Perceived Service Quality models: Are They Still Relevant?

ABSTRACT

The aim of this paper is to review the concept of perceived service quality and to provide an update to the body of service quality knowledge. It consolidates the pathway of perceived service quality concept from its emergence to the research models development. It also critically reviews four characteristics of service quality as prerequisites of perceived service quality conceptualisation. The examination of six perceived service quality models is intended to identify a superior model that could be used by further research.

It appears that service characteristics, traditionally used to explain main differences between goods and services, have considerable limitations. This justifies the need to move towards a revised, service-driven framework in marketing and consider perceived service quality through the lens of the customer. The review of service quality models revealed that the model by Brady and Cronin (2001) have superiority with respect to earlier models; however it has contradictions that have not been addressed.

The paper contributes with a literature review, on the past and future of perceived service quality concept. It identifies a superior model of perceived service quality for further research and provides suggestions for overcoming its existing limitations. The clarification on the link between perceived service quality and service quality models is provided. It proposes an agenda for future research to consider service quality models from the customers' perspective as well as to carry out tests of these models.

A REVIEW OF PERCEIVED SERVICE QUALITY

Service concept

When capturing the concept of a service, most often the focus is on activities, deeds, processes and interactions (Solomon et al., 1985; Lovelock, 1991; Zeithaml and Bitner, 2003; Vargo and Lusch, 2004a). For the purpose of analysis, a service may be considered in three different ways: 1) as a process; 2) as a solution to customers' problems, and 3) as a beneficial outcome for customers. The first of these perspectives (service as a process) is discussed by Lovelock (1991, p. 13) who defines services as "a process or performance rather than a thing"; a view also supported by Gronroos (2001) who argued that a service is a process with an outcome of partly simultaneous production and consumption processes. Gummesson (2007) agrees that services are dynamic activities and processes, whereas 'goods' are static things. The second perspective (service as a solution to customers' problems) is presented by Gronroos (2001) whose view of services focuses on the customers, where services are provided as solutions to customer problems. From this perspective, service is conceptualized as an activity of an intangible nature that usually takes place during the interaction between the customer and service employees to provide solutions to customer problems (Gronroos, 2001). The final perspective (service as a beneficial outcome) is discussed by Vargo and Lusch (2004a, b) who suggest that service is the main function of business enterprises: it is an application of specialized competences - knowledge and skills - through deeds, processes, and actions for the benefit of another entity or the entity itself.

Service characteristics

There are significant differences between services and manufactured goods (Fitzgerald et al., 1993; Ghobadian et al., 1994) which are captured and explained in the marketing literature through the service characteristics of inseparability, heterogeneity, intangibility, and perishability. These differences subsequently have a direct impact on the approach and substance of quality management and will be discussed in turn.

Inseparability

The inseparability of production and consumption in service industries refers to the notion that (usually) the marketer creates or performs the service at the same time as the full or partial consumption of the service takes place. This simultaneous production and consumption results in a highly visible activity that makes it very easy to identify errors or quality issues. Also, intimate involvement of the consumer in the delivery of the service introduces an additional process factor over which the management may have little or no direct control. As well as this process factor of consumer involvement, consumers also interact between each other, and the behaviour of one group of customers may influence other customers' perception of service quality (Ghobadian et al., 1994). The fact whether inseparability characteristic is applicable to all services has been questioned by Gummesson (2007). The characteristic of inseparability appears to be limited to a sub-group of services as some are performed without the customers' presence (e.g. dry-cleaning, car repair, the legal courts, road maintenance). Edvardson et al. (2005) argue that the essence of inseparability stems from the earlier product and production-oriented view where there is a one-way direction of service delivery, i.e. the provider renders a service and the customer simultaneously consumes it. This argument justifies why Edvardson et al. (2005) consider this perspective of inseparability to be outdated. Instead, they propose a shift focus of the provider-customer interaction to co-production and co-creation, and also emphasise the fact that it is the dynamic nature of services (activities, deeds, performances and experiences) that requires simultaneous production and consumption.

