

# Service Marketing

Rohit Verma

*DePaul University, Chicago*

## Introduction

It is now well known that services constitute the biggest section of the economy in many developed nations (Fitzsimmons and Fitzsimmons, 2000). According to the 1999 Statistical Yearbook of the United Nations, the service sector provides over 80% of the employment in the U.S.A. and over 70% of the employment in Canada, Japan, France, Israel, and Australia, when the agriculture, mining, and manufacturing sectors show negligible or negative growth. Because of rapid developments in information technology (IT), globalization, changing customer needs/preferences, and changes in the relative wealth of the developed and newly developing economies, the effective design of service systems continues to increase in importance (see Chapter 5). Some even argue that several developed nations have moved beyond the *service economy* to an *experience economy*, and therefore the ability to design effective systems for creating *desired* customer experiences will increasingly become an order winner (Pine and Gilmore, 1998).

Recognizing the need to improve the understanding of the services industry, this chapter provides an overview of services marketing concepts. Because services are inherently multifunctional in nature, operations, marketing, technology, and human issues are intimately connected to each other. Within this context, transportation services play the role of a *key enabler*, by facilitating the required and necessary movement of goods and people to satisfy the needs of the marketplace (e.g., delivery of mail-order merchandise to homes; mass rapid transport systems in urban areas). Many of the conveniences desired by the citizens of the service/experience economy cannot be fulfilled without the development of an efficient transportation system, and hence transportation and logistics services are growing at a rate faster than the growth of the entire service sector. For example, during the 1990s, while cumulative employment growth in the U.S.A. was 18%, the total service sector employment increased by 22% and transportation services employment increased by 26% (U.S. Bureau of Labor Statistics, 2000). Within the transportation services sector, employment in the trucking and air transportation services increased by 29% and 27%, respectively.

Transportation services, whether operating in a business-to-business (B2B) or a business-to-consumers (B2C) environments, must deal closely with various members of the supply chain (e.g., manufacturers, distributors, retailers, customers) and simultaneously satisfy the needs of many participants. Therefore, to manage effectively in this environment, a

transportation service provider needs to understand the interactions between the essential elements of the service delivery systems.

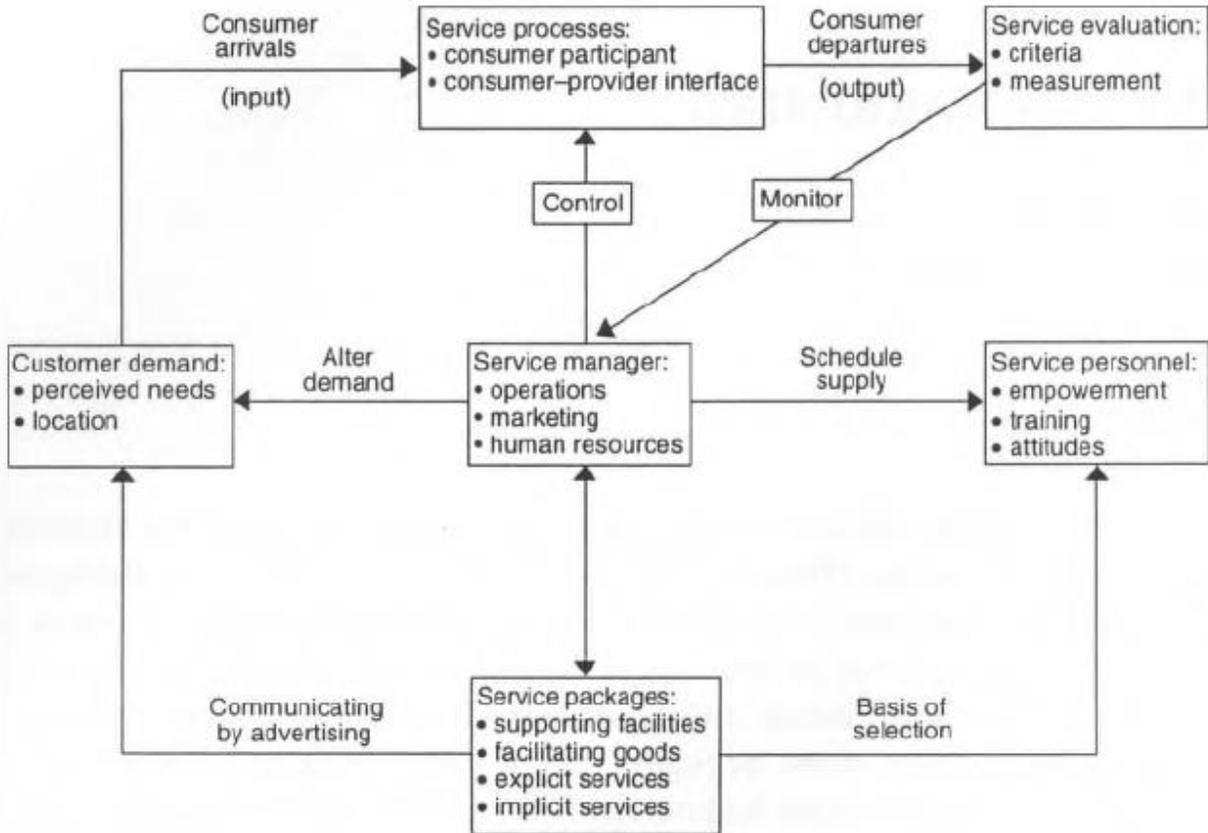


Figure 1. The open system view of services.

