

SERVQUAL and Model of Service Quality Gaps: A Framework for Determining and Prioritizing Critical Factors in Delivering Quality Services

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Abstract

Service firms like other organizations are realizing the significance of customer-centered philosophies and are turning to quality management approaches to help managing their businesses. This paper has started with the concept of service quality and has demonstrated the model of service quality gaps. SERVQUAL as an effective approach has been studied and its role in the analysis of the difference between customer expectations and perceptions has been highlighted with support of an example. Outcomes of the study outline the fact that although SERVQUAL could close one of the important service quality gaps associated with external customer services, it could be extended to close other major gaps and therefore, it could be developed in order to be applied for internal customers, i.e. employees and service providers.

Key words: *Service, Quality, Gaps, SERVQUAL, Customer, Expectations, Perceptions*

Introduction

Managers in the service sector are under increasing pressure to demonstrate that their services are customer-focused and that continuous performance improvement is being delivered. Given the financial and resource constraints under which service organisations must manage it is essential that customer expectations are properly understood and measured and that, from the customers' perspective, any gaps in service quality are identified. This information then assists a manager in identifying cost-effective ways of closing service quality gaps and of prioritizing which gaps to focus on – a critical decision given scarce resources.

While there have been efforts to study service quality, there has been no general agreement on the measurement of the concept. The majority of the work to date has attempted to use the SERVQUAL (Parasuraman *et al.*, 1985; 1988) methodology in an effort to measure service quality (e.g. Brooks *et al.*, 1999; Chaston, 1994; Edvardsson *et al.*, 1997; Lings and Brooks, 1998; Reynoso and Moore, 1995; Young and Varble, 1997; Sahney *et al.*, 2004).

One of the aims of this study involves the use of SERVQUAL instrument in order to ascertain any actual or perceived gaps between customer expectations and perceptions of the service offered. Another aim of this paper is to point out how management of service improvement can become more logical and integrated with respect to the prioritized service quality dimensions and their affections on increasing/decreasing service quality gaps. In the following, after a brief review of the service quality concept, the model of service quality gaps and the SERVQUAL methodology is demonstrated and an example is presented to pinpoint the application of the SERVQUAL approach. Then, after a discussion, major conclusions are derived.

Service Quality

Service quality is a concept that has aroused considerable interest and debate in the research literature because of the difficulties in both defining it and measuring it with no overall consensus emerging on either (Wisniewski, 2001). There are a number of different "definitions" as to what is meant by service quality. One that is commonly used defines service quality as the extent to which a service meets customers' needs or expectations (Lewis and Mitchell, 1990; Dotchin and Oakland, 1994a; Asubonteng *et al.*, 1996; Wisniewski and Donnelly, 1996). Service quality can thus be defined as the difference between customer expectations of service and perceived service. If expectations are greater than performance, then perceived quality is less than satisfactory and hence customer dissatisfaction occurs (Parasuraman *et al.*, 1985; Lewis and Mitchell, 1990).

Always there exists an important question: why should service quality be measured? Measurement allows for comparison before and after changes, for the location of quality related problems and for the establishment of clear standards for service delivery. Edvardsen *et al.* (1994) state that, in their experience, the starting point in developing quality in services is analysis and measurement. The SERVQUAL approach, which is studied in this paper is the most common method for measuring service quality.

Model of Service Quality Gaps

There are seven major gaps in the service quality concept, which are shown in Figure 1. The model is an extension of Parasuraman *et al.* (1985). According to the following explanation (ASI Quality Systems, 1992; Curry, 1999; Luk and Layton, 2002), the three important gaps, which are more associated with the external customers are Gap1, Gap5 and Gap6; since they have a direct relationship with customers.

- **Gap1: Customers' expectations versus management perceptions:** as a result of the lack of a marketing research orientation, inadequate upward communication and too many layers of management.
- **Gap2: Management perceptions versus service specifications:** as a result of inadequate commitment to service quality, a perception of unfeasibility, inadequate task standardisation and an absence of goal setting.
- **Gap3: Service specifications versus service delivery:** as a result of role ambiguity and conflict, poor employee-job fit and poor technology-job fit, inappropriate supervisory control systems, lack of perceived control and lack of teamwork.
- **Gap4: Service delivery versus external communication:** as a result of inadequate horizontal communications and propensity to over-promise.
- **Gap5: The discrepancy between customer expectations and their perceptions of the service delivered:** as a result of the influences exerted from the customer side and the shortfalls (gaps) on the part of the service provider. In this case, customer expectations are influenced by the extent of personal needs, word of mouth recommendation and past service experiences.
- **Gap6: The discrepancy between customer expectations and employees' perceptions:** as a result of the differences in the understanding of customer expectations by front-line service providers.
- **Gap7: The discrepancy between employee's perceptions and management perceptions:** as a result of the differences in the understanding of customer expectations between managers and service providers.