Heterogeneity

In the context of service provision, heterogeneity complicates the provider's task to reproduce the same service consistently on each occasion. The extent of the heterogeneity of service provisions can be affected by the number of factors, including the service provider's behaviour, their awareness of customers' needs as well as the consumer's priorities and expectations at given usage situation. The variability of a service from one period to another and from consumer to consumer makes quality consistency difficult to control. Service providers have to rely heavily on the competence and ability of their staff to understand the requirements of the consumer and react in a timely and appropriate manner (Ghobadian et al., 1994). In order to clarify the causes of heterogeneity, Edvardson et al. (2005) suggest looking at the concept of heterogeneity from two perspectives. The first perspective explains heterogeneity from the point of the ever-changing nature of the service providers and service processes, while the second perspective emphasizes heterogeneity of the production within a given company due to variation among customers' needs and expectations. Similar to the characteristic of intangibility (in the search of reaching consistency), it is difficult to produce the standardization of processes and outputs which subsequently results in heterogeneity.

Intangibility

Intangibility of service refers to the lack of physical attributes and implies the existence of a set of difficulties. On one hand, it is complicated for the producer to determine the service; and, on the other hand, it is difficult for the consumer to asses its potential advantages. This encourages the consumer to look for information through word of mouth, reputation, accessibility, communication, physical attributes and quality assessment. In services, the influence of word of mouth and reputation on purchasing decisions is much greater than the influence of tangible product

specifications, which according to Ghobadian et al. (1994), places greater responsibility on service organizations to deliver what they promise and to market the service adequately. Edvardson et al. (2005) note that it is difficult to develop output measures for services and to display or communicate them as the customer does not own anything tangible after the service is produced and consumed. The author argues that, paradoxically, in some cases the customers perceive intangibility of services as a tangible impact. For example, the effect of a professional advice service might keep bringing financial or other benefits in the future, which creates the value of the intangible service over a long period of time and by this becomes more tangible (Edvardson et al., 2005, p.117). The uniqueness of intangibility characteristic for services was questioned by Gummesson (2007). The brand and its symbolic value, associations and unique mental experiences involved in the use of the product serve as examples of intangibility in tangible product situations. Therefore, Gummesson (2007) argues that there is no empirical evidence that the intangibility aspect has an impact on marketing strategy or market behaviour that separates a good from a service.

Perishability

Perishability of services implies that a service cannot be stored for later use, resold, or returned. This places extra responsibility on the service provider to get the service right first time, and every time (Ghobadian et al., 1994). Unlike in the manufacturing of goods, a final quality check of a service is almost impossible to implement (Lewis, 2003). Edvardson et al. (2005) view perishability as a characteristic created solely by the producer's activity, not that of the customer and claim it is based on the former definition of services in relation to physical products. Instead, they suggest the use of "tangibilizers", i.e. focus on ways of managing the evidence of service and creating favourable customer experiences.

"Goods-dominant" and "service-dominant" logic in services

These four service characteristics have a long academic history and have been substantially integrated into the marketing field in explaining key differences between goods and services. However, some question the validity and relevance of these characteristics (Edvardsson et al., 2005; Gummesson, 2007). Edvardsson et al. (2005) conclude that the service characteristics have most often been discussed from the viewpoint of the service provider, as opposed to the customer. Developing the debate on distinguishing services from goods and understanding the nature of services, Vargo and Lusch (2008) suggested two perspectives for consideration – 'goods-dominant' and 'service-dominant' logic. 'Goods-dominant' logic views services as an intangible type of good and implies that goods production and distribution practices should be modified to deal with the differences between tangible goods and services. 'Service-dominant logic' considers service as process of using ones resources for the benefit of and in conjunction with another party. Vargo and Lusch (2008) note that this logic calls for a revised, and service-driven framework in marketing. According to Gummesson (2007), the service-dominant logic has more relevance and proposes service as the core concept replacing both goods and services. In this situation, a supplier can only offer a value proposition, but it is the usage and consumption process which make value actualisation happen. Gummesson (2007) stated that together value proposition and value actualisation are the outcome of co-creation between suppliers and customers.

