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# Perceived service quality models: Are they still relevant?

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## Abstract

This paper reviews the concept of perceived service quality and provides an update to the body of service quality knowledge. It consolidates the pathway of perceived service quality concept, from its emergence to the research model's development. It also critically reviews service characteristics 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. Yet, overall, the paper challenges the relevance of existing models for the current stage of service quality research. It also justifies the need to move towards a revised, service-driven framework and to consider perceived service quality through the lens of the customer.

## Introduction

This paper reviews the concept of perceived service quality and provides an update to the body of service quality knowledge. The evolution of the perceived service quality concept encompasses a pathway from its emergence to the research model's development. Over the past 25 years, researchers have proposed a multitude of service quality models. Some studies focused on general models (e.g., Cronin & Taylor, 1992; Grönroos, 1988; Parasuraman, Zeithaml, & Berry, 1988); others developed/revised models for particular industries (Aldlaigan & Buttle, 2002; Ko & Pastore, 2004; Lam & Zhang, 1999; Martinez Caro & Martinez Garcia, 2007). The model developed by Brady and Cronin (2001) has been revealed to have superiority with respect to earlier models (Cronin & Taylor, 1992; Dabholkar, Thorpe, & Rentz, 1996; Gronroos, 1988; Parasuraman et al., 1988; Rust & Oliver, 1994); however, it has conceptual and methodological contradictions that have not been addressed.

Analysis of a series of studies (Carrillat, Jaramillo, & Mulki, 2007; Gummesson, 2007; Kaul, 2007; Keillor, Hult, & Kandemir, 2004; Kim & Jin, 2002; Martinez Garcia & Martinez Caro, 2010; Morales & Ladhari, 2011; Schembri & Sandberg, 2011) indicates that there are a number of issues with the existing models. Among these issues are uncertainty of philosophical stance, lack of consideration of culture/context, and 'legitimation' of valence as a service quality attribute. Alongside this, some authors (Gummesson, 2007; Vargo & Lusch, 2008) made suggestions to consider service as a combination of value proposition and value actualisation. This is instead of treating 'service' as an entity described with service characteristics - intangibility, inseparability, heterogeneity, perishability. Indeed, it appears that these service characteristics have considerable limitations. For example, they do not allow for replacing the static view on service quality with a more dynamic approach. The latter is in line with several studies (Arnould & Price,

1993; Kupers, 1998; Schembri & Sandberg, 2011), which confirmed that consumers do not passively receive service quality but actively co-construct the quality of service they experience.

The paper questions the relevance of the existing models in the current stage of service quality research and explores the opportunities for moving towards a revised framework in service marketing. It contributes, with a literature review on the past, and looks to the future of the perceived service quality concept. This is followed by the proposition of an agenda for future research that includes the adjustment of service quality models to the customers' perspective and suggestions of ideas for the 'status quo' models.

### **Service concept**

When capturing the concept of a service, most often the focus is on activities, deeds, processes and interactions (Lovelock, 1991; Solomon, Surprenant, Czepiel, & Gutman, 1985; Vargo & Lusch, 2004a; Zeithaml & Bitner, 2003). 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 Grönroos (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 Grönroos (2001), whose view of services focuses on the customers, where services are provided as solutions to customers' problems. From this perspective, service is conceptualised as an activity of an intangible nature that usually takes place during the interaction between the customer and service employees to provide solutions to customers' problems (Grönroos, 2001). The final perspective (service as a beneficial outcome) is discussed by Vargo and Lusch (2004a, 2004b), who suggest that service is the main function of business enterprises: it is an application of specialised 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, Johnston, Brignall, & Voss, 1993; Ghobadian, Speller, & Jones, 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 is taking 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 with each other, and the behaviour of one group of customers may influence other customers' perceptions of service quality (Ghobadian et al., 1994). Whether the 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, road maintenance). Edvardsson, Gustafsson and Roos (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 Edvardsson 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 a number of factors, including the service provider's behaviour, or awareness of customers' needs, as well as the consumer's priorities and expectations in any 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 to react in a timely and appropriate manner (Ghobadian et al., 1994). In order to clarify the causes of heterogeneity, Edvardsson et al. (2005) suggest looking at the concept of heterogeneity from two perspectives. The first perspective explains heterogeneity from the aspect of the ever-changing nature of the service providers and service processes, while the second perspective emphasises heterogeneity of production within a given company due to variations among customers' needs and expectations. Similar to the characteristic of intangibility (in the search for consistency), it is difficult to achieve a standardisation 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 assess 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 organisations to deliver what they promise and to market the service adequately. Edvardsson 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 authors argue 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 this way becomes more tangible (Edvardsson et al., 2005, p. 117). The uniqueness of the 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). Edvardsson 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 'tangibilisers', i.e., focus on ways of managing the evidence of service and creating favourable customer experiences.

