Service Quality and SERVQUAL Model: A Reappraisal

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Abstract

Service sector has become the center stage of economy, with higher percentage of contribution to gross domestic product. Demand for services has increased due to multiple factors including globalization and growth in demographic factors. This has necessitated understanding the characteristics and measuring services, for sustainability and growth.

There have been many attempts to measure the quality of services. But a comprehensive understanding is still eluding. Various measures have been proposed and each has its own lacunae, nonetheless each research has bolstered the comprehensive understanding about service quality.

In view of this dependency on context, this paper highlights the criticisms of SERVQUAL model from the conceptual and empirical view points. It adds to another dimensionality of 'satiated customer' as a proposition wherein the general perception of quality may be high, but still the customer would like to switch service providers. This factor becomes more prominent when the service features are not specific to individual needs but overwhelms the customer with high turnaround time. The review suggests that understanding the innovation quality and adaptation may be crucial in such cases.

Keywords: SERVQUAL, Service Quality, Customer Satisfaction, Switch, Loyalty

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Introduction

Customer, Service process, Management, and employees are four fundamental concepts shaping the SERVQUAL model (Parasuraman, Zeithaml, & Berry, 1988) of service quality. Customer's have needs, experience, expectations about a particular service; management and employees of the service providers have perceptions about customer needs; and service delivery has processes and specifications. Broadly speaking, these factors interact and give rise to mismatches between different pair of factors called gaps. These gaps are subsequently assessed in the model. Primarily the gaps involve:

- Customer expectations and management perceptions
- Perceptions of employee and management
- Perceptions of management and service specifications
- Service specifications and service delivery
- Service delivery and customer communication
- Customer expectations and perceptions of the service delivery
- Customer expectations and employees' perceptions

The following section discusses different views and criticisms of Servqual model on various accounts.

Generalized Model

It is argued that the model is not a generalized measure for all services; so it has to be customized for specific services, whereas it was designed to serve as a generic measure (Carman, 1990). The application of the instrument to four different service industries indicated that it is not possible to use statements exactly. Similar observation about the unsuitability of the instrument in diverse service industries were indicated in other studies (Finn and Lamb, 1991). Three factors such as conceptualization, measure and validity of the instrument were debated by various researchers. Cronin and Taylor (1992) raised the question about the conceptualization and measure of service quality. It was indicated to be inadequate. The validity of the individual scale items in its ability to describe service quality components as desired was also questioned. Perception versus expectation conceptualization is equivalent to the disconfirmation model. Thus it was (Cronin and Taylor, 1994) asserted that the Servqual scale on disconfirmation-based model does not measure both service quality and customer satisfaction. Many other researchers (Boulding, Kalra, Staelin, & Zeithaml, 1993; Oliver, 1993; Zeithaml, Berry and Parasuraman, 1993) also indicated that the scale is an operationalization of one of the many forms of expectancy-disconfirmation model. On the other hand Buttle (1996) indicated that an attitudinal model for service quality is more appropriate compared to expectation disconfirmation model used in Servqual. While evaluating two models Servqual and Servperf (Cronin and Taylor, 1992) concluded that servqual is based on satisfaction rather than attitude paradigm and also the analysis of structural model confirms few industries rather than being generic. The model is also criticized on being too much inductive and failing to draw concepts from different cross disciplines (Anderson, 1992; Buttle, 1996; O'Neill and Palmer, 2003), industry specificity would require a deductive approach.

One of the concerns is that the instrument is used each time for different industries, the learning from the study is applied to another industry in subsequent research. Since the context is changing every time, the generalizability is a difficult proposition. At the same time the instrument is modified to suit the context of research, so it does not remain the same every time, posing another challenge for generalizability.

Difference Scores

There are issues with the difference scores of P-E gap (Brown, Churchill and Peter, 1993; Iacobucci, Grayson and Ostrom, 1994a; Page and Spreng, 2002; Prakash, 1984; Teas, 1993), the score is obtained by the subtracting the scores in one measurement and creating a new variable to be applied in subsequent data analysis. Thus the measurement becomes questionable (Prakash, 1984). Brown et al. (1993) argued that computation of such difference score measures leads to

several measurement issues like reliability, where in the positive correlation in the component scores (e.g. expectations and performance), will get reduced in the difference. When the expectations and perceptions instruments are administered after the service, there is a possibility of strong correlation between them since expectation is influenced by performance. Though the problem can be obviated to some extent (Page and Spreng, 2002), by administering the expectation instrument prior to rendering of service, and performance instrument thereafter, it presents a challenge in many service settings.

