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A Conceptual Model of Service Quality and Its Implications for Future Research

The attainment of quality in products and services has become a pivotal concern of the 1980s. While quality in tangible goods has been described and measured by marketers, quality in services is largely undefined and unresearched. The authors attempt to rectify this situation by reporting the insights obtained in an extensive exploratory investigation of quality in four service businesses and by developing a model of service quality. Propositions and recommendations to stimulate future research about service quality are offered.

"People want some wise and perceptive statement like,
'Quality is ballet, not hockey.'"—Philip Crosby (1979)

QUALITY is an elusive and indistinct construct. Often mistaken for imprecise adjectives like "goodness, or luxury, or shininess, or weight" (Crosby 1979), quality and its requirements are not easily articulated by consumers (Takeuchi and Quelch 1983). Explication and measurement of quality also present problems for researchers (Monroe and Krishnan 1983), who often bypass definitions and use unidimensional self-report measures to capture the concept (Jacoby, Olson, and Haddock 1973; McConnell 1968; Shapiro 1972).

While the substance and determinants of quality may be undefined, its importance to firms and consumers is unequivocal. Research has demonstrated the strategic benefits of quality in contributing to market share and return on investment (e.g., Anderson and Zeithaml 1984; Phillips, Chang, and Buzzell 1983) as well as in lowering manufacturing costs and improv-

ing productivity (Garvin 1983). The search for quality is arguably the most important consumer trend of the 1980s (Rabin 1983) as consumers are now demanding higher quality in products than ever before (Leonard and Sasser 1982, Takeuchi and Quelch 1983).

Few academic researchers have attempted to define and model quality because of the difficulties involved in delimiting and measuring the construct. Moreover, despite the phenomenal growth of the service sector, only a handful of these researchers have focused on service quality. We attempt to rectify this situation by (1) reviewing the small number of studies that have investigated service quality, (2) reporting the insights obtained in an extensive exploratory investigation of quality in four service businesses, (3) developing a model of service quality, and (4) offering propositions to stimulate future research about quality.

Existing Knowledge about Service Quality

Efforts in defining and measuring quality have come largely from the goods sector. According to the prevailing Japanese philosophy, quality is "zero defects—doing it right the first time." Crosby (1979)

defines quality as "conformance to requirements." Garvin (1983) measures quality by counting the incidence of "internal" failures (those observed before a product leaves the factory) and "external" failures (those incurred in the field after a unit has been installed).

Knowledge about goods quality, however, is insufficient to understand service quality. Three well-documented characteristics of services—*intangibility, heterogeneity,* and *inseparability*—must be acknowledged for a full understanding of service quality.

First, most services are intangible (Bateson 1977, Berry 1980, Lovelock 1981, Shostak 1977). Because they are performances rather than objects, precise manufacturing specifications concerning uniform quality can rarely be set. Most services cannot be counted, measured, inventoried, tested, and verified in advance of sale to assure quality. Because of intangibility, the firm may find it difficult to understand how consumers perceive their services and evaluate service quality (Zeithaml 1981).

Second, services, especially those with a high labor content, are heterogeneous: their performance often varies from producer to producer, from customer to customer, and from day to day. Consistency of behavior from service personnel (i.e., uniform quality) is difficult to assure (Booms and Bitner 1981) because what the firm intends to deliver may be entirely different from what the consumer receives.

Third, production and consumption of many services are inseparable (Carmen and Langeard 1980, Gronroos 1978, Regan 1963, Upah 1980). As a consequence, quality in services is not engineered at the manufacturing plant, then delivered intact to the consumer. In labor intensive services, for example, quality occurs during service delivery, usually in an interaction between the client and the contact person from the service firm (Lehtinen and Lehtinen 1982). The service firm may also have less managerial control over quality in services where consumer participation is intense (e.g., haircuts, doctor's visits) because the client affects the process. In these situations, the consumer's input (description of how the haircut should look, description of symptoms) becomes critical to the quality of service performance.

Service quality has been discussed in only a handful of writings (Gronroos 1982; Lehtinen and Lehtinen 1982; Lewis and Booms 1983; Sasser, Olsen, and Wyckoff 1978). Examination of these writings and other literature on services suggests three underlying themes:

- Service quality is more difficult for the consumer to evaluate than goods quality.
- Service quality perceptions result from a comparison of consumer expectations with actual service performance.

- Quality evaluations are not made solely on the outcome of a service; they also involve evaluations of the *process* of service delivery.

Service Quality More Difficult to Evaluate

When purchasing goods, the consumer employs many tangible cues to judge quality: style, hardness, color, label, feel, package, fit. When purchasing services, fewer tangible cues exist. In most cases, tangible evidence is limited to the service provider's physical facilities, equipment, and personnel.

