technology
- Resolve customer complaints quickly being sincere and genuine.

Chapter Summary

This summary is organized by the learning objectives.

1. Distribution and service is one of the functional subsystems in the foodservice system model. Distribution involves getting food from production to the point of service. Service is the presentation of food to the customer.
2. Centralized service involves assembling plates of food for service in a location adjacent to the preparation area. Decentralized service involves transporting food in bulk to a location separate from the production area and assembling plates of food in that distant location.
3. Table 7-1 provides details regarding the benefits and constraints of various meal distribution systems.
4. Several methods exist for serving food to customers. Counter service involves customers sitting on stools on one side of a counter and being served by staff who work on the opposite side of the counter. Table service involves customers being seated at a table and a waitstaff member taking food orders and serving the meals. Tray service involves an employee carrying food to a customer on a tray, and self-service occurs when customers select the food items they would like from display cases.
5. The service economy focused on the service of food to customers in a dining operation. The experience economy expands the service to include an entertainment, educational, escapism, or estheticism experience.

Test Your Knowledge

1. Discuss how type of production system, degree of meal pre-assembly, physical distance from production to service, and amount of time between production and service impact the distribution and service subsystem.
2. Describe the differences among at least three different methods for reheating food items.
3. Explain three categories of service.
4. What is TQS? Why is it important to a foodservice operation?
5. How does a foodservice manager control quality service?

Class Projects

1. Divide into teams of two to three students. Each team should visit a different type of foodservice operation (i.e., school, restaurant, hospital, and nursing home). Observe the distribution and service process at that operation, write a summary of the process, and share with the class.
2. Invite the manager of a local foodservice operation to speak to the class about how he or she trains staff members about quality service.
3. Develop a questionnaire to evaluate service at a foodservice operation. Visit a local foodservice operation as a mystery shopper and evaluate the service.
4. Work with a local foodservice operation to design entertainment, educational, escapism, or estheticism experiences for the operation.

Case Study Exercises

1. “Deliver Me from Complaints” in Lieux, E. M., & Luoto, P. K. (2008). *Exploring foodservice systems management through problems*, 3rd ed. Upper Saddle River, NJ: Pearson Prentice Hall.
2. “Give Me Five” in Lieux, E. M., & Luoto, P. K. (2008). *Exploring foodservice systems management through problems*, 3rd ed. Upper Saddle River, NJ: Pearson Prentice Hall.
3. Implementing Room Service in the Hospital by N. E. Robinson in Allen-Chabot, A., Jarvis, K., & O’Halloran, R. M. (2006). *Cases in foodservice and clinical nutrition management*. Upper Saddle River, NJ: Pearson Prentice Hall.
4. Evaluation of Patient Satisfaction Using Two Different Tray Systems by A. Knoblcok-Holm in Allen-Chabot, A., Jarvis, K., & O’Halloran, R. M. (2006). *Cases in foodservice and clinical nutrition management*. Upper Saddle River, NJ: Pearson Prentice Hall.

Web Sources

www.irs.gov U.S. Internal Revenue Service
www.isixsigma.com iSixSigma Service Quality

www.nafem.org North American Association of Food Equipment Manufacturers

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