### **'Goods-dominant' and 'service-dominant' logic in services**

The four service characteristics described 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. According to Gummesson (2007), the service characteristics proved to be of some interest to all value propositions, although sometimes they are irrelevant. 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 goods 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 the process of using one's 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 conceptualise service quality were in the 1980s and were based on suggested services characteristics and research in the field of cognitive psychology (Churchill & Surprenant, 1982; Hoffman, 1986; Mandler, 1975; Oliver, 1980; Russell & Pratt 1980; Russell, Ward, & Pratt, 1981). 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” (p. 37). Parasuraman et al. (1988) supported 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” (p. 15).

### ***Challenge of service quality concept***

After the genesis of the service quality concept, the new challenge was to transcend the understanding of quality rooted in the physical goods environment. Applicability of the quality concept to intangible services was impeded by the ‘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 (Akbaba, 2006; Zeithaml, Parasuraman, & Berry, 1990).

### **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 (Bolton & Drew, 1991; Parasuraman et al., 1988). 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

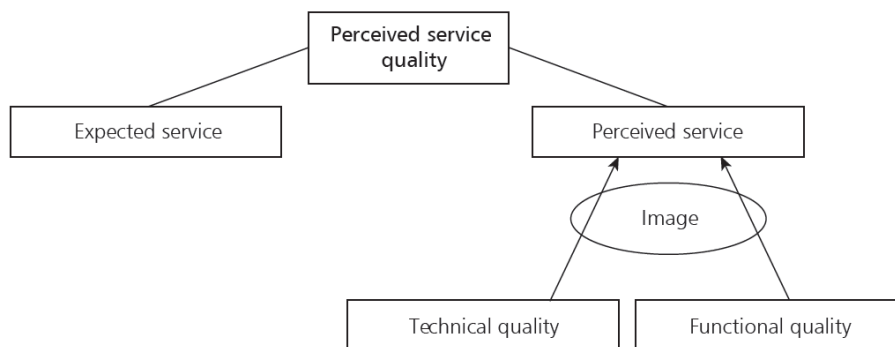
evaluation - laid the foundation for the two conceptually different streams in the development of service quality models.

## Service quality models

### ***Nordic (European) model***

The first service quality models emerged in the 1980s from the Nordic (Grönroos, 1984) and American (Parasuraman, Zeitzmal, & Berry, 1985, 1988) schools of thought. 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 organisation, 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 (Grönroos, 1988).

**Figure 1 Nordic Model**



Source: Adapted from Grönroos (1988)

Six sub-dimensions of service quality were identified (Grönroos, 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.

In addition to this perspective describing service quality with two or three dimensions, it also conceptually introduces the approach based on the 'disconfirmation theory': actual service quality is compared to the level of expectations, and it can be better than expectations, equal to them or worse than expectations (Grönroos, 1984; Lehtinen & Lehtinen, 1991).