Perceived service quality

The first attempts to conceptualize service quality were in the 1980's and were based on suggested services characteristics and research in the field of cognitive psychology (Mandler, 1975; Russell and Pratt 1980; Oliver 1980; Russell et al. 1981; Churchill and Surprenant, 1982; Hoffman, 1986). Initially, the comparison of actual service performance to set standards became a basis for conceptualisations of service quality (Grönroos, 1984; Parasuraman et al., 1988). According to Grönroos (1984), the perceived service quality is "the outcome of an evaluation process where the

customers compare their expectations with service they have received" (Grönroos, 1984, p.37). Parasuraman et al. (1988) support the same view, defining the concept of service quality as "a form of attitude related but not equivalent to satisfaction that results from a comparison of expectations with perceptions and performance" (Parasuraman et al., 1988, p.15).

Challenge of service quality concept

After the genesis of service quality concept, the new challenge was to transcend understanding of quality rooted in physical goods environment. Applicability of the quality concept to intangible services was impeded by "missing product" in services (Grönroos, 1998). Intangibility and heterogeneity of services introduced further complexity into defining service quality in terms of process, outcome or solution for customers' problems. In order to improve the understanding of service situations, the approach originated by the Nordic school (Grönroos, 1984) proposed looking at service quality from the customer's perspective (i.e. researching service quality as perceived by the users). Grönroos (1998) suggests that a customer-oriented construct of perceived service quality has been developed to overcome the problem of a "missing product" in service organisations.

Identifying the customer-oriented approach in the perceived service quality was a big step forward, with it evolving into a long established concept within service quality research. Nevertheless, an all-embracing definition and objective measurement of service quality remains a challenge. This view of service quality as an elusive and abstract construct stimulated the emergence of different schools of thought on perceived service quality (Zeithaml et al., 1990; Akbaba, 2006).

Definitions of perceived service quality in different schools

The most general definitions of service quality are formulated as a consumer's judgment about an entity's overall excellence or superiority (Zeithaml, 1987). Service quality has also been described

as a form of attitude, related but not equivalent to satisfaction, which results from the comparison of expectations with actual performance (Parasuraman et al., 1988; Bolton and Drew, 1991). More recently, as the result of critique of the approach based on the expectations-performance comparison, Cronin and Taylor (1992) suggested that service quality is an attitude, based only on evaluating service performance. These two definitions of perceived service quality – the expectation-performance comparison and performance-only evaluation - laid the foundation for the two conceptually different streams in the development of service quality models.
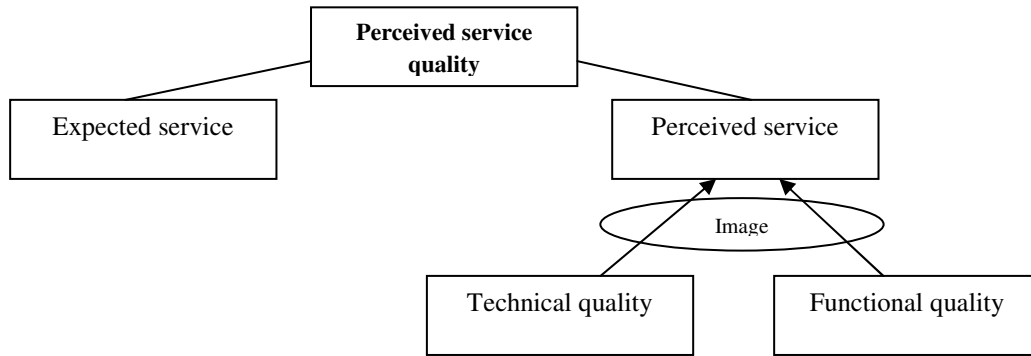
Service quality models

The first service quality models emerged in 1980's from the Nordic (Grönroos, 1984) and American schools of thought (Parasuraman et al., 1985, 1988).