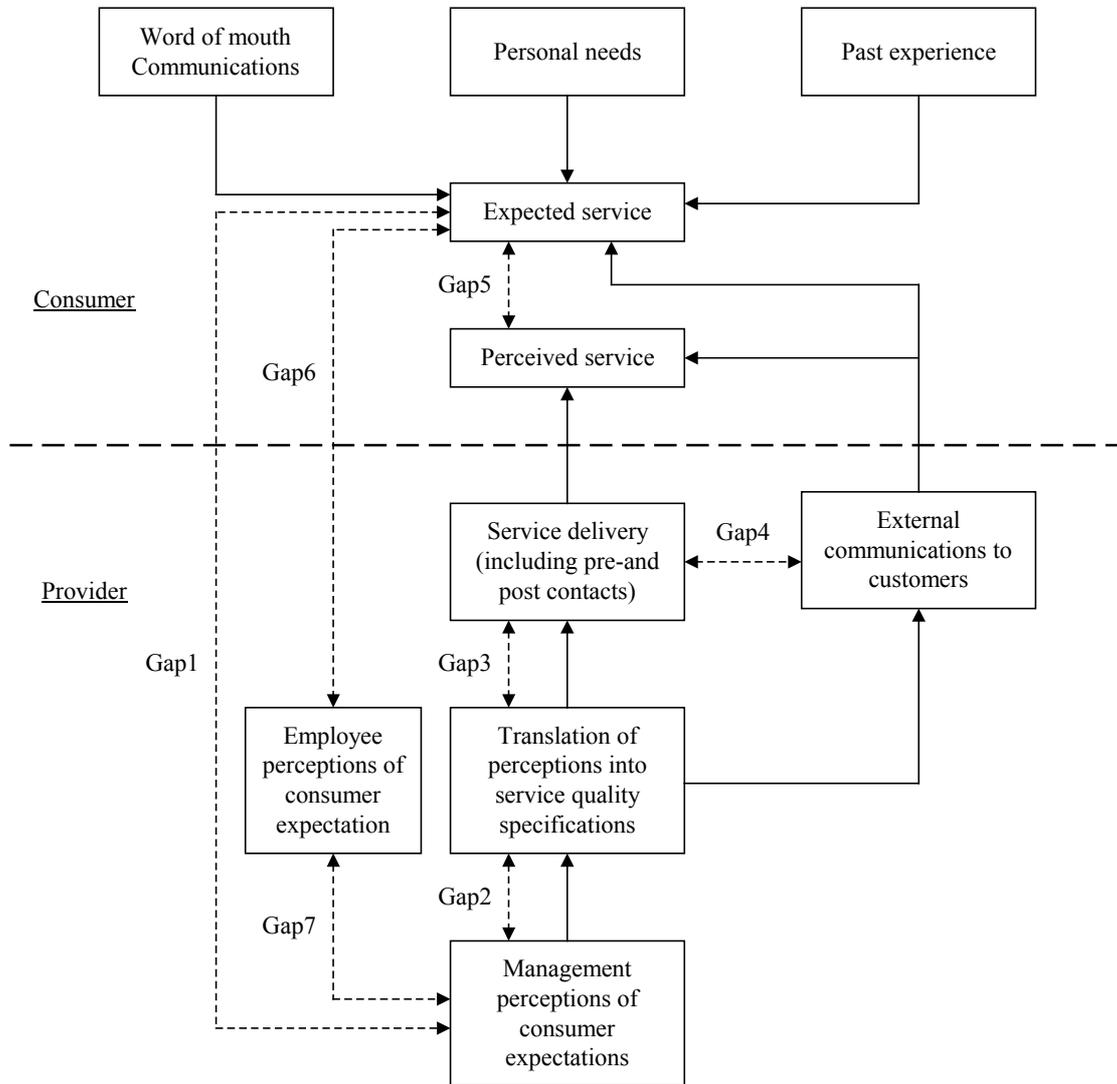


Figure 1. Model of service quality gaps (Parasuraman et al., 1985; Curry, 1999; Luk and Layton, 2002)