The multifunctional role of a service manager can be illustrated by recognizing that a service provider operates in an “open system” connected by customers, employees, processes, and product-service package offerings (Figure 1). For example, the management of a air-transportation services company needs to consider the interrelationships between the service packages offered (pricing, features), personnel (pilots, air crew, ground crew), customer demand patterns (timing, volume, mix), and service processes (routes, check-in process, baggage handling process) in order to gain a good evaluation from their customers.

The remaining sections of this chapter provide an overview of the above and other marketing and management issues related to the service systems, with specific reference to the transportation and logistics industry.

### Services Environment

As mentioned earlier, the services sector is going through a period of massive growth and many changes. Furthermore, according to Pine and Gilmore (1998) many nations have moved to an experience economy, where human labor is increasingly used for artistic, creative,

and intellectual reasons, and the standard of living is measured by quality of life in terms of health, education, and recreation. Several factors have contributed to and emerged as important services marketing issues in the changing face of post-industrial economies. This section summarizes the major trends.

### Technological Innovations

It will not be an exaggeration say that just as machines changed an agricultural economy into an industrial economy, today's IT is transforming an industrial economy into a service-driven economy. The availability of computers and global communication technologies (e.g., the internet and mobile voice/data communications networks) is creating limitless opportunities for designing, developing, and marketing new services. The role of technology in services in fact goes far beyond hardware and machines. It also includes innovative integrative systems, such as automated health testing and the airline industry's real-time pricing (yield) management systems. Technology can also facilitate the reengineering of such activities as delivery of information, order taking, billing and payment, and redesign of the entire service delivery systems. It can also help in automating the "routine" efficiency-driven tasks and free up valuable human resources for selling or introducing other value-added services to consumers.

### Global Competition, Regulatory Changes, and Increased Privatization

Many services that were formerly purely domestic now have to compete with services from all around the world. For example, a customer service call placed by a consumer in Argentina may be routed to an operator located in Ireland, India, or Mexico, depending on the call volume, time of the day, language requirements, availability of the calling circuits, and nature of the call. In addition, the move towards deregulation of services, such as air transportation and telecommunications, around the world is giving rise to many opportunities for providing new services and/or for market share gain. Similarly, privatization of government-run business in many centrally planned nations has opened up several new opportunities for service marketers.

### Franchising and Service Supply Chains

Respected national brand names such as McDonalds, Citibank, and Hertz & Avis car rentals, among others, have spread far beyond their national boundaries. In some case such service chains are entirely company owned, whereas others are coowned by multiple investors who manage or control specific parts of the business. Specifically, franchising involves licensing a product or service to be sold by independent entrepreneurs according to tightly specified specifications. The franchiser often takes the responsibility for marketing, customer relations, product development, and managing the supply chains, whereas individual franchise owners run the day-to-day operations of the specific store. Over the years franchising, has become a very popular approach for service capacity expansion and capital growth, and offers many possibilities for innovative service marketers.

### Changing Social Trends

As the baby-boomers mature, the percentage of older people in many developed nations is increasing rapidly. The aging of a population creates opportunities for retired people to take part-time employment and also creates demands for various services needed by senior citizens (e.g., home delivery of goods and services). In addition, because of the increase in life-expectancy, there is an increased need for healthcare, transportation, and leisure services for older members of the community. Another significant social trend is that two-income families are fast replacing the traditional family structure of a working husband and a homemaker wife. The new two-income families are creating demands for services such as day care, preschool, “eating” out, precooked “gourmet” foods, home delivery of services, and family vacation services. For two-income families time is at a premium, and therefore they are willing to pay for services that give them more free time. In addition, a number of two-income families have an increased level of disposable income, leading to an increased demand for leisure, entertainment, and tourism services. The numbers of single adults and single-parent families are also increasing, creating the need for specific services such as organized recreational activities. The above and other social trends offer many opportunities for innovative service marketers.

### Summary

The above and other trends in the services environment are creating a need for many innovative new services, such as web-based supermarkets (e.g., EthnicGrocer.com, WebVan.com), and have led to an increase in the demand for many existing services (e.g., restaurants, recreational facilities). Many new services, such as e-retailers, which require the movement of goods or people, need the assistance of an efficient distribution network, and therefore transportation services are becoming an essential part of the service package delivered to the customer. In other words, transportation plays a very significant role in customers’ evaluation and choice of services. Hence understanding key services marketing concepts is essential for the effective design and development transportation and logistics operations. The next section of this chapter provides an overview of basic services marketing and management concepts.