Nordic model

The Nordic perspective (Figure 1) suggested two service quality dimensions - functional quality and technical quality. Technical quality is what the consumers receive as a result of interaction with a service organization, while functional quality is concerned with how consumers receive services. Technical quality and functional quality are antecedents of corporate image - the third dimension of the model (Gronroos, 1988).

Six sub-dimensions of service quality were identified (Gronroos, 1988): (1) professionalism and skills, (2) attitudes and behaviour, (3) accessibility and flexibility, (4) reliability and trustworthiness, (5) recovery, and (6) reputation and credibility. Professionalism and skills were regarded as contributing to the technical quality; reputation and credibility – forming an image; the other four sub-dimensions are related to process and therefore correspond to the functional quality dimension.

Figure 1. Nordic model

Source: adapted from Gronroos (1988)

American model

According to the American model (Figure 2), or SERVQUAL, service quality is the difference between the expected level of service and customer perceptions of the level received (Parasuraman et al., 1985). Originally, Parasuraman et al. (1985) proposed ten components of service quality: 1) reliability; 2) responsiveness; 3) competence; 4) access; 5) courtesy; 6) communication; 7) credibility; 8) security; 9) understanding/knowing the customer; 10) tangibles.

In order to develop the SERVQUAL measurement scale Parasuraman et al. (1988) formulated questions for rating a service on specific attributes reflecting the ten basic components. Consumers were asked to rate the service in terms of both expectations and performance.

Figure 2. SERVQUAL model
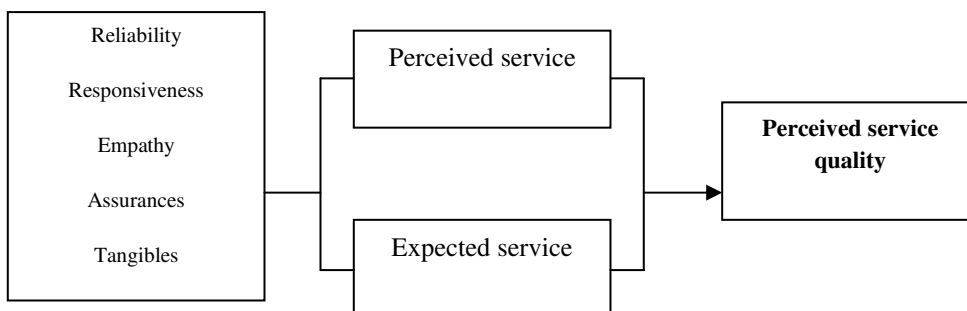
Source: adapted from Parasuraman et al. (1988)

After analyzing and grouping the data, the revised scale was administered to a second sample and questions were tested, with a result of a 22-question (item) scale now measuring five basic dimensions of reliability, responsiveness, empathy, assurance and tangibles both on expectations and performance. A total of 44 questions were used to rate as both expectations and performance (22 questions each). The components of reliability, tangibles and responsiveness remained distinct; the remaining seven components were absorbed into two dimensions - assurance and empathy. These five dimensions represent five conceptually distinct and interrelated facets of service quality (Asubonteng et al, 1996). Although a significant criticism of the SERVQUAL's theoretical and operational underpinnings has developed over the years (Andersson, 1992; Babakus and Mangold, 1992; Cronin and Taylor, 1992; Teas, 1993; Iacobucci et al., 1994; Buttle, 1996; Ekinci and Riley, 1998; Brady and Cronin, 2001; Martinez and Martinez, 2010), the SERVQUAL model is aimed at understanding general elements of service quality that are common for various services and can be applied within different industries.

SERVPERF

Subsequent critique of the American model led to the emergence of the SERVPERF model (Cronin and Taylor, 1992) (Figure 3) whilst the Nordic perspective triggered the development of a three-component model (Rust and Oliver, 1994) (Figure 4).

