Chapter 1

The Service Economy

Learning Objectives

After completing this chapter, you should be able to:

1. Describe the central role of services in an economy.
2. Identify and differentiate the five stages of economic activity.
3. Describe the features of preindustrial, industrial, and postindustrial societies.
4. Describe the features of the experience economy contrasting the consumer (B2C) with the business (B2B) service experience.
5. Explain the essential features of the service-dominant logic.
6. Identify and critique the six distinctive characteristics of a service operation, and explain the implications for managers.
7. Describe a service using the five dimensions of the service package.
8. Use the service process matrix to classify a service.

We are witnessing the greatest labor migration since the industrial revolution. This migration from agriculture and manufacturing to services is both invisible and largely global in scope. The migration is driven by global communications, business and technology growth, urbanization, and low-cost labor. Service industries are leaders in every industrialized nation, they create new jobs that dominate national economies, and have the potential to enhance the quality of life of everyone. Many of these jobs are for high-skilled knowledge-workers in professional and business services, health care, and education. As shown in Table 1.1, the extent of this movement to services is significant in the industrialized nations (European Union, United States, and Japan) but also represents a proportion of the labor force larger than that employed in goods production for the developing BRIC economies (Brazil, Russia, India, and China).

Chapter Preview

In a discussion of economic development, we learn that modern industrialized economies are dominated by employment in the service sector industries. This represents a natural evolution of economies from preindustrial to industrial and finally to postindustrial societies. The nature of the service economy is explored in terms of employment opportunities and the transition to experienced-based relationships for both consumers and businesses.

The distinctive characteristics of service operations suggest that the service environment is sufficiently unique to question the direct application of traditional manufacturing-based management techniques. In particular, the service manager operates in a system in which the customer is present and a co-creator of value. The concept of a service package to describe a service from an operations point of view is the foundation for an open-systems view of service management challenges. We begin with a selection of service definitions.

Service Definitions

Many definitions of service are available but all contain a common theme of intangibility and simultaneous consumption. The following represent a sample of service definitions:

Services are deeds, processes, and performances. (Source: Valarie A. Zeithaml, Mary Jo Bitner, and Dwayne D. Gremler, *Services Marketing,* 4th ed., New York: McGraw-Hill, 2006, p. 4.)

Services are economic activities offered by one party to another, most commonly employing time-based performances to bring about desired results in recipients themselves or in objects or other assets for which purchasers have responsibility. In exchange for their money, time, and effort, service customers expect to obtain value from access to goods, labor, professional skills, facilities, networks, and systems; but they do not normally take ownership of any of the physical elements involved. (Source: Christopher Lovelock and Lauren Wright, *Services Marketing: People, Technology, Strategy,* 6th ed., Upper Saddle River, NJ: Prentice-Hall, 2007, p. 6.)

A service system is a value-coproduction configuration of people, technology, other internal and external service systems, and shared information (such as language, processes, metrics, prices, policies, and laws). (Source: Jim Spohrer, Paul Maglio, John Bailey, and Daniel Gruhl, *Computer,* January 2007, p. 72.)

Facilitating Role of Services in an Economy

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Facilitating Role of Services in an Economy

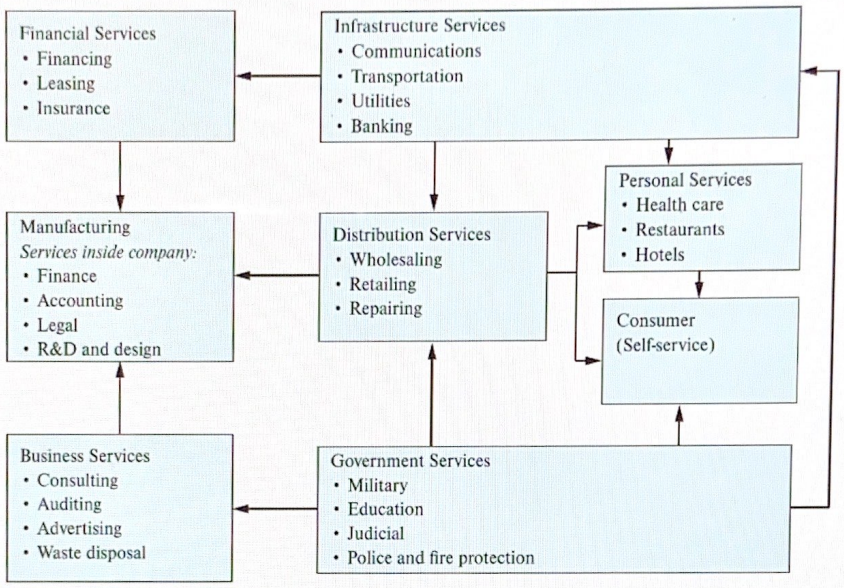
As shown in Figure 1.1, services are central to the economic activity in any society. Infrastructure services, such as transportation and communications, are the essential foundation of an economy. Both infrastructure and distribution services function as economic intermediaries and as the channel of distribution to the final consumer. Infrastructure and distribution services are a prerequisite for an economy to become industrialized; therefore, no advanced society can be without these services.