Discriminant Validity

It indicates that constructs which are not related theoretically should also not have a very high correlation among each other. This necessary condition may manifest, if the reliability of the construct itself is less, but in such a case, it will be for different contexts (Brown et al., 1993) secondly, the difference between P-E scores gets calculated but it actually should be a distinct construct. If it is calculated then it is expected to have high correlation and will not be a distinct construct. This presents an inherent contradiction of logic being a calculated parameter but a distinct construct. These are few reasons for which the discriminant validity of the instrument becomes questionable.

Dimensionality Concerns

Several researchers have questioned the five dimensions of Servqual used as generic one, and its applicability across industries, there is also doubt about its stability (Caruana, Ewing and Ramaseshan, 2000). Individual items used have been questioned about its convergent and discriminant validity (Babakus and Boller, 1992; Spreng and Singh, 1993). It is also suggested that the different number of factors in different studies may be due to similarity across dimension and difference within dimension (Asubonteng, McCleary and Swan, 1996). Because many studies failed to replicate the dimensions, it is pointed out that there is insufficient generalizability (O'Neill and Palmer, 2003). In one case it is suggested that the construct validity should be tested for specific industry prior to measuring service quality (Finn and Lamb, 1991), further indicating lack of generalizability. Dimensions may depend on the type of service industry (Babakus and Boller, 1992) and thus it poses complexity in developing one standard measure for all types of service industries. There are also suggestions (Cronin and Taylor, 1992) that the items used in the scale may be completely different from one service industry to another, depending on the level of involvement of customers. Thus the fundamental arguments lack coherence and congruity for a common measure of quality.

Process Orientation

The Servqual instrument is focused on process or functional quality as opposed to technical or outcome quality (Buttle, 1996). Completeness of twenty two item scale to measure critical dimensions of service quality is also questioned since it focuses on human and tangible aspects (Sureshchandar, Rajendran and Anatharaman, 2002). It is argued that the dimensions like reliability, competence, and security contain outcome quality (Higgins, Ferguson and Winston, 1991) and another research indicates reliability to be associated with outcome dimension (Chumpitaz and Paparoidamis, 2004).

Performance-based Measures

Researchers also have debated if the Performance-Expectation model is better measure or

Performance based measure is better. Cronin and Taylor (1992) contend that performance-based measures are a better and long-term service quality measure. They compared Servqual versus performance-only based instrument Servperf and indicate that the later has better ability to explain variance. This was also confirmed in few other studies (Lee, Lee and Yoo, 2000; Behara, Fisher and Lemmink, 2002; Brady, Cronin, and Brand, 2002; Jain and Gupta, 2004; Sureshchandar et al. 2002).Oliver (1997), cautions that in isolation performance does not mean anything unless anchored by a standard. Thus compared to P-E, P alone is not a logical index (Coulthard, 2004). Even if P alone is used P-E will get computed mentally by the respondents (Llosa, Chandon and Orsingher, 1998; Coulthard, 2004). Thus it become more like disconfirmation in satisfaction theory and should be directly measured (Rust, Zahorik, and Keiningham, 1996).

Although the effectiveness of Servqual has been questioned in evaluating service quality, many do concur it to be a reasonably good predictor (Sureshchandar, et al., 2002), the gap scores are also indicated not to be problematic since it has more diagnostic value than performance-only scores (Parasuraman et al., 1994; Schneider and White, 2004; Spreng and Mackoy, 1996). Oliver (1993) indicates that though there is ambiguity, service quality is a comparison by the customer to the standards of excellence.

