

A CONCEPTUAL FRAMEWORK OF PERCEIVED SERVICE QUALITY: AN EMPIRICAL STUDY

Vikas Singla
Amar Inder Singh*

Abstract

With increasing competition the attainment of quality in products and services has become a pivotal concern. While quality in tangible goods has been described and measured by marketers, quality in services is largely undefined and unresearched. An attempt has been made by conducting an investigation of quality in two service industries and by developing a model of service quality. The conceptualization of service quality carried out in this study enable managers to devote resources to improving either service quality collectively or specific aspects of the service act. The conceptualization can be used to categorize customers across the various dimensions. Segment profiles then can be created to identify areas of core competency as well as service deficiencies. From a competitive standpoint, the identified variables can be used to compare service levels with competitors' offerings. The research reveals that service quality model is industry specific and each of the dimensions lead to improved service quality perceptions as customers perceive the service to be reliable, responsive and price-sensitive at least in the developing countries. The results highlight the need to operationalize the service quality construct, as it would suggest which dimensions of service quality to emphasize for training service employees and for formulating competitive operations strategy.

Introduction

Delivering quality service is considered an essential strategy for success and survival in today's competitive environment. During the 1980s, the primary emphasis of both academic and managerial effort focused on determining what service quality meant to customers and developing strategies to meet customer expectations. Since then, many organizations including those whose primary offerings involve physical goods such as automobiles or computers have

* Punjab School of Management Studies, Punjabi University, Patiala-147002, Punjab, India;
vikassingla@yahoo.com

instituted measurement and management approaches to improve their service. Quality is an elusive and indistinct construct. Explication and measurement of quality also present problems for researchers who often bypass definitions and use unidimensional self-report measures to capture the concept. 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 in investment as well as in lowering manufacturing costs and improving productivity. The search for quality is arguably the most important consumer trend, as consumers are now demanding higher quality in products than ever before.

In India, the service sector has been emerging as the dominant component of the economy. Certain types of services have been growing particularly rapidly. The hotel industry is one of them and its potential for growth is quite substantial as the country has a rich heritage, chequered past with its vast remains, apart from the enormous business potential which can attract a huge number of foreign business and leisure travelers. With the increasing growth of communications, improved transportation, better and more widespread education, increased leisure time and more disposable income there is acceleration in the demand for more sophisticated travel and tourism experiences. The competition has intensified and that has put significant pressure on the hotels to perform. Such a scenario has interesting theoretical and practical implication for the service literature, service establishments and especially the hotel industry, which is lucrative in size and fiercely competitive. In particular, it is important to comprehend the dynamics of this industry from the perspective of the customer who is the final arbiter of how much to spend and where, when and what to eat and stay. Therefore, an understanding of the factors that influence service quality ought to be useful in guiding service providers to design and deliver the right offering.

Service Quality

Efforts in defining and measuring quality have come largely from the goods sector. Knowledge about goods quality, however, is insufficient to understand service quality. Services require a distinct framework for quality measurement as they are essentially intangible, heterogeneous, perishable and are produced and consumed simultaneously. As against the goods sector where tangible cues exist to enable consumers to evaluate product quality, quality in the service context is explicated in terms of parameters that largely come under the domain of 'experience' and 'credence' properties and are as such difficult to measure and evaluate (Parasuraman, Zeithmal and Berry, 1985).