According to Brown and Bond (1995), "the gap model is one of the best received and most heuristically valuable contributions to the services literature". The model identifies seven key discrepancies or gaps relating to managerial perceptions of service quality, and tasks associated with service delivery to customers. The first six gaps (Gap 1, Gap 2, Gap 3, Gap 4, Gap 6 and Gap 7) are identified as functions of the way in which service is delivered, whereas Gap 5 pertains to the customer and as such is considered to be the true measure of service quality. The Gap on which the SERVQUAL methodology has influence is Gap 5. In the following, the SERVQUAL approach is demonstrated.

SERVQUAL methodology

Clearly, from a Best Value perspective the measurement of service quality in the service sector should take into account customer expectations of service as well as perceptions of service. However, as Robinson (1999) concludes: "It is apparent that there is little consensus of opinion and much disagreement about how to measure service quality". One service quality measurement model that has been extensively applied is the SERVQUAL model developed by Parasuraman *et al.* (1985, 1986,

1988, 1991, 1993, 1994; Zeithaml *et al.*, 1990). SERVQUAL as the most often used approach for measuring service quality has been to compare customers' expectations before a service encounter and their perceptions of the actual service delivered (Gronroos, 1982; Lewis and Booms, 1983; Parasuraman *et al.*, 1985). The SERVQUAL instrument has been the predominant method used to measure consumers' perceptions of service quality. It has five generic dimensions or factors and are stated as follows (van Iwaarden *et al.*, 2003):

- (1) *Tangibles*. Physical facilities, equipment and appearance of personnel.
- (2) *Reliability*. Ability to perform the promised service dependably and accurately.
- (3) *Responsiveness*. Willingness to help customers and provide prompt service.
- (4) *Assurance* (including competence, courtesy, credibility and security). Knowledge and courtesy of employees and their ability to inspire trust and confidence.
- (5) *Empathy* (including access, communication, understanding the customer). Caring and individualized attention that the firm provides to its customers.

In the SERVQUAL instrument, 22 statements (Appendix I) measure the performance across these five dimensions, using a seven point likert scale measuring both customer expectations and perceptions (Gabbie and O'Neill, 1996). It is important to note that without adequate information on both the quality of services expected and perceptions of services received then feedback from customer surveys can be highly misleading from both a policy and an operational perspective. In the following, the application of SERVQUAL approach is more specified with an example in a catering company.

Example

In an investigation conducted by Bryslan and Curry (2001) in a catering company, a total of 140 questionnaires were distributed to all of the previous year's customers and 52 useable questionnaires were returned, resulting in a 37 per cent response rate. As can be seen from Table I, all questionnaire responses were negative and an overall departmental weighted SERVQUAL score of - 1.6 was recorded, indicating a significant shortfall in meeting customer expectations across all service areas and dimensions. The summary scores for each dimension are shown in Table I, with the weighted average scores per dimension having been totalled to achieve the overall SERVQUAL score. As can be seen from Table I, the highest gap scores were for Reliability and Responsiveness; this is real cause for concern and provides a definite starting point for service improvements. As can be seen from the results, the customer expects most from the Reliability dimension of the catering service. The relatively low importance of Tangibles could be attributable to the fact that customers are aware of the financial constraints which are typical in the local authority funding context, and simply do not expect much when it comes to aesthetics; instead, they attach more importance to the delivery aspects of the service. Customers allocated to Assurance the lowest weighting, indicating it to be of least importance to them, yet they expect most from this service dimension. This apparent anomaly is probably due to the fact that customers expect staff to be knowledgeable about the service and therefore they can see no reason for this dimension not to be achieved. It is assumed that for this reason, customers have weighted this dimension lowest.

Table I. SERVQUAL scores for catering services (Bryslan and Curry, 2001)

Dimension	Expectations	Perceptions	Gap scores	Weightings	Weighted average
Tangibles	5.66	4.26	-1.40	19.8	-0.28
Reliability	6.06	4.36	-1.70	29.6	-0.5
Responsiveness	5.74	4.05	-1.69	19.9	-0.34
Assurance	6.13	4.58	-1.55	15.2	-0.24
Empathy	5.97	4.45	-1.52	15.7	-0.24

Note: Overall average weighted SERVQUAL score = -1.6

Discussion

The research on measuring service quality has focused primarily on how to meet or exceed the external customer's expectations, and has viewed service quality as a measure of how the delivered service level matches consumer's expectations. These perspectives can also be applied to the employees of a firm and in this case, other major gaps could be closed in the service quality gaps model (Kang *et al.*, 2002).