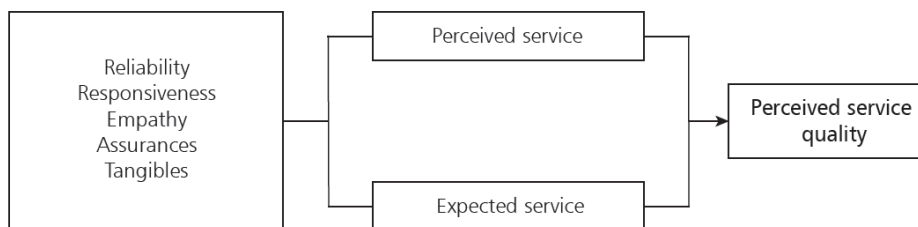
As per Grönroos (2001), the Nordic model has been introduced conceptually but it lacks operationalisation, i.e., it does not offer a practical measurement tool. Therefore, this could be the reason why empirical studies on service quality did not utilise the model. Also, there is evidence that, generally, the focus of the Nordic European school was on "the conceptualisation of service quality without providing strong empirical evidence to support their position" (Ekinci, Riley, & Fife-Schaw, 1998, p. 63). However, the aforementioned critique of the model is a corner stone of the Nordic school overall. In the Nordic school, theory generation is considered more important to the development of a discipline as opposed to theory acting as an

antecedent to hypotheses-testing. It includes constant comparison between new and existing theory and, in certain instances, traditional theory testing (Grönroos & Gummesson, 1985, pp. 6-8).

### **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, and 10) tangibles.

**Figure 2 SERVQUAL model**



Source: Adapted from Parasuraman et al. (1988)

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. After analysing 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. In total, 44 questions were used to rate 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, McCleary, & Swan, 1996).

Although significant criticism of the SERVQUAL's theoretical and operational underpinnings has developed over the years (Andersson, 1992; Babakus & Mangold, 1992; Brady & Cronin, 2001; Buttle, 1996; Cronin & Taylor, 1992; Ekinci & Riley, 1998; Iacobucci, Grayson, & Omstrom, 1994; Martinez Garcia & Martinez Caro, 2010; Teas, 1993), 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.

The aforementioned dimensions became the main criticism of the SERVQUAL model. Thus, a lack of discriminant validity between SERVQUAL's dimensions was identified by empirical studies, whereas content validity is not certain as the conceptual definitions of some dimensions overlap (Buttle, 1996). In terms of the



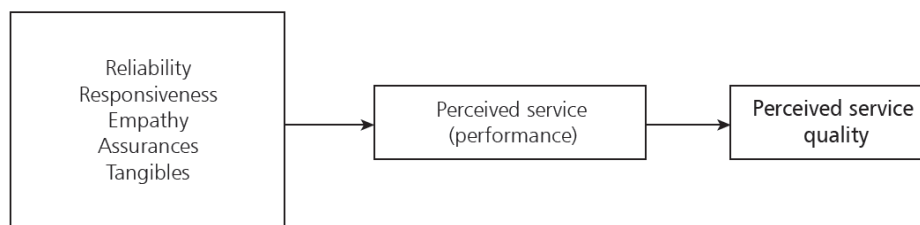
content, the dimensions of 'empathy' and 'reliability' were found confusing, and also the dimension of 'reliability' was found to overlap with 'technical quality' offered by the Nordic model (Lapierre & Filiatrault, 1996). The dimensions of 'tangibles' and 'reliability' were supported to be distinct dimensions, however the rest of the dimensions represented a single dimension (Getty & Thompson, 1994). Some authors (Durvasula, Lysonski, & Mehta, 1999; Kang, 2006; Kang & James, 2004) suggested that SERVQUAL should be restructured into a model with two or three dimensions, as it would consider functional quality and, therefore, be a more adequate service quality model.

### **SERVPERF**

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

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 SERVQUAL did. The new measurement SERVPERF model halved the number of items that must be measured (44 items to 22 items), making it easier to use.

**Figure 3 SERVPERF model**



Source: Adapted from Cronin and Taylor (1992)

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 Romaniuk (1997) showed that SERVPERF outperformed one of the modifications of SERVQUAL measurement. A study in the supermarket context by Mehta, Lalwani and Han (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 (Abdullah, 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 the measurement capabilities of SERVPERF and HEdPERF were the best, but suggested that it was impossible to choose the better one out of these two.