Conceptualization

The conceptualization and measurement of service quality perceptions have been the most debated and controversial topics in the services marketing literature. In the literature, there has been considerable progress as to how service quality perceptions should be measured but little advance as to what should be measured. Researchers generally have adopted one of two conceptualizations. The first is the “Nordic” perspectives (Gronroos 1982, 1984), which defines the dimensions of service quality in global terms as consisting of functional and technical quality. Functional quality represents how the service is delivered, i.e., it defines customers’ perceptions of the interactions that take place during service delivery. Technical quality reflects the outcome of the service act, or what the customer receives in the service encounter. The second, the “American” perspective (Parasuraman, Zeithmal and Berry, 1988), is the disconfirmation paradigm and forms the basis for SERVQUAL model. This model views service quality as the gap between the expected level of service and customer perceptions of the level received. Whereas, Gronroos (1982) suggests two dimensions, Parasuraman, Zeithmal and Berry (1988) proposes five that describe service encounter characteristics (i.e. reliability, responsiveness, empathy, assurances and tangibles). Although the latter conceptualization dominates the literature a consensus has not evolved as to which if either, is the more appropriate approach. Moreover, no attempt has been made to consider how the differing conceptualizations may be related.

Although it is apparent that perceptions of service quality are based on multiple dimensions, there is no general as to the nature or content of the dimensions. Two (e.g., Gronroos 1982), five (e.g., Parasuraman, Zeithmal and Berry, 1988), and even ten (e.g., Parasuraman, Zeithmal and Berry, 1985) dimensions have been proposed. Although the SERVQUAL framework has been pursued with some enthusiasm in various service industries, empirical support for the suggested framework has not always been encouraging. Cronin and Taylor (1992) suggested that service quality could be predicted adequately by using perceptions alone. In addition Carman (1990) suggested that in specific service situations it might be necessary to delete or modify some of the SERVQUAL dimensions. Teas (1993) argued that measuring the gap between expectations and performance could be problematic. However, it is apparent that service quality evaluations are highly complex processes that may operate at several levels of abstraction.

When assessed collectively, the five dimensions of SERVQUAL model are terms that might be used to refine some aspect of service quality. However, of major concern should be the question as to what should be reliable, responsive, empathetic, assured and tangible if service excellence is to be ensured. From a theoretical perspective, if service quality perceptions, represent

a latent variable, something specific must be reliable, responsive, empathetic, assured and tangible. Specifically, a conceptualization that recognizes the significance of SERVQUAL factors and defines what needs to be reliable and so forth will respond to the call for identifying the attributes that influence service quality perceptions.

The SERVQUAL scale, consisting of five original dimensions, was originally conceptualized by Parasuraman, Zeithmal and Berry (1988), it was used to assess four organizations – a bank, a credit card company, a repair and maintenance organization and a long distance phone service carrier. In these industries customers typically develop long-term relationships with just one organization. Each of these services is also a pure type with little or no physical products exchanging hands. In the hotel industry only a part of the offering is a service which is intangible and heterogeneous, and where the production and consumption of the product cannot be separated. In this mixed product-service construct and where service assessments are largely experience based (as opposed to healthcare or auto repair organizations where service assessments are credence based), all five original dimensions of SERVQUAL scale need not be included.

Thus, from above observation a view has been adopted that service quality perceptions are multilevel and multidimensional. Carman (1990) noted that customers tend to break service quality dimensions into various sub dimensions. Several researchers have suggested that the search for universal conceptualization of the service quality construct may be futile (Lovelock, 1983) and arguments have been advanced to suggest that service quality is either industry or context specific.

The objective of this study is to identify a new and integrated conceptualization of service quality in order to develop favorable service quality perceptions among consumers. As the secondary literature indicates that the service quality model is industry specific, thus the questionnaire designed was investigated in two service industries viz. hotel and retail industry. The objective is to analyze the service quality items enumerated by Parasuraman, Zeithmal and Berry (1988) in two selected industries to find whether the five-component structure is confirmed or not. Such a framework is needed if the true effects of service quality perceptions are to be better understood by both marketing researchers and practitioners.

Methodology

The relevant literature and survey instruments developed by past studies provided the basis for developing the questionnaire for this study. After a review of the literature, 37 service quality attributes were developed in the questionnaire

to identify. This questionnaire was put to respondents from two service industries i.e. hotel and retail industry. The questionnaire was divided into two parts; the first part was designed to capture the respondents' demographic profile. The second part measured the respondents' perceptions of service quality actually provided by the retail outlets and hotels under study. The respondents were asked to indicate their level of agreement with statements with responses that ranged from (1) strongly disagree to (5) strongly agree.