### **Understanding Service Delivery Systems**

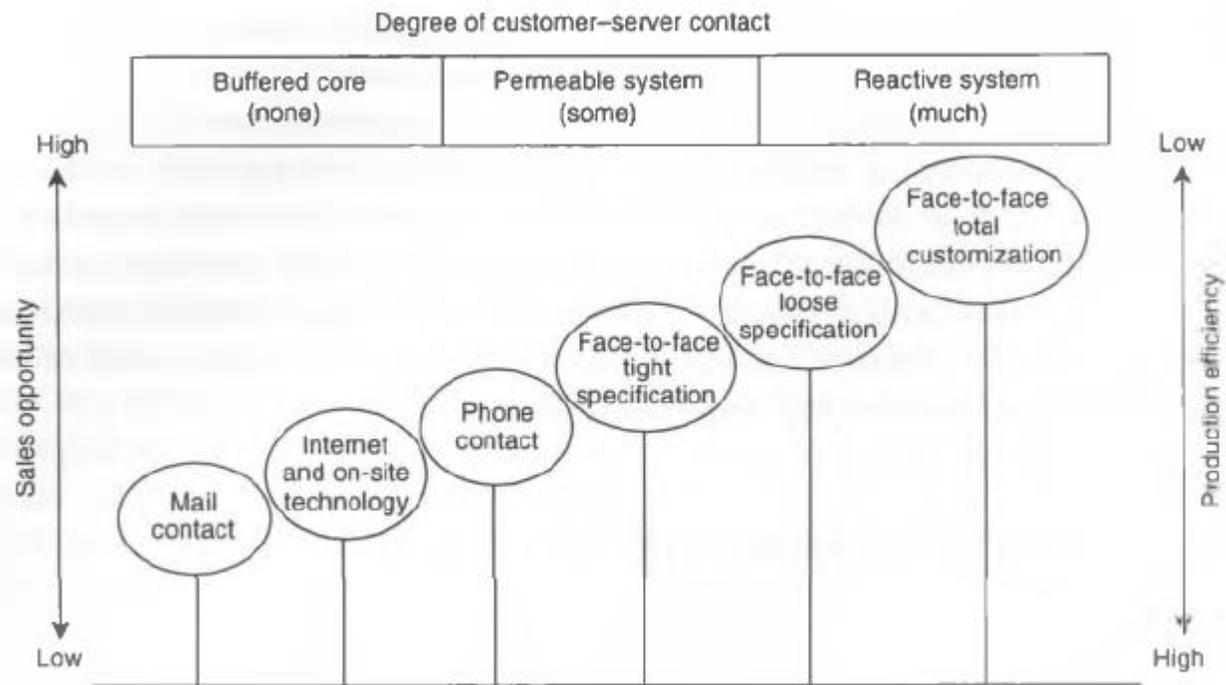
The service sector comprises a wide range of industries, such as entertainment, food services, healthcare, financial services, transportation and distribution services, education, and professional services. This diversity makes it difficult to make useful generalizations concerning the management of all service organizations. However, many underlying characteristics are similar across services and are often very different from those in other sectors of the economy (e.g., manufacturing, mining, agriculture) (Cook et al., 1999).

A service firm, such as an international airline, creates value for its customers without or with relatively little transformation of materials. On the other hand, a manufacturer transforms

metals, polymers, and energy into a product such as a sports utility vehicle. Customers are rarely involved in the production process of the majority of manufactured goods (e.g., automobiles), but are very likely to become an essential part of the service-delivery process (e.g., urban mass rapid transit systems). The majority of services cannot be inventoried, as can products in manufacturing (an unsold airline seat is “lost” as soon as the airplane leaves the gate). Some of the above other commonly accepted characteristics of services are (Cook et al., 1999):

- (1) services are intangible,
- (2) the customer is a participant in the service-delivery process,
- (3) generally services are produced and consumed simultaneously,
- (4) services have a relatively higher variability in operational inputs and outputs,
- (5) services generally have time-perishable capacity,
- (6) site selection in services is directed by the location of customers,
- (7) services in general are very labor intensive, and
- (8) it is relatively difficult to identify appropriate measures of service output.

The above dimensions of services are fairly general and a lot of variability exists among different service firms, even within the same industry (Verma and Young, 2000). Hence to understand unique managerial issues associated with different types of services or to identify commonalities among different firms, close attention should be paid to the underlying features of services. Some of the commonly associated dimensions of services are described below.



### Customer Contact

The term “customer contact” refers to the physical presence of the customer in the service system (Chase and Tansik, 1983). According to Chase (1978), the degree of customer contact determines the sales opportunity, production efficiency, and design of the service delivery systems (Figure 2). For example, low- contact services (e.g., a package delivery company such as FedEx) are designed around efficiency considerations such as speed and utilization. FedEx, for example, has undertaken significant investment of capital, equipment, and IT to gain the maximum possible production efficiency (e.g., a large hub in Memphis, U.S.A., to minimize package-sorting times). High-contact services, on the other hand, have a relatively lower level of production efficiency, because the physical presence of the customer increases the variation in the service delivery process (e.g., even large airport terminals can only handle a very small number of the passengers compared with the number of packages handled at the FedEx hub). On the positive side, high-contact services have more opportunity to sell additional services to their customers than do low-contact services (Chase, 1978). For example, a package delivery company can rarely sell any additional services to its customers after the package has been dropped in a mailbox, whereas a passengers airline terminal has the opportunity to sell additional services (e.g., food, gifts, insurance) to its customers.

### Tangibility

Customers’ preferences and their evaluation of a service also depend on the relative tangibility of the product-service package purchased. As the degree of tangibility decreases, customers’ ability to able to see, touch, or feel the purchased product-service bundle decreases. For example, the services provided by a passenger airline can be considered more tangible than the services provided by an international logistics consulting firm. Customers, in general, rely more on the brand name (reputation) when selecting intangible services (Fitzsimmons and Fitzsimmons, 2000). The degree of tangibility not only shapes the nature of the service delivery, but also affects the role of employees and the design of the service system.

### Customization

An important marketing decision is whether all customers should receive the same service or whether service features or processes should be customized or adapted to meet individual requirements. Due to advances in computing technology, corporations are able to collect specific information about different users of their services and are able to customize their services according to the specific needs of their customers. For example, the Dell Corporation provides customized websites for each of its large corporate clients based on their own preferences for computer systems they are interested in purchasing; Amazon.com tracks and recommends the books, CDs, and DVDs its users might be interested in purchasing, based on their past choices.