Figure 3. SERVPERF model
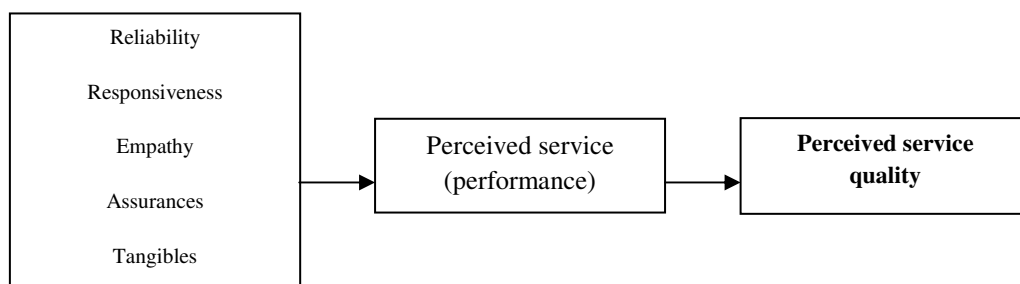
Source: adapted from Cronin and Taylor (1992)

Unlike SERVQUAL, SERVPERF is a performance only measure of service quality and excludes consumer expectations due to them being consistently high. Cronin and Taylor (1992) suggested that long-term service quality attitudes are better reflected by performance-based measures only. They tested a performance-based measure of service quality in four industries and found that this measure explained more of the variance in an overall measure of service quality than did SERVQUAL. The new measurement SERVPERF model reduced by 50% the number of items that must be measured (44 items to 22 items), making it easier to use.

Along with Cronin and Taylor (1992) who supported the theoretical superiority of the SERVPERF scale, the empirical study on the advertising industry by Quester and Romanniuk (1997) showed that SERVPERF outperformed one of the modifications of SERVQUAL measurement. A study in the supermarket context by Mehta et al. (2000) concluded that the modified SERVQUAL worked better in a retailing context where there was a greater focus on the product, while SERVPERF worked better in a retailing context where the service element is more important (i.e. an electronic goods retailer). Another performance-based model, HEdPERF (Firdaus, 2006), was developed for measuring service quality specifically in higher education. Its 41 items included the academic components as well as aspects of the total service environment as experienced by the student. A comparative study of SERVQUAL, SERVPERF and HEdPERF by Brochado (2009) found that measurement capability of each SERVPERF and HEdPERF was the best, but suggested that is impossible to choose the better out of the two. According to Rodrigues et al. (2011), SERVPERF and SERVQUAL considerably differ in terms of the outcomes of their two metrics. Therefore, in order for researcher to benefit from the meaningful measurement, the Rodrigues et al. (2011) suggested to apply both SERVPERF and SERVQUAL and draw combined implications.

Three-component model

Works by Gronroos (1982) and Bitner (1992) became the basis for the three-component model developed by Rust and Oliver (1994) (Figure 4). Its focus was the relationships that exist between service quality, service value and customer satisfaction.

Figure 4. Three-component model
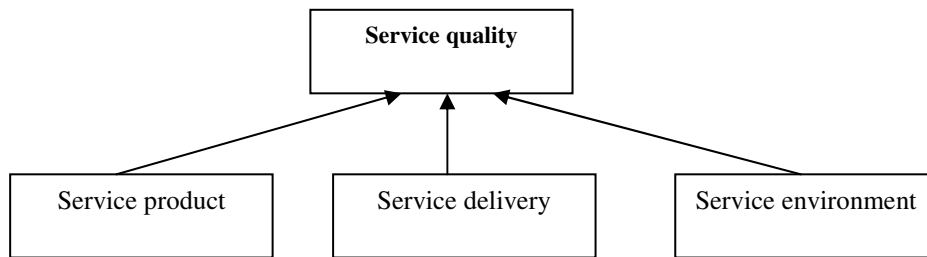
Source: adapted from Rust and Oliver (1994)