Subjective Disconfirmation

Disconfirmation as the difference of scores, between performance and expectation has also been debated. Disconfirmation as the difference between performance and expectation score was questioned by Anderson and Fornell (1994) and they proposed that the subjective disconfirmation can be more appropriately measured directly. One such method (Peter, Churchill and Brown, 1993) involved direct comparisons to operationalize disconfirmation constructs without computation of the difference. In this case the respondents have to mentally compute any such difference between performance and expectation and then respond about disconfirmation. Thus when respondents consider the gaps and respond, it can be taken as the P-E gap is operationally and directly measured (Caruana, 1999). This way of conceptualization and operationalization preserves the essence of service quality along with better statistical reliability and parsimony on account of reduced length of the instrument.

It is also suggested that disconfirmation concept can still be incorporated with expectation wording, rather than separate administration and computation of difference scores (Prakash, 1984). This way of operationalization may increase statistical reliability and parsimony (Rust, Zahorik and Keiningham, 1996). To test out the disconfirmation measure in different ways, Dabholkar, Thorpe and Rentz (2000) operationalized it differently and referred "computed disconfirmation", and "measured disconfirmation". In case of computed disconfirmation case expectation survey was conducted before the service and perception survey was after the service, thus it was a longitudinal method. Then the difference was computed. In case of measured disconfirmation or subjective disconfirmation, the administration of questionnaire was one time, but the wording of the questionnaire altered to capture disconfirmation.

Relationship between Service Quality and Customer Satisfaction

"Satisfaction is a summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feelings about the consumption experience" (Oliver, 1981). Satisfaction and service quality literature indicate that both are about comparison between the service performance and some standard (Spreng and Mackoy, 1996). It indicates interrelated concepts and process, so there is a possibility of cross fertilization of ideas

(Santos and Boote, 2003). Prior to this suggestion, Cronin and Taylor (1994), actually pointed that there is inconsistency in the conceptualization and such issues create difficulties and confusion.

Perceived service quality is a total and long term judgment, but satisfaction is individual transaction specific. Mostly these two concepts are taken to be synonymous whereas Cronin and Taylor (1992) implore a distinction between satisfaction and service quality, arguing that depending on the level of involvement of customer, perceived quality and satisfaction will vary in their importance in different service industries, but a contrary argument, Caruana (2002) posits that more attention should be paid to satisfaction, since it has more impact on customer loyalty.

In another research about "Customer voice" (Iacobucci, Ostrom, and Grayson, 1995) found that respondents could not distinguish substantially between service quality and satisfaction and took both to be synonymous; however factors like back-office service operations, expertise and antecedents impact the perception about service quality but factors such as timeliness, service recovery and physical environment are more likely to affect perceptions of customer satisfaction. Thus a fine tuned methodology is necessitated to distinguish satisfaction from service quality. Similarly a canonical model proposed (Iacobucci et al., 1996) later, suggested that customer satisfaction and the service quality concepts are similar, to the extent being different operationalization of the evaluative judgment construct.

The distinctiveness of both service quality and customer satisfaction is highlighted in many researches. Confirmatory factor analysis indicates (Spreng and Mackoy, 1996) these two constructs to be distinct. Another study (Dabholkar et al., 2000) finds the constructs to be distinct, but highly correlated and customer satisfaction is indicated to have a mediating role between perception of service quality and behavioral intentions of customer.

It is indicated that the evaluation of excellence is attribute based, thus it is a cognitive evaluations (Bitner, 1990; Zeithaml, 1988) process however customer satisfaction is considered to have both cognitive and affective aspects (Dabholkar, 1995). So it is proposed to consider service quality as predominantly cognitive judgment whereas satisfaction as emotional one (Iacobucci et al., 1994). If customer satisfaction and service quality are to be treated theoretically distinct, then the models depicting the antecedents and consequences must describe these (Iacobucci et al., 1996). The service quality models such as the gap model, the satisfaction models (Churchill and Surprenant, 1982; Fornell, 1992, Oliver, 1980) and extended gap model (Boulding, Kalra, Staelin and Zeithaml, 1993)), have to bring out the differences of such antecedents and consequences more clearly.