### Recipients of Service Process

Some services, such as air transportation, are directed towards customers themselves, whereas other services are directed towards things (e.g. cargo, package-delivery services). The design and marketing of the services systems focused on customers are very different from those services focused on things (e.g., airline passenger terminals, cargo terminals).

### Nature of the Relationship with Customers

In many services, anonymous customers purchase one or more service packages from the service provider and then disappear (e.g., a one-time user of a package-delivery company or an airline). On the other hand, by developing a formal relationship with its customers, each customer is known to the organization and all transactions are individually recorded and attributed (e.g., frequent flyers on an airline; corporate customers of large logistics companies). The service provider has an opportunity to create a loyal customer base by giving specific loyalty credits (e.g., frequent flyer miles) when the customers are not anonymous. Furthermore, loyalty information can be used to target groups of customers with specific service options and/or promotions.

### Nature of Demand and Supply

Some services face a steady and predictable demand for their services, whereas others encounter significant fluctuations. Similarly, in some services it is possible to alter capacity at short notice, whereas in other cases marketing mechanisms (e.g., pricing) must be used to deal with the unpredictable nature of demand. The interrelationships between demand, capacity-constrained supply, and pricing mechanisms can be easily observed in the passenger airline, hotel, and rental car industries, where yield management (or revenue management) is practiced widely (Kimes, 1989). The service provider, such as an international airline, constantly evaluates demand patterns, available capacity, and the past trends in cancellations and overbooking when determining prices for various seat categories. Because of the perishable nature of airline seats (i.e., once the flight has departed the potential revenue from an empty seat is lost forever), offering a discount on fares to fill the remaining seats in an aircraft becomes attractive. Selling all seats at discount, however, would preclude the possibility of selling some at full price. Although airlines were the first to develop yield management concepts, this practice is now being implemented in many other services such as hotels and rental cars. According to Kimes (1989), yield management can be a very appropriate marketing tool for services:

- (1) which contain relatively fixed and perishable capacity,
- (2) which operate in multiple market segments,
- (3) which can sell services in advance,
- (4) which operate in fluctuating-demand environments, and
- (5) when the marginal sales costs are much lower than the marginal capacity change costs.

For additional information about the applicability of yield management in services, the reader is referred to Kimes and Chase (1998), Metters and Vargas (1999), and Smith et al. (1992).

### Mode of Service Delivery

When designing delivery systems, service marketers need to decide if the customers will visit the service provider (e.g., a bus stop) or whether the service provider needs to visit the customer (e.g., a taxicab). At the same time, due to recent advances in IT, it is also possible that certain types or components of a service be delivered through mail or electronic channels (e.g., downloading music and e-books instead of going to a store). As mentioned earlier, the transportation industry plays the role of key enabler when customers desire more such services (e.g., home delivery of goods purchased online).

### Type of Service Processes

Because customers are involved in the production and delivery of services, marketers need to understand the nature of the processes to which their customers are exposed. Service processes range from simple procedures involving only a few steps, to highly complex activities such as transporting passengers on an international flight. Because of the multifunctional nature of services, many different approaches to classifying service processes have been developed. For example, Schmenner (1986) classified service processes in four categories (service factory, service shops, mass services, professional services) based on the relative labor intensity, customer contact, and customization. Lovelock and Wright (1998) also classified service processes in four categories: people processing, possession processing, mental stimulus processing, and information processing. Other researchers, such as Bowen (1990), Kellogg and Nie (1995), and Wemmerlov (1990), have also attempted to link service-products with attributes of back-end service processes. Each study cited presents a typology of either ideal service management or theoretically derived differences between services. As a result, each classification scheme provides insights into the operations, personnel, and marketing issues related to different types of service processes.

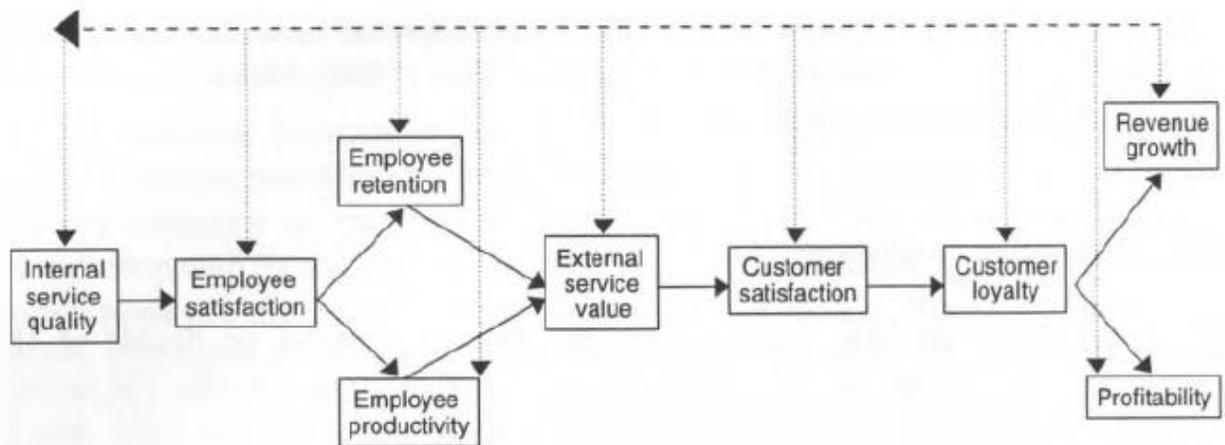


Figure 3. The service profit chain.