Three distinct components - service product, service delivery and service environment – were proposed as essential elements of service quality. The service product element consists of what consumers get as a result of service (i.e. outcome) and also of the consumer's perception of the service. The service delivery element stands for the consumption process with any relevant events that occur during the service act. The service environment element represents the internal and external atmosphere in which a service takes place. Although there was support found for analogous models in retail banking (McDougall and Levesque, 1994), Rust and Oliver did not test their conceptualization which becomes its considerable limitation. The evidence for application of the model in its original form is not available; nevertheless it enhanced further models and equipped them with deeper theoretical understanding of the service quality concept.

Multilevel model

The next two models developed expanded the concept of service quality vertically (Dabholkar et al, 1996) (Figure 5) and horizontally (Brady and Cronin, 2001) (Figure 6). Vertical expansion by Dabholkar et al, (1996) is also referred to as a "hierarchical model of retail service quality suitable

for use in retail businesses". In this model retail service quality is viewed as a higher-order factor defined by two additional levels of attributes (dimensions level and sub-dimension level). The model focused on service quality in the retail environment and it was developed and empirically validated by Dabholkar et al. (1996) using a triangulation of research techniques - interviews with several retail customers, in-depth interviews with six customers and a qualitative study that monitored the thought process of three customers during an actual shopping experience. It included a 28-item scale, of which 17 items were from SERVQUAL and 11 items were developed using qualitative research.

Figure 5. Multilevel model
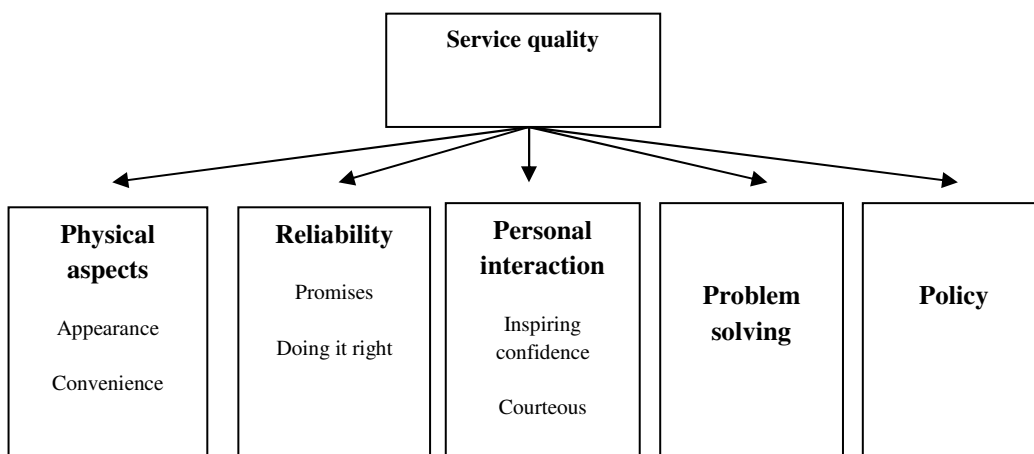
Source: adapted from Dabholkar et al. (1996)

According to Dabholkar et al. (1996), retail service quality has a hierarchical structure comprising five basic dimensions, namely 1) Physical aspects – Retail store appearance and store layout; 2) Reliability – Retailers keep their promises and do the right things; 3) Personal interaction – Retail store personnel are courteous, helpful, and inspire confidence in customers; 4) Problem solving – Retail store personnel are capable of handling returns and exchanges, customers' problems and complaints; and 5) Policy – Retail store's policy on merchandise quality, parking, operation hours, and credit cards. It also includes six sub-dimensions: appearance, convenience, promises, doing it