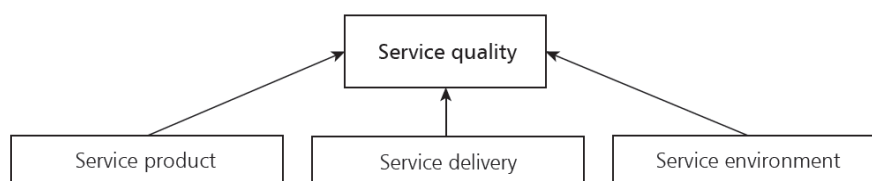
According to Rodrigues, Barkur, Varambally and Motlagh (2011), SERVPERF and SERVQUAL considerably differ in terms of the outcomes of their two metrics. Therefore, in order for researchers to benefit from the meaningful measurement, Rodrigues et al. (2011) suggested applying both SERVPERF and SERVQUAL and drawing combined implications.

Carrillat et al. (2007) employed meta-analysis in their study findings, which suggested that both scales (i.e., SERVPERF and SERVQUAL) are adequate and equally valid predictors of overall service quality. However, the authors believe that the SERVQUAL scale could be of greater interest for practitioners due to its richer diagnostic value (i.e., comparing customer expectations of service versus perceived service across dimensions). Also, the results of the study revealed that the need to adapt the measure to the context of the study in the case of SERVPERF is less than in the case of SERVQUAL. Another finding, by Carrillat et al. (2007), is linked to the culture/language of the researched country which was previously overlooked by other researchers: the predictive validity of SERVQUAL and SERVPERF on overall service quality was found to be higher for non-English speaking countries and for countries with lower levels of individualism. However, Carrillat et al. (2007) suggest that the reason for this is the employment of modified versions of SERVQUAL in those countries rather than the cultural context itself. Indeed, it has been claimed that the dichotomy between individualism and collectivism is too simplistic to account for personal differences in so-called 'collectivist' or 'individualist' societies (Morales & Ladhari, 2011).

### ***Three-component model***

Work by Grönroos (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)

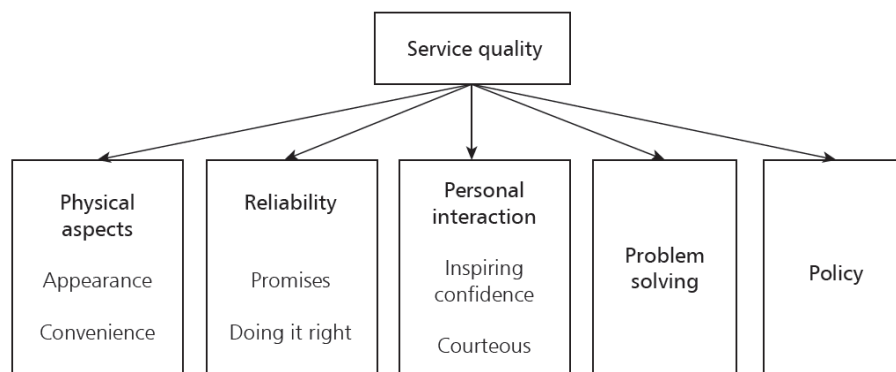
Three distinct components - service product, service delivery and service environment - were proposed as essential elements of service quality. The service product element consists of what consumers get as a result of service (i.e., outcome) and also of the consumer's perception of the service. The service 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 & Levesque, 1995), Rust and Oliver did not test their conceptualisation, which becomes its considerable limitation. The

study by Brady and Cronin (2001) stated that support has been found for similar models in retail banking, and offered empirical confirmation in their research. Yet, 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 and expanded the concept of service quality vertically (Dabholkar et al., 1996) (Figure 5) and horizontally (Brady & Cronin, 2001) (Figure 6). Vertical expansion by Dabholkar et al. (1996) is also referred to as a 'model of retail service quality suitable for use in retail businesses', or RSQS. In this model, retail service quality is viewed as a higher-order factor defined by two additional levels of attributes (the dimension and sub-dimension levels). 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, operating 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 conceptualisation very different from previous models.