The target population of the survey was chosen from a mid-size metropolitan city. A systematic sampling approach was employed and every fifth customer who visited the retail store was surveyed. A total of 150 customers were surveyed. To choose respondents from hotel industry stratified random sampling was employed and a total of 150 respondents were stratified into business and leisure travelers.

Analysis

The data collected from the questionnaires were analyzed by using factor analysis and other statistical techniques like t-test. The first stage of the process was to determine whether the seven dimensions could be viewed as appropriate indicators of service quality in hotel and retail industry. The second stage assessed the variables underlying the various dimensions. Accordingly, 37 descriptive measures were developed to assess the seven dimensions. This stage tests these variables as well as their relevance in conceptualizing service quality.

The 37 service quality variables were factor analyzed to determine whether there existed underlying dimensions of service quality. The objective of the analysis was to summarize the information contained in the original 37 variables into smaller sets of newly correlated composite dimensions or factors. Only variables with factor loadings of 0.40 (Hatcher, 1994) were considered and other items were excluded. The Cronbach alpha coefficient is used to assess the reliability of the scales. The constructs having Cronbach alpha 0.7 (Nunnally, 1978) or more which suggests a good internal consistency among items within each identified construct were considered. The factors with eigenvalue equal to or greater than one were considered significant and chosen for interpretation.

Results

I. Identification of dimensions of service quality in hotel industry:

The underlying dimensions or service quality variables were identified through principal components analyses with orthogonal varimax rotation that

explained the variance in the attributes. Each group of variables was analyzed using varimax rotation with a factor loading of 0.5 or better. Reliability analysis (Cronbach alpha) was calculated to test the reliability and internal consistency of each factor. The results showed that alpha-coefficients of the factors were well above the minimum value of 0.50 considered acceptable as an indication of reliability for basic research (Nunnally, 1967). The number of factors to be extracted was determined by evaluating the eigenvalue scores. Five factors with eigenvalues greater than one were identified and statements with loadings of 0.5 or greater were retained. The structure shown in Table I explain five factors and contain 22 of the 37 statements (Annexure-I). The t-values indicate that there is no significant difference between the statement mean and the factor mean, thus implying that the statement belongs to the factor.

In this mixed product-service construct and where service assessments are largely experience based all five original dimensions of SERVQUAL scale need not be included. *Assurance* is defined as employees' knowledge and courtesy and their ability to inspire trust and confidence. In the hotel industry, the customer's risk is low given the purchase price, the outcome of the service, and the alternatives available. Hence assurance is not likely to be as important in this industry. Moreover, the use of scale items such as "you felt safe in your transactions with the restaurant" or "the behavior of employees instilled confidence in you" (both derived from SERVQUAL) simply did not seem appropriate for the hotel context. Similarly, *empathy* is defined in the SERVQUAL literature as the individualized caring attention that is displayed to each customer. This dimension is more applicable to industries where "relationship marketing" as opposed to "transaction marketing" is critical to the organization's survival. However, the need to demonstrate empathy in the context of hotels, especially for contact personnel such as a server in a busy dinner rush when one is typically waiting on 20 or more people at a time, may be fleeting at best. Customers also do not want a doting server providing personal attention when all they want is to enjoy the food and the company. At the same time, scale items such as "the restaurant gives you individual attention" or "the restaurant had your best interest at heart" (derived from SERVQUAL) seemed inappropriate for the context. Instead, reliable and responsive services may be more desirable for restaurants when provided in a pleasing environment.

This has been corroborated by the research as the results show that assurance and empathy factors were not included in the final assessment as their factor loading was less than the established value.