In an industrialized economy, specialized firms can supply business services to manufacturing firms more cheaply and efficiently than manufacturing firms can supply these services for themselves. Thus, we find advertising, consulting, and other business services being provided for the manufacturing sector by service firms.

Except for basic subsistence living, where individual households are self-sufficient, service activities are absolutely necessary for the economy to function and to enhance the quality of life. Consider, for example, the importance of a banking industry to transfer funds and a transportation industry to move food products to areas that cannot produce them. Moreover, a wide variety of personal services, such as restaurants, lodging, and child care, have been created to move former household functions into the economy. In fact, the consumer performing self-service activities is a service contributor often using technology (e.g., boarding kiosk) to eliminate non-value-adding tasks or affording personalization and control (e.g., online brokerage).

FIGURE 1.1
Role of Services in an Economy

Source: Bruce R. Guile and James Brian Quinn, eds., *Technology in Services: Policies for Growth, Trade, and Employment*, Washington, D.C.: National Academy Press, 1988, p. 214.



Government services play a critical role in providing a stable environment for investment and economic growth. Services such as public education, health care, well-maintained roads, safe drinking water, clean air, and public safety are necessary for any nation's economy to survive and people to prosper.

Increasingly, the profitability of manufacturers depends on exploiting value-added services. For example, automobile manufacturers have discovered that financing and/or leasing automobiles can achieve significant profits. Otis Elevator long ago found that revenues from after-sales maintenance contracts far exceed the profits from elevator equipment sales. This revenue enhancement strategy by manufacturers of deliberately coupling a service with their product is referred to as *servitization*. Almost every product today has a service component.

Thus, it is imperative to recognize that services are not peripheral activities but rather integral parts of society. They are central to a functioning and healthy economy and lie at the heart of that economy. Finally, the service sector not only facilitates but also makes possible the goods-producing activities of the manufacturing sectors. Services are the crucial ingredient for today's global economy.

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Economic Evolution

In the early 1900s, only 3 of every 10 workers in the United States were employed in the services sector. The remaining workers were active in agriculture and industry. By 1950, employment in services accounted for 50 percent of the workforce. Today, services employ about 8 out of every 10 workers. Since WWII, we have witnessed a major evolution in sector employment from being predominantly manufacturing and agriculture to being predominantly services. This change in employment opportunities has made a significant impact on culture, demographics, and education.

Economists studying economic growth are not surprised by these events. Colin Clark argues that as nations become industrialized, there is an inevitable shift of employment from one sector of the economy to another.[1] As productivity (output/labor-hour) increases in one sector, the labor force moves into another. This observation, known as the *Clark-Fisher hypothesis,* leads to a classification of economies by noting the activity of the majority of the workforce.

Stages of Economic Activity

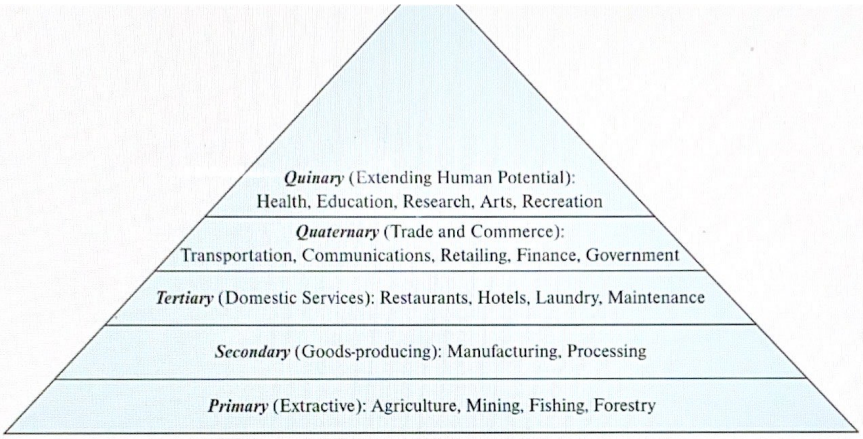

Figure 1.2 describes a hierarchy of economic activity. Many economists, including Clark, limited their analyses to only three stages, of which the tertiary stage was simply services. We have subdivided the service stage to create a total of five stages.

Today, an overwhelming number of countries still are in a primary stage of development. These economies are based on extracting natural resources from the land. Their productivity is low, and income is subject to fluctuations based on the prices of commodities such as sugar and copper. In much of Africa and parts of Asia, more than 70 percent of the labor force is engaged in extractive activities.

Figure 1.3 shows the rapid increase in service employment in the United States and illustrates the almost mirror image decline in agriculture employment. This sector employment trajectory is repeated for all of the nations represented in Table 1.1. We can observe that migration to services is a predictable evolution in the workforce of all nations, and successful industrial economies are built on a strong service sector. Furthermore, competition in services is global. Consider the growth of Indian call centers and British financial services. Trade in services remains a challenge, however, because many countries erect barriers to protect domestic firms. India and Mexico, for example, prohibit the sale of insurance by foreign companies.