The RSQS has been widely applied in various retail formats within various cultural contexts (e.g., Das, Kumar, & Saha, 2010; Kim & Jin, 2002; Mehta et al., 2000; Ravichandran, Jayakumar, & Abdus Samad, 2008; Siu & Cheung, 2001; Vazquez, Rodríguez-Del Bosque, Díaz, & Ruiz, 2001). Leung and Fung (1996) developed their own scale to test retail service quality, however it was of limited versatility and, therefore, applicability. On the contrary, the RSQS has been widely replicated in various studies (Boshoff & Terblanche, 1997; Das et al., 2010; Kaul, 2007; Kim & Jin, 2002; Nadiri & Tumer, 2009; Nguyen & Le Nguyen, 2007; Ravichandran et al., 2008; Siu & Cheung, 2001). Some of these studies (Boshoff & Terblanche, 1997; Das et al., 2010; Nadiri & Tumer, 2009) supported the dimensional structure of RSQS and found it highly suitable for application within their countries. Other studies did not support the five-dimensional structure of RSQS due to inconsistency of the number of dimensions with the original RSQS (Nguyen & Le Nguyen, 2007; Ravichandran et al., 2008; Siu & Cheung, 2001), as well as inadequacy with reference to the country's context (Kaul, 2007; Kim & Jin, 2002). The latter has been supported by Keillor et al. (2004), who found that depending on the differences from one country and/or culture to another, some elements generally associated with service encounters may be significant influencers of behavioural intentions while others may have less influence. Apart from the aforementioned replication studies, some researchers proposed their own new scales. Thus, Mehta et al. (2000) developed a modified scale by combining RSQS and SERVPERF models, and Vazquez et al. (2001) proposed the CALSUPER scale developed on the basis of RSQS and SERVQUAL instruments.

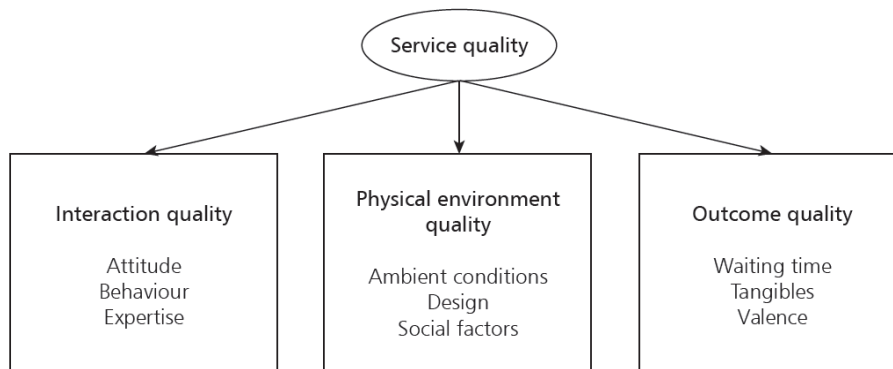
### ***Brady and Cronin's model***

Continual horizontal expansion by Brady and Cronin (2001) conceptualised the five dimensions of the Dabholkar et al., (1996) model into three dimensions 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 conceptualisation 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 Garcia and Martinez Caro (2010) note that Brady and Cronin (2001) propose that sub-dimensions influence quality dimensions, i.e., sub-dimensions directly contribute to quality dimensions' perception. However, their model is operationalised in a different way; dimensions are variables that influence sub-dimensions (Martinez & Martinez, 2010, p. 33). It points out a contradiction that has not been addressed by Brady and Cronin and raises concerns about interpreting the conceptualisation of this model.

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



Source: Adapted from Brady and Cronin (2001)

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

Several authors replicated or modified to different extents Brady and Cronin's (2001) model by incorporating the hierarchical and multidimensional approaches to service quality. Thus, Kim and Jin (2002) and Ko and Pastore (2004) partly reflected Brady and Cronin's (2001) conceptualisation in their model development for particular industries (the restaurant and recreational sport industry respectively). Also, Lui (2005) adapted the same service quality structure for his research in six different service areas. The study by Jones (2005) integrated an additional dimension of communications into Brady and Cronin's structure of service quality, and the results revealed the significance of this new dimension for overall service quality in three out of four industry samples.