Table I (Hotel industry dimensions)

Factors	Dimensions	Factor Loading	t-statistic	Cronbach Alpha	Eigenvalues	Percentage of explained variance
<i>Factor 1.</i> Tangibility	- S1.	0.71	1.63	0.91	3.219	0.4598
	S2.	0.86	1.84			
	S3.	0.70	1.80			
	S4.	0.35	1.50			
	S5.	0.64	1.53			
	S6.	0.72	0.77			
	S9.	0.66	0.92			
<i>Factor2.</i> Reliability	- S10.	0.62	1.72	0.83	1.7792	0.3558
	S11.	0.55	0.62			
	S12.	0.59	1.65			
	S13.	0.61	0.70			
	S14.	0.62	1.67			
<i>Factor 3. –</i> Responsiveness	S15.	0.68	1.44	0.90	2.921	0.4172
	S16.	0.69	1.39			
	S17.	0.76	1.30			
	S18.	0.75	1.49			
<i>Factor 4.-</i> Price	S28.	0.65	0.70	0.72	1.5116	0.3779
	S30.	0.71	1.78			

	S31.	0.57	0.90			
Factor 5.-	S32.	0.59	1.32	0.71	1.1722	0.293
Accessibility & Flexibility	S33.	0.49	1.31			
	S34.	0.52	0.25			

Note: t-values: two tail test, $p < 0.05$

II. Identification of dimensions of service quality in retail industry:

The underlying dimensions or service quality variables were identified through principal components analyses with orthogonal varimax rotation that explained the variance in the attributes. Each group of variables was analyzed using varimax rotation with a factor loading of 0.5 or better. Reliability analysis (Cronbach alpha) was calculated to test the reliability and internal consistency of each factor. The results showed that alpha-coefficients of the factors were well above the minimum value of 0.50 considered acceptable as an indication of reliability for basic research (Nunally, 1967). The number of factors to be extracted was determined by evaluating the eigenvalue scores. Six factors with eigenvalues greater than one were identified and statements with loadings of 0.5 or greater were retained. The structure shown in Table II explains six factors and contains 25 of the 37 statements (Annexure-II). The t-values indicate that there is no significant difference between the statement mean and the factor mean, thus implying that the statement belongs to the factor.

Even in retail industry the results have indicated that empathy is not a significant factor while conceptualizing service quality. In addition to the reasons that have already been mentioned, another reason could be that the majority of the services provided by the retail stores are being produced and consumed by the customers themselves i.e. the element of self-service is predominant in the process. The customers while selecting the products in the retail store didn't like to be interfered by the employees. This has been corroborated by the research as the results show that empathy factor was not included in the final assessment as its factor loading was less than the established value.

Table II (Retail industry dimensions)

Factors	Dimensions	Factor Loading	t-statistic	Cronbach Alpha	Eigenvalues	Percentage of explained variance
Factor 1. – Tangibility	S1.	0.78	1.87	0.98	3.436	0.492
	S2.	0.801	1.88			
	S3.	0.771	1.61			
	S4.	0.715	0.65			
	S5.	0.674	0.58			
	S6.	0.577	0.80			
	S9.	0.541	0.57			
Factor2. – Reliability	S10.	0.811	1.75	0.90	2.673	0.535
	S11.	0.753	1.87			
	S12.	0.649	1.94			
	S13.	0.642	1.96			
	S14.	0.785	1.66			
Factor 3. – Responsiveness	S15.	0.763	1.81	0.83	2.283	0.571
	S16.	0.793	1.93			
	S17.	0.811	1.31			
	S18.	0.64	1.72			
Factor 4.- Assurance	S19.	0.794	1.72	0.77	1.952	0.651
	S20.	0.834	1.73			
	S22.	0.786	1.16			

Factor 5.-	S28.	0.560	0.96	0.71	1.379	0.459
Price	S30.	0.664	0.49			
	S31.	0.790	1.53			
Factor 6.-	S32.	0.71	1.26	0.72	2.089	0.6963
Accessibility & Flexibility	S33.	0.91	1.83			
	S34.	0.87	1.30			