Stages of Economic Development

Describing where our society has been, its current condition, and its most likely future is the task of social historians. Daniel Bell, a professor of sociology at Harvard University, has written extensively on this topic, and the material that follows is based on his work.[2]

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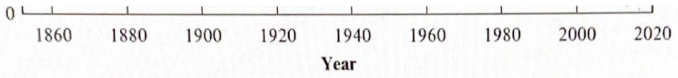
Preindustrial Society

The condition of most of the world's population today is one of subsistence, or a *preindustrial society*. Life is characterized as a game against nature. Working with muscle power and tradition, the labor force is engaged in agriculture, mining, and fishing. Life is conditioned by the elements, such as the weather, the quality of the soil, and the availability of water. The rhythm of life is shaped by nature, and the pace of work varies with the seasons. Productivity is low and bears little evidence of technology. Social life revolves around the extended household, and this combination of low productivity and large population results in high rates of underemployment (workers not fully utilized). Many seek positions in services, but of the personal or household variety. Preindustrial societies are agrarian and structured around tradition, routine, and authority.



Industrial Society

The predominant activity in an *industrial society* is the production of goods. Energy and machines multiply the output per labor-hour and structure the nature of work. Division of labor is the operational "law" that creates routine tasks and the notion of the semiskilled worker. Work is accomplished in the artificial environment of the factory, and people tend the machines. Life becomes a game that is played against a fabricated nature—a world of cities, factories, and tenements. The rhythm of life is machine-paced and dominated by rigid working hours and time clocks. Of course, the unrelenting pressure of industrial life is ameliorated by the countervailing force of labor unions.

An industrial society is a world of schedules and acute awareness of the value of time. The standard of living becomes measured by the quantity of goods, but note that the complexity of coordinating the production and distribution of goods results in the creation of large bureaucratic and hierarchic organizations. These organizations are designed with certain roles for their members, and their operation tends to be impersonal, with persons treated as interchangeable. The individual is the unit of social life in a society that is considered to be the sum total of all the individual decisions being made in the marketplace.

Postindustrial Society

While an industrial society defines the standard of living by the quantity of goods, the *postindustrial society* is concerned with the quality of life, as measured by services such as health, education, and recreation. The central figure is the professional person, because rather than energy or physical strength, information is the key resource. Life now is a game played among persons. Social life becomes more difficult because political claims and social rights multiply. Society becomes aware that the independent actions of individuals and organizations can combine to create havoc for everyone, as evidenced by environmental pollution and traffic congestion. The community rather than the individual becomes the social unit.

Bell suggests that the transformation from an industrial to a postindustrial society occurs in many ways. First, there is a natural development of services, such as transportation and utilities, to support industrial development. As laborsaving devices are introduced into the production process, more workers engage in nonmanufacturing activities, such as maintenance and repair. Second, growth of the population and mass consumption of goods increase wholesale and retail trade, along with banking, real

estate, and insurance. Third, as income increases, the proportion spent on the necessities of food and home decreases, and the remainder creates a demand for durables and then for services.

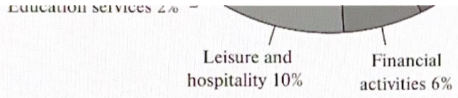
Ernst Engel, a Prussian statistician of the 19th century, observed that as family incomes increase, the percentage spent on food and durables drops while consumption of services that reflect a desire for a more enriched life increases correspondingly. This phenomenon is analogous to the Maslow hierarchy of needs, which says that once the basic requirements of food and shelter are satisfied, people seek physical goods and, finally, personal development. However, a necessary condition for the "good life" is health and education. In our attempts to eliminate disease and increase the span of life, health services become a critical feature of modern society.

Higher education becomes the condition for entry into a postindustrial society, which requires professional and technical skills of its population. Also, claims for more services and social justice lead to a growth in government. Concerns for environmental protection require government intervention and illustrate the interdependent and even global character of postindustrial problems. Table 1.2 summarizes the features that characterize the preindustrial, industrial, and postindustrial stages of economic development.

Nature of the Service Sector

For many people, *service* is synonymous with *servitude* and brings to mind workers flipping hamburgers and waiting on tables. However, the service sector that has grown significantly over the past century cannot be described accurately as composed only of low-wage or low-skill jobs in hotels and fast-food restaurants. Instead, as Figure 1.4 shows, approximately 27 percent of the total employment in 2014 occurred in high-skill service categories such as professional and business services, health care and social assistance, and educational services.