In an attempt to improve Brady and Cronin's (2001) conceptualisation further, Martinez Caro and Martinez Garcia (2007, 2008) focused on two areas, namely, the philosophy of the service quality measurement and the nature of causal relationships between dimensions and sub-dimensions of service quality. Having built up their argument on the studies by Law, Wong and Mobley (1998), Dabholkar et al. (1996) and Edwards (2001), Martinez Caro and Martinez Garcia (2007, 2008) found some inconsistencies in causal relationships between dimensions and sub-dimensions in Brady and Cronin's model. They claimed that these inconsistencies made the

methodological legitimacy of further replications/modifications of the model questionable. The argument was that the model and its modifications contained an implicit assumption of the dimensions as antecedents of service quality. Having items that represent the dimensions and the overall service quality allows for the possibility of adding new dimensions when developing the models/modification on the basis of Brady and Cronin's (2001) study. Martinez Caro and Martinez Garcia (2007, 2008) claim that dimensions are not antecedents of service quality but expressions of the complexity of the construct. As a result, they proposed to use a third-order reflective hierarchical model. This is in contrast to instrumentalism and the formative models (Borsboom, Mellenbergh, & van Heerden, 2003, 2004) and in line with the definition of service quality as an attitude (Parasuraman et al., 1988). The aforementioned suggestions by Martinez Caro and Martinez Garcia (2007, 2008) represent a call to account for the hierarchy of perceptions developed by customers in different levels of abstraction (i.e., overall service quality, dimensions and subdimensions), and if changes in attitude towards overall service quality occur, there is a need to ensure that this is captured in changes in the dimensions, sub-dimensions and observable indicators.

From a practical point of view, the third-order hierarchical model is important in terms of strategic and tactical support for decision making in organisations (Ko & Pastore, 2005). It provides strategic concepts for the improvement of various areas (dimensions) as well as tactical tools (subdimensions) and performance evaluation (items). Moreover, the reflective hierarchical model allows an approach to service quality with 'customer reality' in mind, i.e., it is uncertain whether customers judge service quality attributes and overall evaluation of service quality separately, and whether they extrapolate their overall attitude to the individual service areas or encounters.

### **Models: Old ways of doing new things?**

Although the model by Brady and Cronin (2001) received some criticism, it is recommended as "an excellent basis for proposing the attributes of service quality that can be measured" (Martinez Garcia & Martinez Caro, 2010, p.110). To date, there have been various recommendations on how to improve the model's soundness and operational adequacy. The review of existing models (including the 'superior' one by Brady & Cronin, 2001) leads to the question of how relevant this approach is in the current era of service quality research. Is there a good reason for replication/adaptation/modification of the models that historically inherited lack of conceptual, philosophical or methodological considerations? Does the whole notion of a 'model' with the hierarchy of dimensions, sub-dimensions and items still help researchers to move forward? Or is it just a safe return journey between firmly established concepts adjacent to service quality - a journey with increasing confidence but diminishing potential to collate and utilise myriads of fragmented knowledge snapshots?

In order to help researchers to make a conscious informed decision on which way to go, there are a number of areas to consider. These could be useful for endeavours on both pathways - either improving existing models or creating a new basis for integrated knowledge in the service quality area.