right, inspiring confidence and courteousness. Similar to Cronin and Taylor's (1992) SERVPERF, Dabholkar et al. (1996) used only performance-based measures and found that their scale possessed strong validity and reliability and adequately captured customers' perceptions of retail service quality. Dabholkar et al. (1996) also considered that service quality is defined by and not formed by several dimensions, and this made their conceptualization very different from previous models.
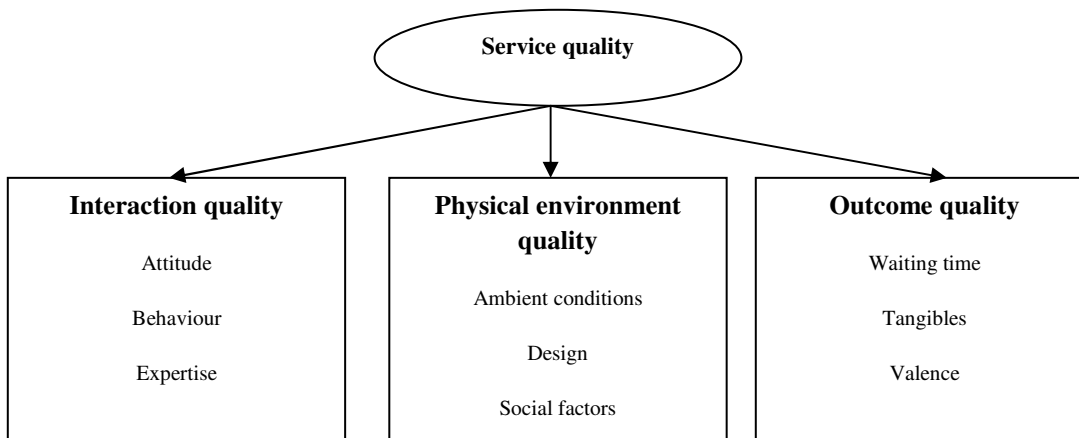
Brady and Cronin's model

Continual horizontal expansion by Brady and Cronin (2001) conceptualized the five dimensions of the Dabholkar et al., (1996) model into three (interaction quality, physical environment quality, and outcome quality) and proposed nine sub-dimensions (Figure 6).

In their model, Brady and Cronin (2001) combined the three-component model by Rust and Oliver (1994) and the multilevel conceptualization of service quality by Dabholkar et al., (1996). The service quality is formed by three primary dimensions: interaction quality, physical environment quality and outcome quality. Each of these dimensions is formed by three corresponding sub-dimensions such as attitude, behaviour and experience (interaction quality); ambient conditions, design and social factors (physical environment quality); waiting time, tangibles and valence (outcome quality).

Martinez and Martinez (2010) note that Brady and Cronin (2001) propose that "sub-dimensions influence quality dimensions, i.e., sub-dimensions directly contribute to quality dimensions perception.

Figure 6. Brady and Cronin's (2001) model

Source: adapted from Brady and Cronin (2001)

However, their model is operationalized in a different way; dimensions are variables that influence sub-dimensions" (Martinez and Martinez, 2010, p. 33). It points out a contradiction that has not been addressed by Brady and Cronin and raises concern for interpreting the conceptualization of this model.

Superiority and critique of Brady and Cronin's model

Capitalizing on developments of previous models, the model by Brady and Cronin (2001) gained superiority with respect to earlier models (Ko and Pastore, 2005; Martinez and Martinez, 2010). However, it has contradictions that have not been addressed (such as direction of influence between levels of quality). In their review of service quality models, Seth et al., (2005) stated the following categories of research issues related to service quality: 1) relation between various attributes of service; 2) role of technology (e.g. information technology), 3) measurement issues. Thus, critique of Brady and Cronin's model by Martinez and Martinez (2010) could fall into the first and possibly the third category due to the unclear direction of influence between levels of quality. However, Seth et al. (2005) do not include models by Rust and Oliver (1994), Dabholkar et al., (1996) and Brady and Cronin (2001) in their review. This fact questions comprehensiveness of the review as it

completely missed the models developed multi-level and hierarchical approach to conceptualisation of service quality.