Changes in the pattern of employment will have implications on where and how people live, on educational requirements, and, consequently, on the kinds of organizations that will be important to that society. Industrialization created the need for the semiskilled worker who could be trained in a few days to perform the routine machine-tending tasks. The subsequent growth in the service sector has caused a shift to white-collar occupations. In the United States, the year 1956 was a turning point. For the first time in the history of industrial society, the number of white-collar workers exceeded the number of blue-collar workers, and the gap has been widening since then. The most interesting growth has been in the managerial and professional–technical fields, which are jobs that require a college education.



Today, service industries are the source of economic leadership. During the past 30 years, more than 44 million new jobs have been created in the service sector to absorb the influx of women into the workforce and to provide an alternative to the lack of job opportunities in manufacturing. The service industries now account for approximately 70 percent of the national income in the United States. Given that there is a limit to how many cars a consumer can use and how much one can eat and drink, this should not be surprising. The appetite for services, however, especially innovative ones, is insatiable. Among the services presently in demand are those that reflect an aging population, such as geriatric health care, and others that reflect a two-income family, such as day care.

During the past four recessions in the United States (the exception being the 2008 bank crash), employment by service industries fell much less than the loss of jobs in manufacturing. This suggests that consumers are willing to postpone the purchase of products but will not sacrifice essential services like education, telephone, banking, health care, and public services such as fire and police protection.

Several reasons can explain the recession-resistant nature of services. First, by their nature, services cannot be inventoried, as is the case for products. Because consumption and production occur simultaneously for services, the demand for them is more stable than that for manufactured goods. When the economy falters, many services continue to survive. Hospitals keep busy as usual, and, while commissions may drop in real estate and insurance, employees often need not be laid off.

Second, during a recession, both consumers and business firms defer capital expenditures and instead fix up and make do with existing equipment. Thus, service jobs in maintenance and repair are created.

The Experience Economy

The nature of the service economy has moved past the transactional nature of services to one of experience-based relationships. Consider how Starbucks and Disney World have defined their respective services as an experience. Table 1.3 describes the features of different economies in the historical evolution from agrarian to experience. To appreciate the subtle differences, pay particular attention to the words used to describe each economy. Note that the *experience economy* is further divided into consumer services and business services.

Method of Supply	Stored in bulk	Inventoried	Delivered on demand	Revealed over time	Sustained over time
Seller	Trader	Producer	Provider	Stager	Collaborator
Buyer	Market	Customer	Client	Guest	Collaborator
Expectation	Quantity	Features	Benefits	Sensations	Capability

Consumer Service Experience

Business-to-customer (B2C) experiences create added value by engaging and connecting with the customer in a personal and memorable way. As businesses explicitly charge for the memorable encounters they stage, we transition from a service economy to the new experience economy. Figure 1.5 displays four types of consumer experiences characterized by the level of customer participation and level of interaction with the environment. Entertainment (e.g., watching a movie) is the least involved level of experience and escapist (e.g., scuba diving) requires the most commitment from the customer.

Consumer service experience design is based on five principles. *Theme the experience* is illustrated by the Forum Shops in Las Vegas that are decorated with Roman columns and where salespeople wear togas. An example of *harmonize impressions with positive cues* is found at the O'Hare Airport Parking Garage where each floor is painted with a distinctive color and unique music is played to help returning travelers find their parked automobiles (e.g., hard rock on the first floor and classical on the second). *Eliminate negative cues* is illustrated creatively by the use of talking trash containers (i.e., the container says "thank you" when an item is discarded) at a Cinemark Theater in Austin, Texas. An example of *mix in memorabilia* is providing group pictures of vacationers at Club Med. *Engage all five senses* is found at the Rainforest Café in Las Vegas (e.g., jungle sounds and mist in the air).

Business Service Experience

For business-to-business (B2B) services, value is derived from the coproduction or collaborative nature of the relationship such as we see in a consultancy engagement. The B2B service experience has three dimensions:

Co-creation of value

- The customer is a coproducer of the value extracted from the relationship.
- The customer is an input to the service process.

Relationships

- The relationship with the customer is of paramount importance because it is a source of innovation and differentiation.
- Long-term relationships facilitate the ability to tailor the service offerings to customers' needs.

Scuba divers escape to an underwater world that requires special equipment for survival.
©Georgette Douwma/Getty Images RF

Service capability

- Provide service capacity to meet fluctuations in demands while retaining quality of service.
- Quality of service is measured primarily from the perspective of the customer.

The core experience of B2B service is one of creating, enabling, problem solving, and innovative use of information that is not consumed in the exchange, but is enhanced and remains available for further use by others.

Table 1.4 presents a complete listing of both consumer and business service experiences to be found in the 21st century, all of which rely heavily on a skilled knowledge-based workforce.

Service-Dominant Logic[3]

The service environment is sufficiently unique for us to question the direct application of traditional manufacturing-based techniques to services without some modification, although many approaches are analogous. Ignoring the differences between manufacturing and service requirements will lead to failure, but more importantly, recognition of the special features of services provides insights for enlightened and innovative management.