Causal Order

The above discussion about antecedents and consequences of satisfaction also point out inherent conflicts in the explanation (Cronin and Taylor, 1992; Gotlieb, Grewal and Brown, 1994; Lee et al., 2000; Spreng and Mackoy, 1996). Similarly, how customer satisfaction and service quality is effectuated by disconfirmation is not very well understood. Many researchers (Churchill and Surprenant, 1982; Oliver, 1980; Oliver and DeSarbo, 1988; and Swan and Trawick, 1981), indicate that disconfirmation influence satisfaction. Similarly other researchers (Bolton and Drew, 1991; Brown and Swartz, 1989; and Parasuraman et al., 1988) indicate that disconfirmation influence perceived service quality. The distinction of both was attributed to (Zeithaml et al., 1993) the operationalization of the expectations construct. It is also proposed that the perception of service quality is formed by comparing ideals to perceived performance on various quality dimensions but customer satisfaction is a function of the difference between predictive expectations and performance along quality as well as non-quality dimensions (Oliver, 1993).

There was an effort to distinguish expectation and disconfirmation of expectation in that the latter is proposed to influence satisfaction (Zeithaml et al., 1993). The precise nature of influences of expectation on service quality and satisfaction is not understood fully (Coye, 2004)

There has also been debate about the causal perspectives if satisfaction causes service quality or vice versa. Teas (1993) suggests that the causal perspectives might be understood in terms of transaction specific or relations specific quality. One school of thought (Oliver, 1993) proposes satisfaction to be super-ordinate where as service quality is sub-ordinate, at the same time there is a possibility that satisfaction is linked to subsequent perceptions of service quality. Thus each satisfying experience reinforces the previous perception.

Expectancy value theory as well as 'Attitude, Intention, Behavior' (Bagozzi, 1992) has been applied to understand the nature of precedence between service quality and satisfaction (Gotlieb, Grewal and Brown, 1994). The findings indicate that the model with satisfaction as precedence is a better fit. This can be taken as a causal direction from service quality to customer satisfaction. The level of relationship between the two however does not remain the same, at the beginning it starts at a level and then expectation goes up, thus satisfaction may come down (McAlexander, Kaldenburg, and Koenig, 1994). So a continual improvement becomes necessary. In another opinion (Dabholkar et al., 1995) service quality and satisfaction are distinct but highly correlated concepts. Within the zone of tolerance, both the concepts could overlap, but where performance falls continually or there is high emotional contest, the causal order changes between the two constructs. Gronroos (1998) summarises emphatically that Perceived service quality comes first, then satisfaction with quality.

Satiation and Quality

Quality is indicated to be the ability to satisfy customer need. Most of the models deal with a situation where, customer expectation is higher than product's ability. As a result there is a gap and this is indicated to be the measure of quality. But what happens when the ability of the product surpasses the customer need? It is indicated to be resulting in customer delight at a higher level of customer satisfaction. However, in many situations, customer rarely plays a role in shaping the product feature. Innovation does not solely depend on customer requirement. So the impact of such unanticipated ability of the product on customer perception of quality is worth investigation. In high technology products where the feature turnaround and obsolescence is higher, customers may find it difficult to adapt to the complexity thus may reject the product. Similarly techno-savvy customers in a low cost scenario would like to experiment and switch even if the current product feature meets their requirement perfectly. Such issues are indicated in the research (Sahoo, Kar and Das, 2015) where in customer's have indicated satisfaction with their current service provider yet they would like to switch the service provider. However more research would substantiate the proposition subsequently.

Trend of Service Quality Research in the last decade (2005-2015)

Over the period SERVQUAL and its variant models have been put to test. Most of the researches on Servqual have been about the application of its concepts, constructs and techniques to assess the service quality in different service sector industries and organizations. Few of the diverse areas noted are: NGO (Ahuja, Mahlawat, Masood, 2011); IT (Roses, Hoppen and Henrique, 2009); E-retailing (Siadat, Buyut and Selamat, 2008); Police service (Donnelly, Kerr, Rimmer and Shiu, 2006); banks (Nair, Ranjith, Bose and Shri, 2010; Kumar, Tat Kee and Taap Manshor, 2009); health care (Muhammad Butt and Cyril de Run, 2010); education (Akhlaghi, Amini, and Akhlaghi,

2012); tourism (Chand, 2010) and many more. In general, these have been validating different aspects of base model and the model was adapted to the context.