In the absence of tangible evidence on which to evaluate quality, consumers must depend on other cues. The nature of these other cues has not been investigated by researchers, although some authors have suggested that price becomes a pivotal quality indicator in situations where other information is not available (McConnell 1968, Olander 1970, Zeithaml 1981). Because of service intangibility, a firm may find it more difficult to understand how consumers perceive services and service quality. "When a service provider knows how [the service] will be evaluated by the consumer, we will be able to suggest how to influence these evaluations in a desired direction" (Gronroos 1982).

Quality Is a Comparison between Expectations and Performance

Researchers and managers of service firms concur that service quality involves a comparison of expectations with performance:

> Service quality is a measure of how well the service level delivered matches customer expectations. Delivering quality service means conforming to customer expectations on a consistent basis. (Lewis and Booms 1983)

In line with this thinking, Gronroos (1982) developed a model in which he contends that consumers compare the service they expect with perceptions of the service they receive in evaluating service quality.

Smith and Houston (1982) claimed that satisfaction with services is related to confirmation or disconfirmation of expectations. They based their research on the disconfirmation paradigm, which maintains that satisfaction is related to the size and direction of the disconfirmation experience where disconfirmation is related to the person's initial expectations (Churchill and Suprenaut 1982).

Quality Evaluations Involve Outcomes and Processes

Sasser, Olsen, and Wyckoff (1978) discussed three different dimensions of service performance: levels of material, facilities, and personnel. Implied in this trichotomy is the notion that service quality involves more than outcome; it also includes the manner in which

the service is delivered. This notion surfaces in other research on service quality as well.

Gronroos, for example, postulated that two types of service quality exist: *technical quality*, which involves what the customer is actually receiving from the service, and *functional quality*, which involves the manner in which the service is delivered (Gronroos 1982).

Lehtinen and Lehtinen's (1982) basic premise is that service quality is produced in the interaction between a customer and elements in the service organization. They use three quality dimensions: *physical quality*, which includes the physical aspects of the service (e.g., equipment or building); *corporate quality*, which involves the company's image or profile; and *interactive quality*, which derives from the interaction between contact personnel and customers as well as between some customers and other customers. They further differentiate between the quality associated with the process of service delivery and the quality associated with the outcome of the service.

Exploratory Investigation

Because the literature on service quality is not yet rich enough to provide a sound conceptual foundation for investigating service quality, an exploratory qualitative study was undertaken to investigate the concept of service quality. Specifically, focus group interviews with consumers and in-depth interviews with executives were conducted to develop a conceptual model of service quality. The approach used is consistent with procedures recommended for marketing theory development by several scholars (Deshpande 1983; Peter and Olson 1983; Zaltman, LeMasters, and Heffring 1982).

In-depth interviews of executives in four nationally recognized service firms and a set of focus group interviews of consumers were conducted to gain insights about the following questions:

- What do managers of service firms perceive to be the key attributes of service quality? What problems and tasks are involved in providing high quality service?

- What do consumers perceive to be the key attributes of quality in services?

- Do discrepancies exist between the perceptions of consumers and service marketers?

- Can consumer and marketer perceptions be combined in a general model that explains service quality from the consumer's standpoint?

Service Categories Investigated

Four service categories were chosen for investigation: retail banking, credit card, securities brokerage, and product repair and maintenance. While this set of service businesses is not exhaustive, it represents a cross-section of industries which vary along key dimensions used to categorize services (Lovelock 1980, 1983). For example, retail banking and securities brokerage services are more "high contact services" than the other two types. The nature and results of the service act are more tangible for product repair and maintenance services than for the other three types. In terms of service delivery, discrete transactions characterize credit card services and product repair and maintenance services to a greater extent than the other two types of services.

Executive Interviews

A nationally recognized company from each of the four service businesses participated in the study. In-depth personal interviews comprised of open-ended questions were conducted with three or four executives in each firm. The executives were selected from marketing, operations, senior management, and customer relations because each of these areas could have an impact on quality in service firms. The respondents held titles such as president, senior vice president, director of customer relations, and manager of consumer market research. Fourteen executives were interviewed about a broad range of service quality issues (e.g., what they perceived to be service quality from the consumer's perspective, what steps they took to control or improve service quality, and what problems they faced in delivering high quality services).

Focus Group Interviews

A total of 12 focus group interviews was conducted, three for each of the four selected services. Eight of the focus groups were held in a metropolitan area in the southwest. The remaining four were conducted in the vicinity of the participating companies' headquarters and were therefore spread across the country: one on the West Coast, one in the Midwest, and two in the East.