TABLE 1.4
Typology of Services in the 21st Century

Source: Adapted from J. R. Bryson, P. W. Daniels, and B. Warf, *Service Worlds: People, Organizations, Technologies*, New York: Routledge, 2004, p. 33.

Core Experience	Essential Feature	Examples
Creative	Present ideas	Advertising, theater
Enabling	Act as intermediary	Transportation, communications
Experiential	Presence of customer	Massage, theme park
Extending	Extend and maintain	Warranty, health check
Entrusted	Contractual agreement	Service/repair, portfolio mgt.
Information	Access to information	Internet search engine
Innovation	Facilitate new concepts	R&D services, product testing
Problem solving	Access to specialists	Consultants, counseling
Quality of life	Improve well-being	Health care, recreation, tourism
Regulation	Establish rules and regulations	Environment, legal, patents

		with increased specialization and outsourcing.
6	The customer always is a co-creator of value.	This premise implies that value creation is interactional.
7	The enterprise cannot deliver value, but only offer value propositions.	The firm can offer its applied resources and create value collaboratively (interactively) following acceptance, but cannot create/deliver value alone.
8	A service-centered view is inherently customer-oriented and relational.	Service is customer-determined and co-created; thus, it is inherently customer-oriented and relational.
9	All economic and social actors are resource integrators.	The context of value creation is networks of networks (resource-integrators).
10	Value is always uniquely and phenomenologically determined by the beneficiary.	Value is idiosyncratic, experiential, contextual, and meaning-laden.

Advances in service management cannot occur without an appreciation of the service delivery process that creates the experience for the customer.

We begin our discussion of the nature of services and implications for operations management with a discussion of the service-dominant logic paradigm. *Service-dominant logic* is a service-centered alternative to the traditional goods-centered paradigm for describing economic exchange and value creation. The central idea is that service is the fundamental basis of value creation when defined as the application of competencies for the benefit of another through exchange. As a component of the service, goods might be involved in the exchange, but value-in-use (value as realized and determined by the customer) is the important feature.

Table 1.5 contains the 10 foundational premises (FPs) of service-dominant logic and a brief explanation/justification of each. We will look at each of the premises in more detail.

FP1: Service is regarded as an activity or process (singular), rather than an intangible unit of output (plural in the goods analogy). The service is derived from applying competencies (knowledge and skills) for the benefit of another party.

FP2: The process of value creation in a postindustrial society is complex and has many intermediary systems (e.g., Internet) that facilitate the process of exchange.

FP3: Although goods are a store of energy, material, and labor costs, they realize a value only upon use (e.g., a car providing the service of transportation).

FP4: Competitive advantage is captured in a service firm's intellectual capital, skills, and knowledge that can be applied to creating value for the customer.

FP5: If service is the application of competencies for the benefit of others, then all economic activity is essentially service, no matter if the economy is considered agrarian, industrial, or postindustrial.

FP6: If value is co-created with the customer, then by definition, the service activity involves the customer in some capacity (e.g., mind, body, belongings, information) in an interactive relationship.

FP7: Just as a product has no intrinsic value until used, a service is only a capacity to create value upon customer activation (e.g., a seat on an airplane has no value if empty upon takeoff).

FP8: Because a service is co-created with the customer, the service exchange necessarily must become customer-focused.

FP9: Value is created when the customer integrates and applies the resources of the service provider along with other resource-integrators (e.g., using PayPal to make a purchase on eBay) to achieve the exchange.

FP10: Each customer determines the value or quality of the service experience based on personal needs at the specific time (e.g., quick lunch or dinner party) and in the particular context (e.g., alone or in a group).

Service-dominant logic is the foundation of a new field of study called service science, management, and engineering (SSME), championed by the IBM Almaden Research Center in San Jose, California. SSME is the application of scientific, management, and engineering disciplines to tasks that one organization beneficially performs for and with another organization or individual. The objective is to make productivity, quality, performance, compliance, growth, and learning improvements more predictable in work-sharing and risk-sharing (coproduction) relationships. The heart of *service science* is the transfer and sharing of resources within and among service systems. The normative function of service systems is to connect people, technology, and information through value propositions with the aim of co-creating value for the service systems participating in the exchange of resources within and across systems.

Distinctive Characteristics of Service Operations

In services, a distinction must be made between *inputs* and *resources*. For services, inputs are the customers themselves, and resources are the facilitating goods, employee labor, and capital at the command of the service manager. Thus, to function, the service system must interact with the customers as participants in the service process. Because customers typically arrive at their own discretion and with unique demands on the service system, matching service capacity with demand is a challenge.

For some services, such as banking, however, the focus of activity is on processing information instead of people. In these situations, information technology, such as

augment the work of the service staff.

Taking the customer out of the process, however, is becoming a common practice. Consider retail banking, in which customers are encouraged to use online transactions, direct deposit, and automatic-debit bill paying instead of actually traveling to the bank. Moreover, the advent of Internet commerce gives new meaning to the phrase "window shopping."