### ***Clarity about the philosophical stance***

It seems that the major drawback of existing service quality models is the lack of clarity regarding the philosophical stance of particular research. All previous studies have attempted to offer improved conceptualisation of service quality. These models were suggested to have several service quality dimensions and, practically, this multidimensionality (Martinez Garcia & Martinez Caro, 2010) represented a measurement tool for service quality. However, perceived service quality itself belongs to the group of theoretical constructs - "a conceptual term used to describe a phenomenon of theoretical interest" (Edwards & Bagozzi, 2000, p. 156-157). Although these conceptual terms (constructs) are built by researchers, they refer to real phenomena which exist regardless of the awareness and interpretation of the researcher and the person under study (Cook & Campbell, 1979; Messick, 1981). However, depending on the nature of the phenomenon, researchers may view constructs as representing constructions of the human mind and not real phenomena because words cannot be interpreted without involving human sensations and perceptions (Peter, 1992). Different approaches to viewing constructs refer to the area of research philosophy as a separate subject of discussion: realists think of phenomena in terms of real world entities (Edwards & Bagozzi, 2000); constructionists argue that all phenomena are ultimately perceptions of the human mind, and as such, cannot be real in a pure sense (Peter & Olson, 1989). In both cases, theoretical constructs themselves are not real in the objective sense but instead are "verbal surrogates" (Edwards & Bagozzi, 2000, p. 157) for phenomena of interest regardless of whether the latter are perceived as real or not.

No doubt, there is a need in different philosophical positions for different studies to make the unknown variables and contexts more pronounced. Originally, variables/dimensions of service quality represented measures, i.e., "a quantified record taken as an empirical analogue to a construct" (Edwards & Bagozzi, 2000, p. 156). Therefore, explaining relationships between service quality and its dimensions becomes very important as they bridge the gap between theoretical constructs and measurable empirical phenomena (Costner, 1969). Edwards and Bagozzi (2000) note that research works often place a big emphasis on explaining casual relationships between constructs but little attention is paid to explaining the direction of relationships between constructs and their measures.

Due to the impact that philosophy can have on the overall study, clarifying the philosophical position of the researcher can enable constructive critique from colleagues in the field. Critique from an appropriate standpoint (conceptual, philosophical, methodological, operational) could clarify research findings. It also has the potential to increase the positive developmental potential of models as other researchers will be able to contribute constructively from a similar standpoint.

### ***Static versus dynamic approach to service quality***

The move from 'goods-dominant' towards 'service-dominant' logic (Vargo & Lusch, 2008) is based on the notion of service co-creation between suppliers and customers. The process of co-creation has the ultimate result that all participants aim to benefit from; this result is the combination of value proposition and value actualisation (Gummesson, 2007). If the commitment to the contemporary 'service-dominant' vector is made, then there is a need to explore what role consumers play

in service quality co-creation. Several studies (Arnould & Price, 1993; Kupers, 1998; Schembri & Sandberg, 2011) confirmed that consumers do not passively receive service quality but actively co-construct the quality of service they experience. However, in their current format, existing service quality models do not allow for the scope of going beyond a set of their fixed dimensions. This fundamentally contradicts the dynamics of 'service-dominant' logic as well as the value/quality co-creation process. Moreover, the dimensional structure of service quality preserves the status quo of the models, and by this creates a rationale for neglecting the experiential meaning of service quality (Schembri & Sandberg, 2011).

To be able to shift from established and predefined terms of service quality research, the research community needs to find a way to reach a mutually supported conclusion. In fact, it is time to formally update, not the models, but the approaches. Schembri and Sandberg (2011) suggest that this could be done by taking an interpretivist approach and placing the focus on the consumer's lived experiences as a source of service quality. This is in line with Martinez and Martinez (2010), who recommend that the literature of service quality be updated with studies that use phenomenographic techniques and ethnographics in order to 're-discover' the meaning of quality.

### ***Role of culture/context***

The review of the service quality models showed that there has not been enough consideration of the country/culture specific context in which the models have been developed. However, there is evidence that this can have implications for adaptations/modifications of the models for use in different contexts, i.e., inadequacy or limited explanation potential (Carrillat et al., 2007; Kaul, 2007; Keillor et al., 2004; Kim & Jin, 2002). Indeed, the social world, and the historical meaning of that world, serves as a departure point for consumers forming their complexity of views. In its turn, a precise consumption context leads to the emergence of salient meaning for the consumer in that context (Thompson, 1997).