## Summary

It can be easily appreciated from the above discussion of the underlying characteristics of service delivery systems that there is no one formula for applying marketing concepts to complex transportation services firms. Therefore, innovative service providers either adapt their offerings and/or delivery process in order to better meet the needs of the markets they serve. Consequently, a number of approaches to implementing services marketing concepts have been developed. The next section in this chapter summarizes the major themes in services marketing.

### **Major Themes in Service Marketing**

It should be apparent from the preceding sections in this chapter that the service sector is going through a dynamic stage of development, presenting many exciting opportunities for marketing research and practice. Here I present only a few services marketing themes, which I believe will continue to be of great importance during the coming years. Note that this section contains only a few specific examples from any specific type of service, such as transportation. The focus is on summarizing merging themes that can be applied to a large cross-section of service firms.

### Customer Satisfaction and Loyalty

Along with the growth in the services industry, there has been an increased interest by both academic researchers and practitioners in understanding the drivers of customer satisfaction and loyalty. Research has shown that it is significantly more expensive to recruit new customers than to generate repeat business with existing customers. Reichheld and coworkers (Reichheld, 1996; Reichheld and Schefter, 2000) have argued that for all types of services (including e-services) customer defection (and therefore retention) should be carefully monitored to assess customer satisfaction. Building on similar ideas, Heskett et al. (1994) proposed an oft-cited *service profit chain* model, which links financial performance and customer loyalty to their drivers (operations strategy, human resources issues, service features). The service profit chain model has been very influential in developing an understanding of the drivers of high performance in the services industry. Hence this model is described briefly below (Figure 3).

According to Heskett et al. (1994):

- (1) *Customer loyalty drives profitability and growth.* Heskett et al. (1994) argue that a 5% increase in customer loyalty can boost profits by 25-85%.
- (2) *Customer satisfaction drives customer loyalty.* The study demonstrates that “very satisfied” customers are likely to repurchase a service up to six-times more than are customers who are merely “satisfied.”
- (3) *Value drives customer satisfaction.* Delivering higher value service implies providing relatively more for the same cost to customers.

- (4) *Employee productivity drives value.* Successfully and profitably delivering value requires building a team of employees who understand the linkages between operational productivity and customer value.
- (5) *Employee satisfaction drives loyalty.* Heskett et al. found that low employee turnover is closely linked to customer satisfaction and that unsatisfied employees are three times more likely to leave the firm.
- (6) *Internal service quality drives employee satisfaction.* Service workers are happiest when they are empowered to make things right for the customers and when they have the responsibility that enriches their work.

Other more quantitative approaches to linking customer satisfaction and financial performance have been developed by Rust et al. (1995) and Claes et al. (1996). Rust et al. (1995) developed a quantitative model, known as return on quality (ROQ), which links quality-improvement efforts with customer satisfaction, customer retention, revenue, market share, and profitability in service organizations (Figure 4). ROQ measures a ratio of changes in the net present value of profits with respect to additional quality improvement expenditures. Claes et al. (1996) linked customer loyalty and complaints with customer satisfaction, perceived value, perceived service quality, and customer expectations. This approach, also known as the American customer satisfaction index (ACSI), has been widely published in both the academic and the business literature (Figure 5). Although ROQ, ACSI, and the service profit chain approaches were developed by different research teams, there is a remarkable degree of agreement between their conceptual frameworks (see Figures 3 to 5), confirming the strong linkages between quality, customer satisfaction, customer loyalty, and financial performance in the services industry.

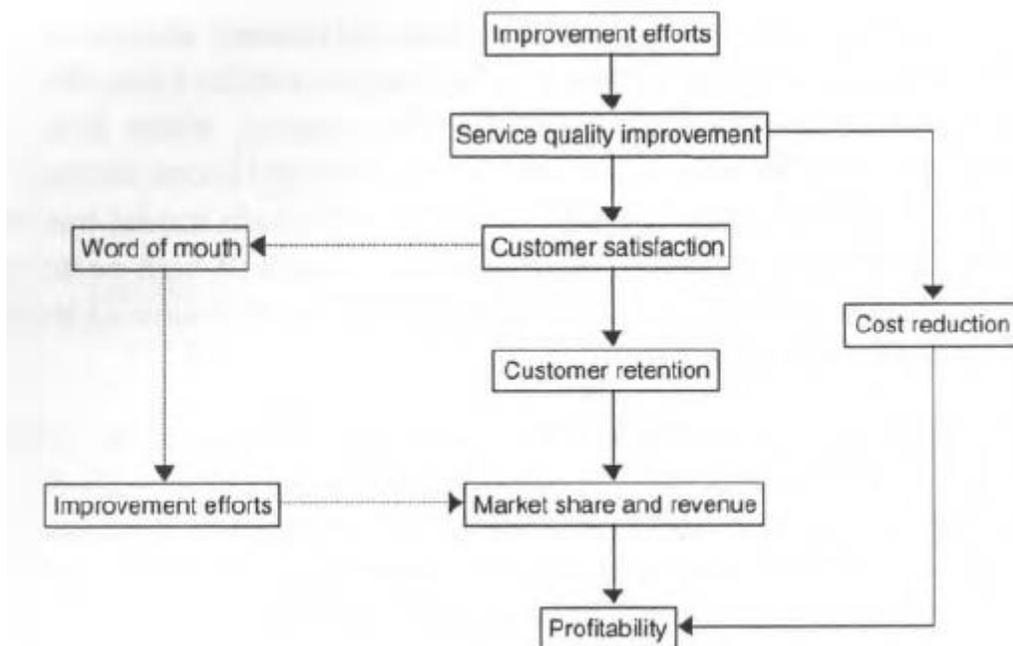


Figure 4. The return on quality approach.