The focus groups were formed in accordance with guidelines traditionally followed in the marketing research field (Bellenger, Berhardt, and Goldstucker 1976). Respondents were screened to ensure that they were current or recent users of the service in question. To maintain homogeneity and assure maximum participation, respondents were assigned to groups based on age and sex. Six of the twelve groups included only males and six included only females. At least one male group and one female group were interviewed for each of the four services. Consistency in age was maintained within groups; however, age diversity across groups for each service category was established to ascertain the viewpoints of a broad cross section of consumers.

Identities of participating firms were not revealed to focus group participants. Discussion about quality of a given service centered on consumer experiences and perceptions relating to that service *in general,* as opposed to the specific service of the participating firm in that service category. Questions asked by the moderator covered topics such as instances of and reasons for satisfaction and dissatisfaction with the service; descriptions of an ideal service (e.g., ideal bank or ideal credit card); the meaning of service quality; factors important in evaluating service quality; performance expectations concerning the service; and the role of price in service quality.

Insights from Exploratory Investigation

Executive Interviews

Remarkably consistent patterns emerged from the four sets of executive interviews. While some perceptions about service quality were specific to the industries selected, commonalities among the industries prevailed. The commonalities are encouraging for they suggest that a general model of service quality can be developed.

Perhaps the most important insight obtained from analyzing the executive responses is the following:

> *A set of key discrepancies or gaps exists regarding executive perceptions of service quality and the tasks associated with service delivery to consumers. These gaps can be major hurdles in attempting to deliver a service which consumers would perceive as being of high quality.*

The gaps revealed by the executive interviews are shown in the lower portion (i.e., the MARKETER side) of Figure 1. This figure summarizes the key insights gained (through the focus group as well as executive interviews) about the concept of service quality and factors affecting it. The remainder of this section discusses the gaps on the service marketer's side (GAP1, GAP2, GAP3, and GAP4) and presents propositions implied by those gaps. The consumer's side of the service quality model in Figure 1 is discussed in the next section.

Consumer expectation–management perception gap (GAP1): Many of the executive perceptions about what consumers expect in a quality service were congruent with the consumer expectations revealed in the focus groups. However, discrepancies between executive perceptions and consumer expectations existed, as illustrated by the following examples:

FIGURE 1
Service Quality Model
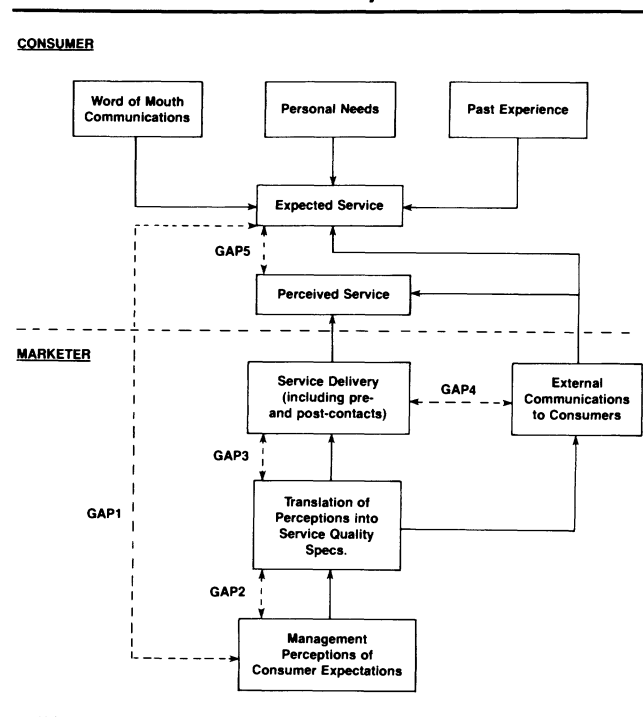
- Privacy or confidentiality during transactions emerged as a pivotal quality attribute in every banking and securities brokerage focus group. Rarely was this consideration mentioned in the executive interviews.

- The physical and security features of credit cards (e.g., the likelihood that unauthorized people could use the cards) generated substantial discussion in the focus group interviews but did not emerge as critical in the executive interviews.

- The product repair and maintenance focus groups indicated that a large repair service firm was unlikely to be viewed as a high quality firm. Small independent repair firms were consistently associated with high quality. In contrast, most executive comments indicated that a firm's size would signal strength in a quality context.

In essence, service firm executives may not always understand what features connote high quality to consumers in advance, what features a service must have in order to meet consumer needs, and what levels of performance on those features are needed to deliver high quality service. This insight is consistent with previous research in services, which suggests that service marketers may not always understand what consumers expect in a service (Langeard et al. 1981, Parasuraman and Zeithaml 1982). This lack of under-

standing may affect quality perceptions of consumers:

Proposition 1: The gap between consumer expectations and management perceptions of those expectations will have an impact on the consumer's evaluation of service quality.