Further research

Although the model by Brady and Cronin (2001) received some critique, it is recommended as "an excellent basis for proposing the attributes of service quality that can be measured" (Martinez and Martinez, 2010, p.110). To overcome the limitations of Brady and Cronin's model, the following recommendations are suggested by the authors in the framework of future study:

1) Enrichment and improved industry specificity of the model through the inclusion of specific service quality dimensions and items.

Dabholkar et al. (1996) argued that a measure of service quality across industries is not feasible and suggested that future research develops industry-specific measures of service quality. This argument is supported by Ladhari (2008) who views industry-specific measures of service quality as more appropriate than ones of a single generic scale. More recently, Martinez and Martinez (2010) noted that, by definition, attributes of service quality are not universal but industry specific. The focus of attributes on a particular service industry will produce a clear set of areas for consideration and increase relevance of practical implications for management in particular industry.

2) Unique consideration of valence as a service quality attribute.

Brady and Cronin (2001) suggested that the purpose of valence concept is to explain attributes which determine a customers' belief in the service (good or bad outcome), regardless of their evaluation of any other aspect of the experience. This good/bad belief reflects the degree to which the object of interest is considered favourable or unfavourable (Mazis et al., 1975). Previous service

quality research (Cronin and Taylor, 1992; Parasuraman et al., 1985, 1988) justifies inclusion of valence among the service quality attributes on the basis that service quality is similar to an attitude. Martinez and Martinez (2010) argue that although valence is close to the concept of satisfaction, it is not necessarily associated with service quality. As valence is outside the direct control of service management, "its definition is not concordant with the other attributes" (Martinez and Martinez, 2010, p.112). Valence may have an impact on a service experience regardless of service quality perception; therefore it is suggested to explore it through qualitative research along with other concepts influencing service quality perceptions.

3) Inclusion of a measure of overall service quality.

Separate measurement of overall service quality can assist researchers to discover whether customers make clear distinction between service quality attributes and overall evaluation of service quality. In turn, this would help to identify if extreme overall evaluation of service quality impacts on the evaluation of attributes (Martinez and Martinez, 2010). Qualitative research could explore to what extent evaluation of overall service quality is influenced by other concepts contributing to the general feelings towards service.

4) Employment of importance-performance analysis for evaluation of service quality.

First introduced by Martilla and James in 1977, importance–performance analysis is regarded as a "useful screening tool" (Rial et al., 2008, p.180) with growing potential. It represents a technique for identifying those attributes of a service that need improvement or that can incorporate cost-saving conditions without significant detriment to overall quality (Martinez and Martinez, 2010). Recently, importance–performance analysis has been considered as a non-traditional alternative for assessing perceived service quality (Martinez and Martinez, 2010; Yildiz, 2011). The logic of analysis comprises a comparison between performance and importance of each relevant attribute

(Abalo et al., 2007). In the context of service quality evaluation, performance reflects customer perceptions of current delivery of a service, and importance represents a relative value that customers assign to a service. The comparison between performance and importance of service attributes can provide management with useful information and assist in making decisions on service management priorities.

To ensure the critique of Brady and Cronin's model is addressed, all of the above four points are advised be incorporated in the future studies.

Conclusion

This paper reviewed the concept of perceived service quality and provided an update to the body of service quality knowledge. Consolidation of the pathway of perceived service quality concept from its emergence to the research models development assisted in establishing the link between perceived service quality and service quality models. The four service quality characteristics were explored as prerequisites of perceived service quality conceptualisation. It appears that these characteristics, traditionally used to explain the main differences between goods and services, have considerable limitations. This justifies the need to move towards a revised, service-driven framework in marketing and consider perceived service quality through the lens of the customer. Six perceived service quality models were examined in order to identify a superior model that could be used for further research. The review revealed that the model by Brady and Cronin (2001) has superiority with respect to earlier models. Although the model has contradictions that have not yet been addressed, this paper does provide suggestions for overcoming these limitations.

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