The extensions and variations to the model also have been put to research during this period. The relationship between service quality and customer loyalty (Albarq, 2013), service quality and customer satisfaction (Naeem, Akram and Saif, 2011; Krishnamurthy, SivaKumar, and Sellamuthu, 2010), antecedents of customer loyalty (Boohene and Agyapong, 2011), internal customer perception (Hirmukhe, 2012) also have been worked upon. Satisfaction and intention (Kouthouris and Alexandris, 2005), Mediation effect of customer satisfaction between service quality and repurchase intention has also been studied (Ahmed, Nawaz, Usman, Shaukat, and Ahmed, 2010) during this period.

This period also has reported some quantum jumps with regard to the concept of service quality measurement and parameters. Parasuraman, Zeithaml, and Malhotra (2005) developed an electronic Service quality model 'E-S-Qual' consisting of "efficiency, fulfillment, system availability, and privacy" parameters. Zineldin (2006) proposed a 5Qs model involving 'quality of object, processes, infrastructure, interaction, and atmosphere' to assess the service quality in case of hospital. Private branding was proposed as 6th dimension of SERVQUAL model (Herstein and Gamliel, 2006). 'FAIRSERV' model (Carr, 2007) based on fairness in the service transaction and relational context was also proposed. The Servqual model was extended (Kashi, Astanbous, Javidnia, and Rajabi, 2012) using quality function deployment (QFD) and Kano's model in banking service, a similar attempt was also made to analyse logistics service (Baki, Sahin Basfirinci, Murat, and Cilingir, 2009). Fuzzy logic also has been tried to prioritize the library service (Jamali and Sayyadi Tooranloo, 2009). Caro and García (2008) used a hierarchical and multidimensional service quality model for travel agency industry. In another research (Shieh, Wu and Huang, 2010) the instrument was used to identify the factors of importance from customer perspective and then the importance of each such factors were identified by using 'decision making trial and evaluation laboratory (DEMATEL). In a multipronged approach to evaluate service quality of hospitals, (Asadi, Mirghafoori, Sadeqhi Arani, and Khosravanian, 2011) DEA, Balanced Scorecard and SERVQUAL model also have been used. The model has been used along with performance control matrix to suggest improvement in service quality (Chen, Yeh, and Chen, 2011).

In summary it can be seen that researchers are still validating the contextual applicability of the SERVQUAL model. At the same time extensions and fundamental shifts are noticed in the paradigm of measuring service quality.

Scope for Future Research

Satisfaction, causality, temporality and its benefit for the producer remain as open area of investigation, especially when the turnaround time is too short. The market has become more transient in its scope, thus the quality perception among its customers becomes more crucial for competitive advantage. This perception is bound to undergo change during the life cycle of the product or service. Future research needs to investigate, how does this change over the life cycle? In a very competitive environment, the quality would be more apt as 'competitive quality' as the customer's perception, expectation and experience would be relational. Similarly there is a need for investigation into a group perspective in quality rather a purely individual perspective, as the constructs associated are formed by the cohorts. Extant research indicate that quality, satisfaction and loyalty are related but the precedence and rub-off effect is not very apparent. A loyal customer may perceive the product or service to be of better quality than others, so the bi-directional relationship needs to be contextualized to generate meaningful understanding.

Discussion and Conclusion

This study contributes in drawing the attention of the researcher community to few important aspects of 'satiated customer', 'competitive quality' and bi-directionality of the associated constructs. It proposes that there could be impact of the cohorts on quality perception and thus the perception needs to be understood from a collective stand point rather than only from individual perspective.

Service quality, customer satisfaction, loyalty and associated concepts still present challenges in terms of antecedents, consequences and causality, specifically when priorities of the dimensions are partly impacted by contexts. One area of challenge is to take customer expectation as an independent variable, which is hardly the case. Expectations are set by existing experience. Exposure to innovative and novel product may raise the expectation, but initially the innovation was not from the expectation set. The rapidity with which customers are exposed to such product and higher degree of obsolescence would influence the relationship between customer satisfaction and loyalty. This would influence the temporal stability of quality dimensions. Nevertheless the quest continues for a durable and comprehensive framework to understand service quality and its ramifications in different contexts.

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