The concept of measuring the difference between expectations and perceptions in the form of the SERVQUAL gap score proved very useful for assessing levels of service quality. Parasuraman *et al.*, argue that, with minor modification, SERVQUAL can be adapted to any service organisation. They further argue that information on service quality gaps can help managers diagnose where performance improvement can best be targeted. The largest negative gaps, combined with assessment of where expectations are highest, facilitates prioritisation of performance improvement. Equally, if gap scores in some aspects of service do turn out to be positive, implying expectations are actually not just being met but exceeded, then this allows managers to review whether they may be "over-supplying" this particular feature of the service and whether there is potential for re-deployment of resources into features which are underperforming.

It seems that in almost all the existing resources, the SERVQUAL approach has been used only for closing Gap 5. However, its application could also be extended to the analysis of other gaps. It is important to note that SERVQUAL is only one of the instruments used in service quality analysis and there are different approaches which might be stronger in closing gaps. SERVQUAL has been extensively criticised on both theoretical and operational grounds (see Buttle, 1996 and Asubonteng *et al.*, 1996), although Asubonteng *et al.* (1996) conclude that: "Until a better but equally simple model emerges, SERVQUAL will predominate as a service quality measure". It is also evident that SERVQUAL by itself, useful though it may be to a service manager, will not give a complete picture of needs, expectations and perceptions in a service organization context. As Gaster (1995) comments, "because service provision is complex, it is not simply a matter of meeting expressed needs, but of finding out unexpressed needs, setting priorities, allocating resources and publicly justifying and accounting for what has been done". Service organizations are responsible and accountable to citizens and communities as well as to customers and service users. There are wider service organization agendas than simply service quality: improving access to existing services; equity and equality of service provision; providing efficient and effective services within political as well as resource constraints. The definition of service quality therefore takes on a wider meaning and accordingly its measurement becomes both more complex and more difficult.

Besides the discussed weaknesses, a particular advantage of SERVQUAL is that it is a tried and tested instrument which can be used comparatively for benchmarking purposes (Bryceland and Curry, 2001). SERVQUAL does, however, benefit from being a statistically valid instrument as a result of extensive field testing and refinement. It therefore escapes the pitfall of being perceived by service users and providers as "something that has been invented off the top of the head" or a questionnaire that has been skewed to elicit certain types of response. As a generic and universally-applicable instrument, SERVQUAL can also be administered on a repeated, regular basis and used for comparative benchmarking purposes. To appreciate more fully the benefits of using SERVQUAL, surveys should be conducted every year, for the following reasons:

- to allow yearly comparisons;
- to determine how service improvements have affected customers' perceptions and expectations of the service over time; and
- to determine the effectiveness of service development and improvement initiatives in targeted dimensions.

It is important to note that the measurement systems themselves are often inappropriate because the system designers do not know enough about what is to be measured. Measuring customer perceptions of service may increase expectations and measuring too often may well result in customers losing their motivation to answer correctly. Finally, there is no point in measuring service quality if one is not willing to take appropriate action on the findings.

Conclusions

In this paper, service quality and its model of gaps were reviewed. SERVQUAL methodology as an analytical approach for evaluating the difference between customers' expectations and perceptions of quality was also studied.

While this research provides some perspectives to the field of service quality, it is believed that there are a number of things that should be done to confirm the demonstrated methodologies as well as to expand the use of SERVQUAL in design and improvement of quality services.

Just as the SERVQUAL instrument is extensively used to assess external service quality, the instrument can also be modified to assess the quality of the internal service provided by departments and divisions within a company to employees in other departments and divisions. The results of the current study illustrate that organizations can at least assess five dimensions of service quality to ascertain the level of services provided, and to determine which dimensions need improvement.

In order to improve service quality, it is necessary to contact employees regularly and assess their service experiences. Like the external customer, an internal customer too considers categories of service attributes, such as reliability and responsiveness, in judging the quality of the internal service. With the knowledge of the internal service quality dimensions, the service organizations can then judge how well the organization or employees performed on each dimension and managers could identify the weakness in order to make improvements.