Recently, some concerns regarding the situation with the research in the cross-cultural service quality area have been expressed (Morales & Ladhari, 2011). Firstly, the absence of a conceptual framework that facilitates studies of cross-cultural service quality could disadvantage the body of service quality knowledge by increasing disintegration. Secondly, cultural facets of service quality phenomenon have always been present in real life but rather neglected by most current research methodologies. This continuing trend for researchers in the area leads to a situation where most do take a more considerate stand.

In turn, Dabholkar et al. (1996) argued that a measure of service quality across industries is not feasible and suggested that future research should develop 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 the relevance of practical implications for management in any particular industry.

Therefore, this encourages researchers towards making a conscious decision to



either consider the service quality environment more realistically, or at least clearly define limitations imposed on the research by not doing so. This will allow capturing of a meaningful picture of service quality perceptions, providing a clear pathway for further research/model improvements and simplifying challenge of filling the gaps in the area of perceived service quality. This goes along with the suggestion of Morales and Ladhari (2011) to utilise a holistic approach and consider situational, contextual and structural variables related to service quality perceptions.

### ***Unique consideration of valence as a service quality attribute***

Brady and Cronin (2001) suggested that the purpose of the valence concept is to explain attributes which determine a customer's belief in the service (good or bad outcomes), 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, Ahtola & Klippel, 1975).

Previous service quality research (Cronin & Taylor, 1992; Parasuraman et al., 1985, 1988) justifies the inclusion of valence among service quality attributes on the basis that service quality is similar to an attitude. Martinez Garcia and Martinez Caro (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 Garcia & Martinez Caro, 2010, p. 112). Valence may have an impact on a service experience regardless of service quality perception; therefore it is suggested that it should be explored through qualitative research along with other concepts influencing service quality perceptions.

Valence may be a very useful attribute for the improvement of an existing service quality model or for the development of a new one based on a dimensional structure. However, the authors of this research argue that it might be of less urgency once the points of philosophical stance, the level of dynamics, and the context are addressed. The notion of valence has been brought into the equation of static models in order to create a place for legitimate consideration of the unknown. But why should it be unknown? This only supports the earlier suggestion that other methods/philosophies are needed to investigate and discover 'the unknown'. Although a researcher can make a conscious decision not to approach 'the unknown' within the static framework of a model, the presence of 'valence' could be reduced by directing the research to answer the following questions: what position (passive vs. active) do customers take in co-creation of service quality? (Schembri & Sandberg, 2011); what is their level of self-awareness?; and what is the nature of their motivations (e.g., intrinsic/extrinsic)? (Thatcher, Thatcher, Day, Portas, & Hood, 2009).

### ***Ideas for 'status quo' models***

Whilst the aforementioned emphasises strategic considerations for service quality research, here are two final ideas for the existing service quality models which still will possibly be used in their current format (i.e., without applying changes to them in the areas discussed earlier in the paper). These are the inclusion of a measure of overall service quality, and employment of importance-performance analysis for evaluation of service quality.

Separate measurement of overall service quality can assist researchers to discover

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

The importance-performance analysis (Martilla & James, 1977) is considered to be a “useful screening tool” (Rial, Rial, Varela & Real, 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 Garcia & Martinez Caro, 2010). Recently, importance-performance analysis has been considered as a non-traditional alternative for assessing perceived service quality (Martinez Garcia & Martinez Caro, 2010; Yildiz, 2011). The logic of analysis comprises a comparison between performance and importance of each relevant attribute (Abalo, Varela & Manzano, 2007). In the context of service quality evaluation, performance is a reflection of customer perceptions towards current service delivery, and importance is a representation of 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.

This discussion is intended to assist those on the pathway of innovation in the area of service quality as well as researchers attempting to improve existing service quality models. Therefore, the above ideas for ‘status quo’ models could help to make the best of their operationalisation.

## **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 model’s development, established the link between perceived service quality and service quality models. The four service quality characteristics (inseparability, heterogeneity, intangibility, and perishability) 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. Along with several methodological issues, 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 better explanatory potential in comparison with earlier models. Although the model has contradictions that have not yet been addressed, this paper does provide suggestions for overcoming these limitations and emphasises strategic considerations for future service quality research.

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