Management perception–service quality specification gap (GAP2): A recurring theme in the executive interviews in all four service firms was the difficulty experienced in attempting to match or exceed consumer expectations. Executives cited constraints which prevent them from delivering what the consumer expects. As an example, executives in the repair service firm were fully aware that consumers view quick response to appliance breakdowns as a vital ingredient of high quality service. However, they find it difficult to establish specifications to deliver quick response consistently because of a lack of trained service personnel and wide fluctuations in demand. As one executive observed, peak demand for repairing air conditioners and lawnmowers occurs during the summer months, precisely when most service personnel want to go on vacation. In this and numerous other situations, knowledge of consumer expectations exists but the perceived means to deliver to expectations apparently do not.

Apart from resource and market constraints, another reason for the gap between expectations and the actual set of specifications established for a service is the absence of total management commitment to service quality. Although the executive interviews indicated a genuine concern for quality on the part of managers interviewed, this concern may not be generalizable to all service firms. In discussing product quality, Garvin (1983) stated: ". . . the seriousness that management attached to quality problems [varies]. It's one thing to say you believe in defect-free products, but quite another to take time from a busy schedule to act on that belief and stay informed" (p. 68). Garvin's observations are likely to apply to service businesses as well.

In short, a variety of factors—resource constraints, market conditions, and/or management indifference—may result in a discrepancy between management perceptions of consumer expectations and the actual specifications established for a service. This discrepancy is predicted to affect quality perceptions of consumers:

Proposition 2: The gap between management perceptions of consumer expectations and the firm's service quality specifications will affect service quality from the consumer's viewpoint.

Service quality specifications–service delivery gap (GAP3): Even when guidelines exist for performing services well and treating consumers correctly, high quality service performance may not be a certainty. Executives recognize that a service firm's employees exert a strong influence on the service quality perceived by consumers and that employee performance cannot always be standardized. When asked what causes service quality problems, executives consistently mentioned the pivotal role of contact personnel. In the repair and maintenance firm, for example, one executive's immediate response to the source of service quality problems was, "Everything involves a person—a repair person. It's so hard to maintain standardized quality."

Each of the four firms had formal standards or specifications for maintaining service quality (e.g., answer at least 90% of phone calls from consumers within 10 seconds; keep error rates in statements below 1%). However, each firm reported difficulty in adhering to these standards because of variability in employee performance. This problem leads to a third proposition:

Proposition 3: The gap between service quality specifications and actual service delivery will affect service quality from the consumer's standpoint.

Service delivery–external communications gap (GAP4): Media advertising and other communications by a firm can affect consumer expectations. If expectations play a major role in consumer perceptions of service quality (as the services literature contends), the firm must be certain not to promise more in communications than it can deliver in reality. Promising more than can be delivered will raise initial expectations but lower perceptions of quality when the promises are not fulfilled.

The executive interviews suggest another perhaps more intriguing way in which external communications could influence service quality perceptions by consumers. This occurs when companies neglect to inform consumers of special efforts to assure quality that are not visible to consumers. Comments of several executives implied that consumers are not always aware of everything done behind the scenes to serve them well.

For instance, a securities brokerage executive mentioned a "48-hour rule" prohibiting employees from buying or selling securities for their personal accounts for the first 48 hours after information is supplied by the firm. The firm did not communicate this information to its customers, perhaps contributing to a perception that "all the good deals are probably made by the brokers for themselves" (a perception which sur-

faced in the securities brokerage focus groups). One bank executive indicated that consumers were unaware of the bank's behind the counter, on-line teller terminals which would "translate into visible effects on customer service." Making consumers aware of not readily apparent service related standards such as these could improve service quality perceptions. Consumers who are aware that a firm is taking concrete steps to serve their best interests are likely *to perceive* a delivered service in a more favorable way.

In short, external communications can affect not only consumer expectations about a service but also consumer *perceptions* of the delivered service. Alternatively, discrepancies between service delivery and external communications—in the form of exaggerated promises and/or the absence of information about service delivery aspects intended to serve consumers well—can affect consumer perceptions of service quality.

Proposition 4: The gap between actual service delivery and external communications about the service will affect service quality from a consumer's standpoint.

Focus Group Interviews

As was true of the executive interviews, the responses of focus group participants about service quality were remarkably consistent across groups and across service businesses. While some service-specific differences were revealed, common themes emerged— themes which offer valuable insights about service quality perceptions of consumers.

Expected service–perceived service gap (GAP5): The focus groups unambiguously supported the notion that the key to ensuring good service quality is meeting or exceeding what consumers expect from the service. One female participant described a situation when a repairman not only fixed her broken appliance but also explained what had gone wrong and how she could fix it herself if a similar problem occurred in the future. She rated the quality of this service excellent because it exceeded her expectations. A male respondent in a banking services focus group described the frustration he felt when his bank would not cash his payroll check from a nationally known employer because it was postdated by one day. When someone else in the group pointed out legal constraints preventing the bank from cashing his check, he responded, "Well, nobody *in the bank* explained that to me!" Not receiving an explanation in the bank, this respondent perceived that the bank was *unwilling* rather than *unable* to cash the check. This in turn resulted in a perception of poor service quality.