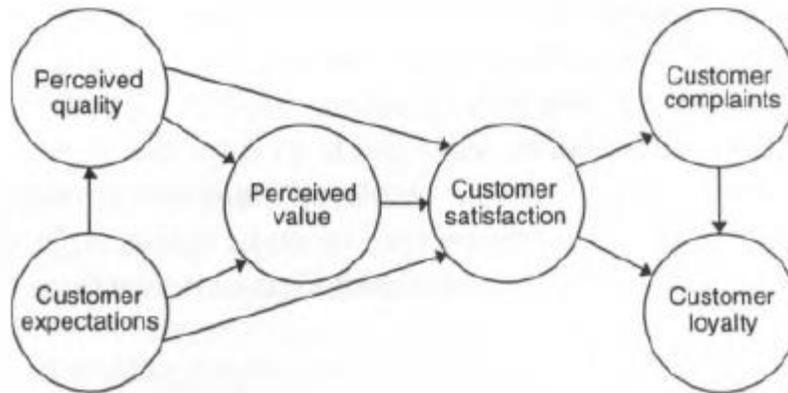


Figure 5. The American customer satisfaction index (ACSI).

A number of measurement approaches have been proposed that recognize the importance of customer satisfaction (Berry and Parasuraman, 1997). The most commonly used approaches are described below.

- (1) *Transactional surveys.* Satisfaction surveys of customers following the service encounter provide feedback while service experience is still fresh in the customer's mind.
- (2) *Mystery shopping.* In this approach researchers pretend be customers. The approach measures individual employee service behavior for use in coaching, training, performance evaluation, reorganization, and rewards, and is used to identify systematic strengths and weaknesses in customer contact service.
- (3) *New, declining, and lost customer surveys.* Surveys that determine why customers select a service firm, reduce their purchase, or leave the firm.
- (4) *Focus group interviews.* Directed questioning of a small group, usually 8-12 people (customers, potential customers, employees), provides a forum for participants to suggest improvement ideas.
- (5) *One-on-one interviews.* An effective technique for achieving a deeper understanding of the customers' view of service performance.
- (6) *Customer advisory panels.* A group of customers is recruited to periodically provide the firm with feedback and advice on service performance and other issues.
- (7) *Service reviews.* Periodic visits with customers to discuss and assess the service relationship.
- (8) *Total market surveys.* Surveys that measure customers' overall assessment of a company's service. Data are often collected from sample customers of multiple competitors (i.e., from the total market).
- (9) *Employee field reporting.* Formal process for gathering, categorizing, and distributing field employee intelligence about service issues.
- (10) *Service operating data capture.* A system to retain, categorize, track, and distribute key service performance operating data, such as response times, service failure rates, and service delivery costs.

(11 Customer complaints. These are mostly passively collected, and are used to identify the most common service failure types.

(12 Critical incident technique. This is a one-on-one technique to elicit details about services that particularly dissatisfy or delight customers.

One of the central underlying assumptions behind the work of Berry and Parasuraman (1997), Rust et al. (1995), Heskett et al. (1994), and Cleas et al. (1996) is that the quality of service ultimately determines value for the customer, which leads to customer loyalty and superior financial performance. Therefore, a considerable amount of research has been undertaken to link service quality with other characteristics of service delivery systems.

### Service Quality

The most widely used measurement instrument for service quality, known as SERVQUAL, is based on the “gap” model proposed by Parasuraman et al. (1985). Parasuraman et al. conceptualized service quality as the difference between customer expectations and perceptions of service delivery. Customer perceptions are formed by personal needs, past experiences, and word of mouth. According to the model proposed by Parasuraman et al., customer perceptions of service are conceptualized as a function of service encounter or delivery, external communications to customers, managers’ perceptions of customer