Simultaneity

The fact that services are created and consumed simultaneously and, thus, cannot be stored is a critical feature in the management of services. This inability to inventory services precludes using the traditional manufacturing strategy of relying on inventory as a buffer to absorb fluctuations in demand. An inventory of finished goods serves as a convenient system boundary for a manufacturer, separating the internal operations of planning and control from the external environment. Thus, the manufacturing facility can be operated at a constant level of output that is most efficient. The factory is operated as a *closed system,* with inventory decoupling the productive system from customer demand. Services, however, operate as *open systems,* with the full impact of demand variations being transmitted to the system.

Inventory also can be used to decouple the stages in a manufacturing process. For services, the decoupling is achieved through customer waiting. Inventory control is a major issue in manufacturing operations, whereas in services, the corresponding problem is customer waiting, or "queuing." The problems of selecting service capacity, facility utilization, and use of idle time all are balanced against customer waiting time.

The simultaneous production and consumption in services also eliminates many opportunities for quality-control intervention. A product can be inspected before delivery, but services must rely on other measures to ensure the quality of services delivered.

Perishability

A service is a perishable commodity. Consider an empty airline seat, an unoccupied hospital or hotel room, or an hour without a patient in the day of a dentist. In each case, a lost opportunity has occurred. Because a service cannot be stored, it is lost forever when not used. The full utilization of service capacity becomes a management challenge, because

customer demand exhibits considerable variation and building inventory to absorb these fluctuations is not an option.

Consumer demand for services typically exhibits very cyclic behavior over short periods of time, with considerable variation between the peaks and valleys. For example, the custom of eating lunch between noon and 1 PM places a burden on restaurants to accommodate the noon rush. Many examples can be found in the public sector; for example, the demand for emergency ambulance service normally peaks around the 6 PM rush hour and has a lull around 3 AM while the city sleeps.

For recreational and transportation services, seasonal variation in demand creates surges in activity. As many students know, flights home often are booked months in advance of spring break and the year-end holiday.

Faced with variable demand and a *time-perishable capacity* to provide the service, the manager has three basic options:

1. Smooth demand by:
   a. Using reservations or appointments.
   b. Using price incentives (e.g., matinee discounts at movie theaters).
   c. Demarketing peak times (e.g., advertising to shop early and avoid the Christmas rush).
2. Adjust service capacity by:
   a. Using part-time help during peak hours.
   b. Scheduling work shifts to vary workforce needs according to demand (e.g., call centers staff their operators to match call demand).
   c. Increasing the customer self-service content of the service.
3. Allow customers to wait.

The last option can be viewed as a passive contribution to the service process that carries the risk of losing a dissatisfied customer to a competitor. By waiting, the customer permits greater utilization of service capacity. The airlines explicitly recognize this by offering standby passengers an unsold seat on the departing flight.

Intangibility

Services are ideas and concepts; products are things. Therefore, it follows that service innovations are not patentable. To secure the benefits of a novel service concept, the firm must expand extremely rapidly and preempt any competitors. Franchising has been the vehicle to secure market areas and establish a brand name. Franchising allows the parent firm to sell its idea to a local entrepreneur, thus preserving capital while retaining control and reducing risk.

The intangible nature of services also presents a problem for customers. When buy-

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Intangibility

Services are ideas and concepts; products are things. Therefore, it follows that service innovations are not patentable. To secure the benefits of a novel service concept, the firm must expand extremely rapidly and preempt any competitors. Franchising has been the vehicle to secure market areas and establish a brand name. Franchising allows the parent firm to sell its idea to a local entrepreneur, thus preserving capital while retaining control and reducing risk.

The intangible nature of services also presents a problem for customers. When buying a product, the customer is able to see it, feel it, and test its performance before purchase. For a service, however, the customer must rely on the reputation of the service firm. In many service areas, the government has intervened to guarantee acceptable service performances. Through the use of registration, licensing, and regulation, the government can assure consumers that the training and test performance of some service providers meet certain standards. Thus, we find that public construction plans must be approved by a registered professional engineer, a doctor must be licensed to practice medicine, and the power company is a regulated utility. In its efforts to "protect" the consumer, however, the government may be stifling innovation, raising barriers to entry, and generally reducing competition.

Heterogeneity

The combination of the intangible nature of services and the customer as a participant in the service delivery system results in variation of service from customer to customer. The interaction between customer and employee in services, however, creates the possibility of a more satisfying human work experience. In services, work activity generally is oriented

toward people rather than toward things. There are exceptions, however, for services that process information (e.g., communications) or customers' property (e.g., brokerage services). In the limited customer-contact service industries, we now see a dramatic reduction in the level of labor intensiveness through the introduction of self-service technology.

Even the introduction of automation may strengthen personalization by eliminating the relatively routine impersonal tasks, thereby permitting increased personal attention to the remaining work. At the same time, personal attention creates opportunities for variability in the service that is provided. This is not inherently bad, however, unless customers perceive a significant variation in quality. A customer expects to be treated fairly and to be given the same service that others receive. The development of standards and of employee training in proper procedures is the key to ensuring consistency in the service provided. Monitoring the output of each employee often is rather impractical, so customers play a role in quality control through their feedback.