Similar experiences, both positive and negative,

were described by consumers in every focus group. It appears that judgments of high and low service quality depend on how consumers perceive the actual service performance in the context of what they expected.

Proposition 5: The quality that a consumer perceives in a service is a function of the magnitude and direction of the gap between expected service and perceived service.

A Service Quality Model

Insights obtained from the executive interviews and the focus groups form the basis of a model summarizing the nature and determinants of service quality as perceived by consumers. The foundation of this model is the set of gaps discussed earlier and shown in Figure 1. Service quality as perceived by a consumer depends on the size and direction of GAP5 which, in turn, depends on the nature of the gaps associated with the design, marketing, and delivery of services: services:

Proposition 6: $GAP5 = f(GAP1, GAP2, GAP3, GAP4)$

It is important to note that the gaps on the marketer side of the equation can be favorable or unfavorable from a service quality perspective. That is, the magnitude *and direction* of each gap will have an impact on service quality. For instance, GAP3 will be favorable when actual service delivery exceeds specifications; it will be unfavorable when service specifications are not met. While proposition 6 suggests a relationship between service quality as perceived by consumers and the gaps occurring on the marketer's side, the functional form of the relationship needs to be investigated. This point is discussed further in the last section dealing with future research directions.

The Perceived Service Quality Component

The focus groups revealed that, regardless of the type of service, consumers used basically similar criteria in evaluating service quality. These criteria seem to fall into 10 key categories which are labeled "service quality determinants" and described in Table 1. For each determinant, Table 1 provides examples of service specific criteria that emerged in the focus groups. Table 1 is not meant to suggest that the 10 determinants are non-overlapping. Because the research was exploratory, measurement of possible overlap across the 10 criteria (as well as determination of whether some can be combined) must await future empirical investigation.

The consumer's view of service quality is shown in the upper part of Figure 1 and further elaborated in

TABLE 1
Determinants of Service Quality

RELIABILITY involves consistency of performance and dependability. It means that the firm performs the service right the first time. It also means that the firm honors its promises. Specifically, it involves:
—accuracy in billing;
—keeping records correctly;
—performing the service at the designated time.

RESPONSIVENESS concerns the willingness or readiness of employees to provide service. It involves timeliness of service:
—mailing a transaction slip immediately;
—calling the customer back quickly;
—giving prompt service (e.g., setting up appointments quickly).

COMPETENCE means possession of the required skills and knowledge to perform the service. It involves:
—knowledge and skill of the contact personnel;
—knowledge and skill of operational support personnel;
—research capability of the organization, e.g., securities brokerage firm.

ACCESS involves approachability and ease of contact. It means:
—the service is easily accessible by telephone (lines are not busy and they don't put you on hold);
—waiting time to receive service (e.g., at a bank) is not extensive;
—convenient hours of operation;
—convenient location of service facility.

COURTESY involves politeness, respect, consideration, and friendliness of contact personnel (including receptionists, telephone operators, etc.). It includes:
—consideration for the consumer's property (e.g., no muddy shoes on the carpet);
—clean and neat appearance of public contact personnel.

COMMUNICATION means keeping customers informed in language they can understand and listening to them. It may mean that the company has to adjust its language for different consumers—increasing the level of sophistication with a well-educated customer and speaking simply and plainly with a novice. It involves:
—explaining the service itself;
—explaining how much the service will cost;
—explaining the trade-offs between service and cost;
—assuring the consumer that a problem will be handled.

CREDIBILITY involves trustworthiness, believability, honesty. It involves having the customer's best interests at heart. Contributing to credibility are:
—company name;
—company reputation;
—personal characteristics of the contact personnel;
—the degree of hard sell involved in interactions with the customer.

SECURITY is the freedom from danger, risk, or doubt. It involves:
—physical safety (Will I get mugged at the automatic teller machine?);
—financial security (Does the company know where my stock certificate is?);
—confidentiality (Are my dealings with the company private?).