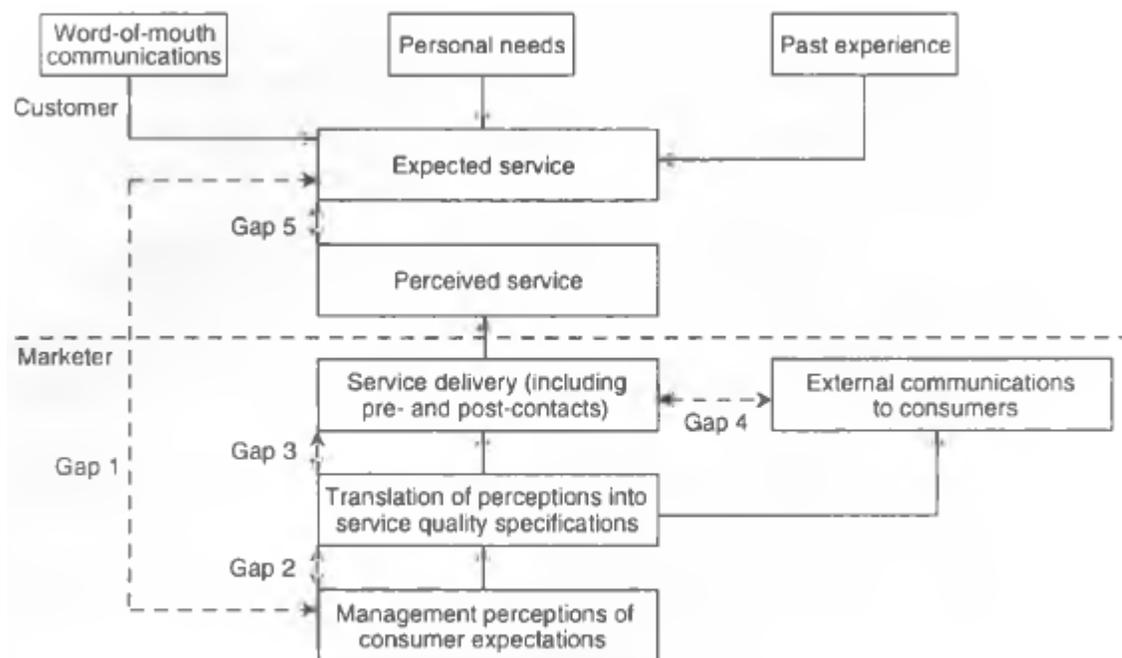


Figure 6. The service quality gap model.

expectations, and translations of managers’ perceptions into service specifications (Figure 6).

In subsequent work Parasuraman et al. (1988) developed a 22-item scale, known as SERVQUAL, which measures the gap between customer expectations and customer perceptions within five dimensions of service quality:

- (1) *Reliability*: the ability to perform the promised service both dependably and accurately.
- (2) *Responsiveness*: the willingness to help customers and to provide prompt service.
- (3) *Assurance*: the knowledge and courtesy of employees and their ability to convey trust and confidence.
- (4) *Empathy*: the provision of caring, individualized attention to customers.
- (5) *Tangibles*: the appearance of physical facilities, equipment, personnel, and communication materials.

In subsequent publications, Parasuraman et al. (1994) expanded the conceptualization of expectations based on further empirical studies. The enhanced version of the “gap” model includes a “zone of tolerance” within service expectations. According to Parasuraman et al. (1994), customers’ expectations of service are within a zone bounded by desired service (highest expectations) and adequate service (lowest expectations). Parasuraman et al. (1994) also introduced a modified version of the SERVQUAL instrument, which measures the five service quality dimensions along desired service, adequate service, and perceived service scales.

Since the publication of the SERVQUAL instrument, a number of studies have applied the technique to a large number of industries. However, a number of studies have criticized the use of SERVQUAL as a general instrument for measuring service quality. Criticisms include both statistical and theoretical reasoning (e.g., Carman, 1990; Cronin and Taylor, 1992). At the same time, SERVQUAL in its original or modified format continues to be used in both academic and applied studies. For example, Soteriou and Chase (1998) demonstrated that perceived service quality as measured by SERVQUAL is linked to the degree of customer contact. Oppewal and Vriens (2000) presented an alternative approach for measuring service quality, using integrated conjoint experiments based on the five SERVQUAL dimensions.

With the recent exposition in electronic and information intensive services, I believe that we will continue to see many more applications, modifications, and enhancements of SERVQUAL. On the other hand, there has been a significant amount of research on the design and development of high-quality services. This stream of research is reviewed in the following section.

### *New Service Design and Development*

In goods-based industries, new product development has been widely studied (e.g., Wind and Mahajan, 1997). Given the inherent differences between the production of goods and services (e.g., the role of customer contact, intangibility, demand heterogeneity), the application of new product development models to services might not suffice in adequately describing how new services are optimally developed (Bitran and Pedrosa, 1998). According to

a recent review article by Johnson et al. (2000), the new service development research undertaken so far has been largely descriptive rather than prescriptive. A brief review of the research is given in this section.

Johnson et al. (2000) have defined new service as “an offering not previously available to customers that results from the addition of offerings, radical changes in the service delivery process, or incremental changes to existing service packages that customers perceive as being new.” According to Lovelock (1984), new service development can be divided into two categories: radical innovations and incremental innovations. *Radical innovations* include services for as yet undefined markets, such as many of the internet and IT based services (e.g., wireless web- based logistics, inventory tracking services). They also include start-up businesses in markets already served by existing services, and businesses providing radically new services to existing markets. *Incremental innovations* include service-line extensions (e.g., adding menu items in restaurants, adding new flight routes), service improvements (e.g., designing better web interfaces), and service style changes (modest forms of visible changes that have an impact on customer perceptions, emotions, and attitudes).

According to Ramaswamy (1996), service design consists of four interrelated components: service product design, facilities design, operations process design, and customer service process design. *Service product design* refers to the design of physical attributes; *facilities design* refers to the design of the physical layout of the facilities (including virtual facilities) where the service is delivered; *operations process design* refers to the activities that are needed to deliver or maintain a service; and *customer service process design* pertains to the interactions between the customer and the service provider. According to Chase et al. (1998), the three dominant approaches to service design are: the *production line approach* (e.g., McDonalds); the *self-service approach* (e.g., ATM machines); and the *personal attention approach* (e.g., Nordstrom). Ramaswamy (1996) stated that customers should be involved in all stages of the design process and that the design specifications should be developed with customer preferences in mind. He also stated that a multifunctional team should be involved in the design process and that the developed designed should be tested in “real” markets and not laboratories. Building on these concepts, Ramaswamy (1996) developed an eight- stage model:

- (1) *Stage 1 - defining service design attributes.* This stage involves: identifying key customers for the service; determining the needs that the customers expect the service to fulfill; prioritizing the needs in order of importance; specifying the attributes required by a service that meets these needs; creating quantitative measures for measuring design attributes; establishing the relationships between needs and attributes; and determining the most important design attributes.
- (2) *Stage 2 - specifying performance standards.* This stage involves: identifying the customers’ desired performance level for each attribute; analyzing the performance of competitors; determining the relationship between performance and customer satisfaction; and specifying design performance standards for each attribute.