Future research should seek to examine the use of SERVQUAL to close other service quality gaps for different types of organizations. Also, an important issue for future research is about the relationship between internal service quality and external customer satisfaction as well as other constructs, such as employee service orientation, and external service quality.

In conclusion, knowing how customers perceive the service quality and being able to measure service quality can benefit industry professionals in quantitative and qualitative ways. The measurement of service quality can provide specific data that can be used in quality management; hence, service organizations would be able to monitor and maintain quality service. Assessing service quality and better understanding how various dimensions affect overall service quality would enable organizations to efficiently design the service delivery process. By identifying strengths and

weaknesses pertaining to the dimensions of service quality organizations can better allocate resources to provide better service and ultimately better service to external customers.

Generally speaking, the study of service quality is both important and challenging. Future efforts should continue to advance the understanding of the concept and the means to measure and improve service quality.

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Appendix I. 22 statements of the SERVQUAL instrument

DIRECTIONS: This survey deals with your opinions of——— services. Please show the extent to which you think firms offering —— services should possess the features described by each statement. Do this by picking one of the seven numbers next to each statement. If you strongly agree that these firms should possess a feature, circle the number 7. If you strongly disagree that these firms should possess a feature, circle 1. If your feelings are not strong, circle one of the numbers in the middle. There are no right or wrong answers. All we are interested in is a number that best shows your expectations about firms offering —— services.

- E1. They should have up-to-date equipment.
- E2. Their physical facilities should be visually appealing.
- E3. Their employees should be well dressed and appear neat.
- E4. The appearance of the physical facilities of these firms should be in keeping with the type of services provided.
- E5. When these firms promise to do something by a certain time, they should do so.
- E6. When customers have problems, these firms should be sympathetic and reassuring.
- E7. These firms should be dependable.
- E8. They should provide their services at the time they promise to do so.
- E9. They should keep their records accurately.
- E10. They shouldn't be expected to tell customers exactly when services will be performed. (-)
- E11. It is not realistic for customers to expect prompt service from employees of these firms. (-)
- E12. Their employees don't always have to be willing to help customers. (-)
- E13. It is okay if they are too busy to respond to customer requests promptly. (-)
- E14. Customers should be able to trust employees of these firms.
- E15. Customers should be able to feel safe in their transactions with these firms' employees.
- E16. Their employees should be polite.
- E17. Their employees should get adequate support from these firms to do their jobs well.
- E18. These firms should not be expected to give customers individual attention. (-)
- E19. Employees of these firms cannot be expected to give customers personal attention. (-)
- E20. It is unrealistic to expect employees to know what the needs of their customers are. (-)
- E21. It is unrealistic to expect these firms to have their customers' best interests at heart. (-)
- E22. They shouldn't be expected to have operating hours convenient to all their customers. (-)

DIRECTIONS: The following set of statements relate to your feelings about XYZ. For each statement, please show the extent to which you believe XYZ has the feature described by the statement. Once again, circling a 7 means that you strongly agree that XYZ has that feature, and circling a 1 means that you strongly disagree. You may circle any of the numbers in the middle that show how strong your feelings are. There are no right or wrong answers. All we are interested in is a number that best shows your perceptions about XYZ.

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- P1. XYZ has up-to-date equipment.
- P2. XYZ's physical facilities are visually appealing.
- P3. XYZ's employees are well dressed and appear neat.
- P4. The appearance of the physical facilities of XYZ is in keeping with the type of services provided.
- P5. When XYZ promises to do something by a certain time, it does so.
- P6. When you have problems, XYZ is sympathetic and reassuring.
- P7. XYZ is dependable.
- P8. XYZ provides its services at the time it promises to do so.
- P9. XYZ keeps its records accurately.
- P10. XYZ does not tell customers exactly when services will be performed. (-)
- P11. You do not receive prompt service from XYZ's employees. (-)
- P12. Employees of XYZ are not always willing to help customers. (-)
- P13. Employees of XYZ are too busy to respond to customer requests promptly. (-)
- P14. You can trust employees of XYZ.
- P15. You feel safe in your transactions with XYZ's employees.
- P16. Employees of XYZ are polite.
- P17. Employees get adequate support from XYZ to do their jobs well.
- P18. XYZ does not give you individual attention. (-)
- P19. Employees of XYZ do not give you personal attention. (-)
- P20. Employees of XYZ do not know what your needs are. (-)
- P21. XYZ does not have your best interests at heart. (-)
- P22. XYZ does not have operating hours convenient to all their customers. (-)