UNDERSTANDING/KNOWING THE CUSTOMER involves making the effort to understand the customer's needs. It involves:
—learning the customer's specific requirements;
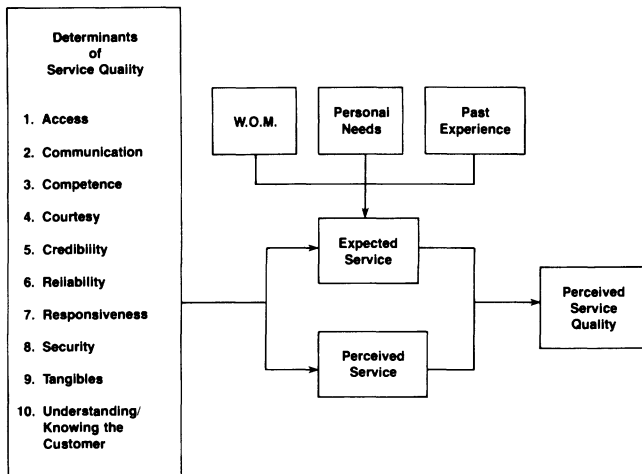—providing individualized attention;
—recognizing the regular customer.

TANGIBLES include the physical evidence of the service:
—physical facilities;
—appearance of personnel;
—tools or equipment used to provide the service;
—physical representations of the service, such as a plastic credit card or a bank statement;
—other customers in the service facility.

Figure 2. Figure 2 indicates that perceived service quality is the result of the consumer's comparison of expected service with perceived service. It is quite possible that the relative importance of the 10 determinants in molding consumer expectations (prior to service delivery) may differ from their relative importance vis-à-vis consumer perceptions of the delivered service. However, the general comparison of expections with perceptions was suggested in past research on service quality (Gronroos 1982, Lehtinen and Lehtinen 1982) and supported in the focus group interviews with consumers. The comparison of expected

FIGURE 2
Determinants of Perceived Service Quality

In general, offerings high in search properties are easiest to evaluate, those high in experience properties more difficult to evaluate, and those high in credence properties hardest to evaluate. Most services contain few search properties and are high in experience and credence properties, making their quality more difficult to evaluate than quality of goods (Zeithaml 1981).

Only two of the ten determinants—tangibles and credibility—can be known in advance of purchase, thereby making the number of search properties few. Most of the dimensions of service quality mentioned by the focus group participants were experience properties: access, courtesy, reliability, responsiveness, understanding/knowing the customer, and communication. Each of these determinants can only be known as the customer is purchasing or consuming the service. While customers may possess some information based on their experience or on other customers' evaluations, they are likely to reevaluate these determinants each time a purchase is made because of the heterogeneity of services.

Two of the determinants that surfaced in the focus group interviews probably fall into the category of credence properties, those which consumers cannot evaluate even after purchase and consumption. These include competence (the possession of the required skills and knowledge to perform the service) and security (freedom from danger, risk, or doubt). Consumers are probably never certain of these attributes, even after consumption of the service.

Because few search properties exist with services and because credence properties are too difficult to evaluate, the following is proposed:

Proposition 7: Consumers typically rely on experience properties when evaluating service quality.

Based on insights from the present study, perceived service quality is further posited to exist along a continuum ranging from ideal quality to totally unacceptable quality, with some point along the continuum representing satisfactory quality. The position of a consumer's perception of service quality on the continuum depends on the nature of the discrepancy between the expected service (ES) and perceived service (PS):

Proposition 8: (a) When ES > PS, perceived quality is less than satisfactory and will tend toward totally unacceptable quality, with increased discrepancy between ES and PS; (b) when ES = PS, perceived quality is satisfactory; (c) when ES < PS, perceived quality is more than

and perceived service is not unlike that performed by consumers when evaluating goods. What differs with services is the *nature* of the characteristics upon which they are evaluated.

One framework for isolating differences in evaluation of quality for goods and services is the classification of properties of goods proposed by Nelson (1974) and Darby and Karni (1973). Nelson distinguished between two categories of properties of consumer goods: *search properties*, attributes which a consumer can determine prior to purchasing a product, and *experience properties*, attributes which can only be discerned after purchase or during consumption. Search properties include attributes such as color, style, price, fit, feel, hardness, and smell, while experience properties include characteristics such as taste, wearability, and dependability.

Darby and Karni (1973) added to Nelson's two-way classification system a third category, *credence properties*—characteristics which the consumer may find impossible to evaluate even after purchase and consumption. Examples of offerings high in credence properties include appendectomies and brake relinings on automobiles. Few consumers possess medical or mechanical skills sufficient to evaluate whether these services are necessary or are performed properly, even after they have been prescribed and produced by the seller.

Consumers in the focus groups mentioned search, experience, and credence properties when asked to describe and define service quality. These aspects of service quality can be categorized into the 10 service quality determinants shown in Table 1 and can be arrayed along a continuum ranging from *easy to evaluate* to *difficult to evaluate*.

satisfactory and will tend toward ideal quality, with increased discrepancy between ES and PS.

Directions for Future Research

The proposed service quality model (Figure 1) provides a conceptual framework in an area where little prior research has been done. It is based on an interpretation of qualitative data generated through a number of in-depth executive interviews and consumer focus groups—an approach consistent with procedures recommended for marketing theory development. The conceptual model and the propositions emerging from it imply a rich agenda for further research.