- (3) *Stage 3-generating and evaluating design concepts.* This stage involves: defining the key functions needed to provide the service; assembly of the key functions into processes; documentation of process flows; creation of multiple design concepts for service; and evaluation and selection of a service concept.
- (4) *Stage 4 - developing design details.* This stage involves: converting selected service concepts into process components; generating, evaluating, and selecting the best design alternative for each component; testing the performance of the overall service design; making the necessary modifications; and specifying detailed functional requirements.
- (5) *Stage 5 - implementing the design.* This stage involves developing and implementing service construction, pilot testing, roll-out, and communication plans.
- (6) *Stage 6 - measuring performance.* This stage involves: selecting and measuring the performance of key attributes relative to established standards; measuring the capability of attributes and the efficiency of processes; identifying the root cause of poorly performing attributes, if any; and developing corrective actions, as required.
- (7) *Stage 7-assessing customer satisfaction.* This stage involves assessing customer satisfaction with respect to customer expectations and competition, and with respect to past performance of service, and identifying opportunities for improvement.
- (8) *Stage 8 - improving performance.* This stage involves estimating: the relationships between financial objectives; overall customer satisfaction; service attributes; process attributes; and developing process improvement initiatives.

Although no detailed empirical work has been done to assess the approach presented above, the framework is valuable in developing a general understanding of various aspects of the service design process. To my knowledge, no other such elaborate conceptual framework for services design has been presented elsewhere. However, in recent years there has been a considerable amount of work done on developing tools or techniques for use in the service design activity, such as structured analysis and design (Congram and Epelman, 1995), function analysis (Berkley 1996), and discrete choice models (Verma et al., 2000; Pullman et al., 2001a,b).

### *Operational and Human Issues in Services Marketing*

As mentioned earlier in this chapter, the interdisciplinary nature of services often makes it difficult to separate functional boundaries, and many operational issues directly impact on marketing practice and research. Here some operational and human issues of interest to service marketers are briefly described.

#### *Operations Strategy*

Defined as the long-term pattern and priorities of decision-making, operations strategy in service is often inseparable from corporate and marketing strategies. Since the service delivery system is the main business of a service firm, alignment between the market positioning of service and products, priorities of marketing and operations functions, and an

understanding of departmental trade-offs and constraints are essential. For example, Chase and Hayes (1991) have shown that the stages of the service strategy (available for service, journeyman, distinctive competence achieved, world class service delivery) are a function of customer preferences, service quality, technology, and workforce and management practices.

### Demand and Capacity Management

Many services inherently contain highly fluctuating demand patterns. Although it is possible to stabilize certain aspects of demand with marketing mechanisms (promoting off-peak demand and discouraging peak demand periods), much can be gained by effectively using operational mechanisms, such as remote processing, use of automated technology, and use of flexible labor scheduling techniques. As mentioned earlier, revenue management (or yield management) is an approach for pricing capacity-constrained and time-perishable services (e.g., airline seats, hotel rooms, telecommunication packages). Prices are adjusted based on the demand rates, the supply of capacity at a given time, and the anticipated cancellation rates. Large-scale probabilistic optimization heuristics, which consider both the marketing and the operational variables, are used in price adjustments.

### Management of Waiting Lines

Stochastic customer demand, capacity, and service productivity and the inability to use inventory buffers result in waiting times. Operations researchers have been interested for the last several decades in developing analytical models of queue configurations and their linkages on customer waiting times. However, there is also a psychological side to waiting. For example, preprocess waits are often perceived to be longer than in-process waits. In addition, perceived waiting times are often not linearly related to actual waiting times. It has also been suggested that service waits are impacted by environmental factors (e.g., music) or culture (e.g., Asian, western). For example, in a recent study, Pullman et al. (2000a,b) demonstrated that economic utilities for waiting times were not the same for Japanese-, Spanish-, and English-speaking customers at an international airport.

### Service Encounter

Most services are characterized as an encounter (or a series of encounters) between a service provider and a customer. This interaction, also known as the “moment of truth,” is the time when the customer evaluates and forms opinions about service performance. The characteristics of a service encounter are determined by the customer, the service-providing employee, and the service organization. Recognizing the above interrelationship, service encounters have been of interest to service marketers, operations management, human resources, and organizational behavior researchers (e.g., Tansik, 1990; Price et al., 1995).

### Service Recovery and Error Proofing

Service recovery is a firm’s response to failures in its delivery system. Even the best-in-class services fail sometimes, because service delivery systems are characterized by the

simultaneous production and consumption, and because of the inclusion of customers in the production process. Good service recovery systems provide a firm with a second opportunity to “get things right” and win back market share. However, historically, most service firms have paid little attention to developing an effective service-recovery or error proofing system. Recently, Stewart and Chase (1999) found that substantial portions of service failures are a result of human error in the delivery process. Given that competition is increasing at an increasing rate in many service industries, the issue of error proofing and service recovery might be of critical importance to service marketers in the future.

### **Concluding Remarks**

Services provide many opportunities and challenges to managers and researchers alike. This chapter has provided an overview of the conceptual basis, trends, and major themes in services marketing. Many examples from transportation and logistics services are embedded throughout the chapter to illustrate the applicability of the concepts presented in these specific industries. The dynamic and evolving nature of services continue to present an increasing number of unanswered questions. Along these lines this chapter should, at the best, be considered as a primer on the exciting science and art of services marketing.

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