The direct customer–employee contact has implications for service (industrial) relations as well. Autoworkers with grievances against the firm have been known to sabotage the product on the assembly line. Presumably, the final inspection will ensure that any such cars are corrected before delivery. A disgruntled service employee, however, can do irreparable harm to the organization because the employee is the firm's sole contact with customers. Therefore, the service manager must be concerned about the employees' attitudes as well as their performance. At a resort hotel, for example, it is difficult to have happy guests with unhappy employees. Through training and genuine concern for employee welfare, the organizational goals can be internalized.

Nontransferrable Ownership[4]

From a marketing perspective, services, unlike goods, do not involve transfer of ownership. If customers do not receive ownership when they purchase a service, then what are they buying? One view is that customers gain access or rental of resources for a period of time such as a hotel room for the night or a seat in an airplane. Service industries share their resources among customers by allocating the use of them. Customers do not purchase an asset but, instead, have use of the asset for a specific time, whether it is the use of human labor (e.g., dentist), technology (e.g., cellular network), or a physical asset (e.g., theme park). Notice that in each example, customers often share the service provider's asset concurrently with other customers. Table 1.6 lists the five classes of nonownership services with examples.

Sharing resources among customers presents management challenges. In the case of goods rental, convenience of a rental office location for pickup and drop-off is essential. Car rentals, for example, are found at airports. However, Enterprise is an exception, because it began delivering vehicles to the local population instead of catering primarily to travelers.

TABLE 1.6

Maintenance of the rental good and returning the good to acceptable condition between customer rentals is a necessary and ongoing activity. In the case of place and space rental, customers are able to participate in the economies of scale derived from sharing a larger space with many users while enjoying some degree of separation and privacy. For airlines, the extra large seats and leg room in business class partially explains the relatively high ticket price. For any shared facility, housekeeping is a routine activity performed between periods of customer usage (e.g., trash pickup upon landing for an airline flight and changing linen upon departure of a hotel guest).

Management of queues and crowd control is a challenge for managers of physical facilities that are shared by a large population of customers. Disney, for example, has made a science of controlling waiting lines using multiple techniques that include diversions and allowing guests to reserve time slots for rides hours in advance. Availability is critical for network services because customers depend upon and expect access 24/7 (24 hours per day, 7 days per week). Thus, continuous availability is essential, but because usage varies depending on time-of-day and day-of-week, pricing for the service must be creative and flexible.

The Service Package

Service managers have difficulty describing their product. This problem is partly a result of the intangible nature of services, but it is the presence of the customer in the process that creates a concern for the total service experience. Consider the following examples. For a sit-down restaurant, atmosphere is just as important as the meal because many diners regard the occasion as a way to get together with friends. A customer's opinion of a bank can be formed quickly on the basis of a teller's cheerfulness or the length of the waiting line.

The *service package* is defined as a bundle of goods and services with information that is provided in some environment. This bundle consists of five features (as shown in Figure 1.6) in the shape of an onion with the service experience at the core.

FIGURE 1.6
Service Package

1. *Supporting facility*. The physical resources that must be in place before a service can be offered. Examples are a golf course, a ski lift, a hospital, and an airplane.
2. *Facilitating goods*. The material purchased or consumed by the buyer, or the items provided by the customer. Examples are golf clubs, skis, food items, replacement auto parts, legal documents, and medical supplies.
3. ***Information.*** Data that is available from the customer or provider to enable efficient and customized service. Examples include electronic patient medical records, airline showing seats available on a flight, customer preferences from prior visits, GPS website location of customer to dispatch a taxi, and Google map link on a hotel website.
4. *Explicit services*. The benefits that are readily observable by the senses and that consist of the essential or intrinsic features of the service. Examples are the absence of pain when a tooth is repaired, a smooth-running automobile after a tuneup, and the response time of a fire department.
5. *Implicit services*. Psychological benefits that the customer may sense only vaguely, or the extrinsic features of the service. Examples are the status of a degree from an Ivy League school, the privacy of a loan office, and worry-free auto repair.

All of these features are experienced by the customer and form the basis of his or her perception of the service. It is important that the service manager offer a total experience for the customer that is consistent with the desired service package. Take, for example, a budget hotel. The supporting facility is a concrete-block building with austere furnishings. Facilitating goods are reduced to the minimum of soap, towels, and tissue paper. Information on room availability is used to book a reservation. The explicit service is a comfortable bed in a clean room, and implicit services might include a friendly desk clerk and the security of a well-lighted parking area. Deviations from this service package, such as adding bellhops, would destroy the bargain image. Table 1.7 lists criteria (with examples) for evaluating the service package.

The importance of facilitating goods in the service package can be used to classify services across a continuum from pure services to various degrees of mixed services. For example, psychiatric counseling with no facilitating goods would be considered a "pure" service. Automobile maintenance usually requires more facilitating goods than a haircut does.