First, there is a need and an opportunity to develop a standard instrument to measure consumers' service quality perceptions. The authors' exploratory research revealed 10 evaluative dimensions or criteria which transcend a variety of services (Table 1). Research is now needed to generate items or statements to flesh out the 10 dimensions, to devise appropriate rating scales to measure consumers' perceptions with respect to each statement, and to condense the set of statements to produce a reliable and comprehensive but concise instrument. Further, the statements generated should be such that with appropriate changes in wording, the same instrument can be used to measure perceived quality for a variety of services.

Second, the main thesis of the service quality model is that consumers' quality perceptions are influenced by a series of distinct gaps occurring on the marketers' side. A key challenge for researchers is to devise methods to measure these gaps accurately. Reliable and valid measures of these gaps will be necessary for empirically testing the propositions implied by the model.

Third, research is needed to examine the *nature* of the association between service quality as perceived by consumers and its determinants (GAPS 1–4). Specifically, are one or more of these gaps more critical than the others in affecting quality? Can creating one "favorable" gap—e.g., making GAP4 favorable by employing effective external communications to create realistic consumer expectations and to enhance consumer perceptions—offset service quality problems stemming from other gaps? Are there differences

across service industries regarding the relative seriousness of service quality problems and their impact on quality as perceived by consumers? In addition to offering valuable managerial insights, answers to questions like these may suggest refinements to the proposed model.

Fourth, the usefulness of segmenting consumers on the basis of their service quality expectations is worth exploring. Although the focus groups consistently revealed similar criteria for judging service quality, the group participants differed on the *relative importance* of those criteria to them, and their *expectations* along the various quality dimensions. Empirical research aimed at determining whether distinct, identifiable service quality segments exist will be valuable from a service marketer's viewpoint. In this regard, it will be useful to build into the service quality measurement instrument certain statements for ascertaining whether, and in what ways, consumer expectations differ.

Fifth, as shown by Figure 1, expected service—a critical component of perceived service quality—in addition to being influenced by a marketer's communications, is shaped by word-of-mouth communications, personal needs, and past experience. Research focusing on the relative impact of these factors on consumers' service expectations, within as well as across service categories, will have useful managerial implications.

Summary

The exploratory research (focus group and in-depth executive interviews) reported in this article offers several insights and propositions concerning consumers' perceptions of service quality. Specifically, the research revealed 10 dimensions that consumers use in forming expectations about and perceptions of services, dimensions that transcend different types of services. The research also pinpointed four key discrepancies or gaps on the service provider's side that are likely to affect service quality as perceived by consumers. The major insights gained through the research suggest a conceptual service quality model that will hopefully spawn both academic and practitioner interest in service quality and serve as a framework for further empirical research in this important area.

REFERENCES

Anderson, Carl and Carl P. Zeithaml (1984), "Stage of the Product Life Cycle, Business Strategy, and Business Performance," *Academy of Management Journal*, 27 (March), 5–24.

Bateson, John E. G. (1977), "Do We Need Service Marketing?," in *Marketing Consumer Services: New Insights,* Cambridge, MA: Marketing Science Institute, Report #77-115.

Bellenger, Danny N., Kenneth L. Berhardt, and Jac L. Goldstucker (1976), *Qualitative Research in Marketing,* Chicago: American Marketing.

Berry, Leonard L. (1980), "Services Marketing Is Different," *Business,* 30 (May–June), 24–28.

Booms, Bernard H. and Mary J. Bitner (1981), "Marketing Strategies and Organization Structures for Services Firms," in *Marketing of Services,* J. Donnelly and W. George, eds., Chicago: American Marketing, 47–51.

Carmen, James M. and Eric Langeard (1980), "Growth Strategies of Service Firms," *Strategic Management Journal,* 1 (January–March), 7–22.

Churchill, G. A., Jr., and C. Suprenaut (1982), "An Investigation into the Determinants of Customer Satisfaction," *Journal of Marketing Research,* 19 (November), 491–504.

Crosby, Philip B. (1979), *Quality Is Free: The Art of Making Quality Certain,* New York: New American Library.

Darby, M. R. and E. Karni (1973), "Free Competition and the Optimal Amount of Fraud," *Journal of Law and Economics,* 16 (April), 67–86.

Deshpande, Rohit (1983), "'Paradigms Lost': On Theory and Method in Research in Marketing," *Journal of Marketing,* 47 (Fall), 101–110.

Garvin, David A. (1983), "Quality on the Line," *Harvard Business Review,* 61 (September–October), 65–73.

Gronroos, Christian (1978), "A Service-Oriented Approach to Marketing of Services," *European Journal of Marketing,* 12 (no. 8), 588–601.