Note: t-values: two tail test, $p < 0.05$

Conclusion

This study developed a service quality scale for hotel and retail industry, which tries to address some basic issues like what, defines service quality perceptions and how service quality perceptions are formed. The service quality framework developed in the study requires managerial attention in efforts to improve consumer perceptions of service quality. The present study was dictated by the fact to develop a reliable measure of service quality that would be widely used in the service industry. The results highlight the need to operationalize the service quality construct, as it would suggest which dimensions of service quality to emphasize for training service employees and for formulating competitive operations strategy.

The assurance and empathy dimension of service quality were found to be insignificant in the hotel industry whereas empathy dimension was found to have least impact in conceptualization of service quality in retail industry. Instead, reliable and responsive services may be more desirable for the industries when provided in a pleasing environment. Reliability has been regarded as one of the most critical factor for customers based on both direct measures and importance weights derived from regression analysis (PZB, 1988). Price and Accessibility & Flexibility factors are also considered to be important factors especially in the context of developing economies. The customers tend to correlate quality of service with the price. Thus, pricing policies play an important role in establishing service quality. The conceptualization of service quality carried out in this study enable managers to devote resources to improving either service quality collectively or specific aspects of the service act.

Annexure-I (Survey items for hotel industry)

- S1. The hotel is clean and attractive.
- S2. The equipment & physical facilities of hotel are visually appealing and up-to-date.
- S3. The employees are neat appearing.
- S4. The lobby area is comfortable.
- S5. The parking space is adequate.
- S6. Materials associated with service like pamphlets and menu cards are visually appealing.
- S9. The employees give us special attention.
- S10. Our requests are handled promptly.
- S11. The employees adapt services to our needs. Eg. Employees communicate with the guests in the language they understand.
- S12. Room maintenance is adequate.
- S13. The employees adapt well to handle peak customer traffic.
- S14. The employees will tell customers exactly when services will be performed.
- S15. The employees' knowledge of hotel procedures makes me feel comfortable.
- S16. The employees provide adequate information about hotel facilities like computer system and exercise equipment.
- S17. The customers feel safe in their transactions.
- S18. The employees are consistently courteous with customers.
- S28. The employees give customers individual attention.
- S29. The hotel is conveniently located.
- S30. The employees are easily accessible when needed.
- S31. Operating hours are flexible. E.g. Express checkout is available for guests.
- S32. Services are accessible as and when customers demand.
- S33. Prices of services availed were competitive.

S34. Prices of services and items like food reflected the quality of meal and services you require.

Annexure-II (Survey items for retail industry)

S1. This store has modern looking and user-friendly equipment.

S2. The physical facilities at the store are visually appealing.

S3. Materials like shopping bags, catalogues etc. are visually appealing.

S4. Store layout makes it easy for customers to find what they need.

S5. Store layout makes it easy for customers to move around in the store.

S6. The store accepts most major credit cards.

S9. Employees of the store are neat in their appearance.

S10. This store provides its services at the time when it promises to do so.

S11. This store performs the service right the first time.

S12. The store has products available when the customers want it.

S13. The employees show sincere interest in solving service problems.

S14. The store insists on error-free sales transactions i.e. it provides accurate information.

S15. The store tells customers exactly when the services will be performed.

S16. Employees in the store give prompt service to the customer.

S17. Employees of the store are always willing to help.

S18. Employees of the store are never too busy to respond to customers' request.

S19. The behavior of employees in the store instills confidence in customer.

S20. The employees in the store have the knowledge to customers' questions.

S22. Employees in the store are able to handle customer complaints immediately.

S28. The prices of services availed were competitive.

S30. The items available in the store were expensive.

S31. You paid more than you had planned.

S32. The store is conveniently located.

S33. The employees of the store are easily accessible when needed.

S34. The services are accessible as and when the customers demand.

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