Making general statements about service management is difficult when there are such variations in the nature of services. However, an appreciation of the unique features of the service environment is important for understanding the challenges facing service managers.

Grouping Services by Delivery Process

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Grouping Services by Delivery Process

Concepts of service management should be applicable to all service organizations. For example, hospital administrators could learn something about their own business from the restaurant and hotel trade. Professional services such as consulting, law, and medicine have special problems because the professional is trained to provide a specific clinical service (to use a medical example) but is not knowledgeable in business management. Thus, managing professional service firms offers attractive career opportunities for business school graduates.

A service classification scheme can help to organize our discussion of service management and break down the industry barriers to shared learning. As suggested, hospitals can learn about housekeeping from hotels. Less obviously, dry-cleaning establishments can learn from banks—cleaners can adapt the convenience of night deposits enjoyed by banking customers by providing laundry bags and after-hours dropoff boxes. For professional firms, scheduling a consulting engagement is similar to planning a legal defense or preparing a medical team for open-heart surgery.

To demonstrate that management problems are common across service industries, Roger Schmenner proposed the *service process matrix* in Figure 1.7. In this matrix, services

The horizontal dimension measures the degree of customer interaction and customization, which is a marketing variable that describes the ability of the customer to affect personally the nature of the service being delivered. Little interaction between customer and service provider is needed when the service is standardized rather than customized. For example, a meal at McDonald's, which is assembled from prepared items, is low in customization and served with little interaction occurring between the customer and the service providers. In contrast, a doctor and patient must interact fully in the diagnostic and treatment phases to achieve satisfactory results. Patients also expect to be treated as individuals and wish to receive medical care that is customized to their particular needs.

The four quadrants of the service process matrix have been given names, as defined by the two dimensions, to describe the nature of the services illustrated. *Service factories* provide a standardized service with high capital investment, much like a line-flow manufacturing plant. *Service shops* permit more service customization, but they do so in a high-capital environment. Customers of a *mass service* will receive an undifferentiated service in a labor-intensive environment, but those seeking a *professional service* will be given individual attention by highly trained specialists.

Managers of services in any category, whether service factory, service shop, mass service, or professional service, share similar challenges, as noted in Figure 1.8. Services with high capital requirements (i.e., low labor intensity), such as airlines and hospitals, require close monitoring of technological advances to remain competitive. This high capital investment also requires managers to schedule demand to maintain utilization of the equipment. Alternatively, managers of highly labor-intensive services, such as medical or legal professionals, must concentrate on personnel matters. The degree of customization affects the ability to control the quality of the service being delivered and the perception of the service by the customer. Approaches to addressing each of these challenges are topics that will be discussed in later chapters.

Open-Systems View of Service Operations Management

Service organizations are sufficiently unique in their character to require special management approaches that go beyond the simple adaptation of the management techniques found in manufacturing a product. The distinctive characteristics suggest enlarging the system view to include the customer as a participant in the service process. As Figure 1.9 shows, the customer is viewed as an input that is transformed by the service process into an output with some degree of satisfaction.

The role of the service operations manager includes the functions of both production and marketing in an open system with the customer as a participant. The traditional

the shift from ownership to access results in fewer new products sold, which in turn can result in less pressure on scarce natural resources and reduction of global warming gases emitted into the atmosphere.

to match service capacity. This marketing activity must be coordinated with scheduling staff levels and with both controlling and evaluating the delivery process. By necessity, the operations and marketing functions are integrated for service organizations.

For services, *the process is the product*. The presence of the customer in the service process negates the closed-system perspective that is taken in manufacturing. Techniques to control operations in an isolated factory producing a tangible good are inadequate for services. No longer is the process machine-paced and the output easily measured for compliance with specifications. Instead, customers arrive with different demands on the service; thus, multiple measures of performance are necessary. Service employees interact directly with the customer, with little opportunity for management intervention. This requires extensive training and empowerment of employees to act appropriately in the absence of direct supervision.

Further, customer impressions of service quality are based on the total service experience, not just on the explicit service that is performed. A concern for employee attitudes and training becomes a necessity to ensure that the implicit service is also appreciated by the customer. When viewed from the customer's perspective, the entire service process raises concerns ranging from the aesthetic design of the facility to pleasant diversions in waiting areas.

An open-system concept of services also allows one to view the customer as a coproducer. Permitting the customer to participate actively in the service process (e.g., providing a salad bar at a restaurant) can increase productivity, which in turn can create a competitive edge.

Summary

Just as farming jobs moved to manufacturing in the 19th century under the driving force of labor-saving technology, manufacturing jobs in due time moved to services. Today an experience economy driven by information technology is emerging to satisfy rising expectations for services. The distinctive characteristics of services require an approach to management that is significantly different from the closed system found in manufacturing. For a service, however, the presence of the customer in the process allows for co-creation of value.