————— (1982), *Strategic Management and Marketing in the Service Sector,* Helsingfors: Swedish School of Economics and Business Administration.

Jacoby, Jacob, Jerry C. Olson, and Rafael A. Haddock (1973), "Price, Brand Name and Product Composition Characteristics as Determinants of Perceived Quality," *Journal of Applied Psychology,* 55 (no. 6), 570–579.

Langeard, Eric, John E. G. Bateson, Christopher H. Lovelock, and Pierre Eiglier (1981), *Service Marketing: New Insights from Consumers and Managers,* Cambridge, MA: Marketing Science Institute.

Lehtinen, Uolevi and Jarmo R. Lehtinen (1982), "Service Quality: A Study of Quality Dimensions," unpublished working paper, Helsinki: Service Management Institute, Finland OY.

Leonard, Frank S. and W. Earl Sasser (1982), "The Incline of Quality," *Harvard Business Review,* 60 (September–October), 163–171.

Lewis, Robert C. and Bernard H. Booms (1983), "The Marketing Aspects of Service Quality," in *Emerging Perspectives on Services Marketing,* L. Berry, G. Shostack, and G. Upah, eds., Chicago: American Marketing, 99–107.

Lovelock, Christopher H. (1980), "Towards a Classification of Services," in *Theoretical Developments in Marketing,* C. Lamb and P. Dunne, eds., Chicago: American Marketing, 72–76.

————— (1981), "Why Marketing Management Needs to be Different for Services," in *Marketing of Services,* J. Donnelly and W. George, eds., Chicago: American Marketing, 5–9.

————— (1983), "Classifying Services to Gain Strategic Marketing Insights," *Journal of Marketing,* 47 (Summer), 9–20.

McConnell, J. D. (1968), "Effect of Pricing on Perception of Product Quality," *Journal of Applied Psychology,* 52 (August), 300–303.

Monroe, Kent B. and R. Krishnan (1983), "The Effect of Price on Subjective Product Evaluations," Blacksburg: Virginia Polytechnic Institute, working paper.

Nelson, P. (1974), "Advertising as Information," *Journal of Political Economy,* 81 (July/August), 729–754.

Olander, F. (1970), "The Influence of Price on the Consumer's Evaluation of Products," in *Pricing Strategy,* B. Taylor and G. Wills, eds., Princeton, NJ: Brandon/Systems Press.

Parasuraman, A. and Valarie A. Zeithaml (1982), "Differential Perceptions of Suppliers and Clients of Industrial Services," in *Emerging Perspectives on Services Marketing,* L. Berry, G. Shostack, and G. Upah, eds., Chicago: American Marketing, 35–39.

Peter, J. Paul and Jerry C. Olson (1983), "Is Science Marketing?," *Journal of Marketing,* 47 (Fall), 111–125.

Phillips, Lynn W., Dae R. Chang, and Robert D. Buzzell (1983), "Product Quality, Cost Position, and Business Performance: A Test of Some Key Hypotheses," *Journal of Marketing,* 47 (Spring), 26–43.

Rabin, Joseph H. (1983), "Accent Is on Quality in Consumer Services This Decade," *Marketing News,* 17 (March 4), 12.

Regan, William J. (1963), "The Service Revolution," *Journal of Marketing,* 27 (July), 57–62.

Sasser, W. Earl, Jr., R. Paul Olsen, and D. Daryl Wyckoff (1978), *Management of Service Operations: Text and Cases,* Boston: Allyn & Bacon.

Shapiro, Bensen (1972), "The Price of Consumer Goods: Theory and Practice," Cambridge, MA: Marketing Science Institute, working paper.

Shostack, G. Lynn (1977), "Breaking Free from Product Marketing," *Journal of Marketing,* 41 (April), 73–80.

Smith, Ruth A. and Michael J. Houston (1982), "Script-Based Evaluations of Satisfaction with Services," in *Emerging Perspectives on Services Marketing,* L. Berry, G. Shostack, and G. Upah, eds., Chicago: American Marketing, 59–62.

Takeuchi, Hirotaka and John A. Quelch (1983), "Quality Is More Than Making a Good Product," *Harvard Business Review,* 61 (July–August), 139–145.

Upah, Gregory D. (1980), "Mass Marketing in Service Retailing: A Review and Synthesis of Major Methods," *Journal of Retailing,* 56 (Fall), 59–76.

Zaltman, Gerald, Karen LeMasters, and Michael Heffring (1982), *Theory Construction in Marketing: Some Thought on Thinking,* New York: Wiley.

Zeithaml, Valarie A. (1981), "How Consumer Evaluation Processes Differ between Goods and Services," in *Marketing of Services,* J. Donnelly and W. George, eds., Chicago: American Marketing, 186–190.