

An empirical assessment of service quality dimensions in the Indian retail sector

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Key words

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Abstract

Customer perceived service is considered as one of the key determinants of business performance. In the process of creating this differentiation, the role of delivery of quality services is very vital. So far, in the Indian context, there is a dearth of tested instruments which can measure customer-perceived service quality of a retail store. Application of quality measurement scales, in Indian context, particularly retail service quality, is yet very limited. In order to understand the driving factors of a typical Indian retail customer, the key objective of this study was to empirically test the service quality dimensions. The study also opined to carry out the gap analysis and identify the areas for improvements in retail service quality. The instrument proposed by Dabholkar, Thorpe and Rentz (1996) RSQS(Retail Service Quality Scale) was used as the questionnaire with the addition of two more variables which were found to be relevant for the Indian context after a pilot survey among small group of consumers. A 5-point Likert scale (1-strongly disagree, 5-strongly agree)was employed to measure the service quality of the retail shop. The findings of the RSQS in India are thus different from those of Dabholkar, Thorpe and Rentz.

Introduction

India has now regained the top position in the Global Retail Development Index (AT Kearney 2009). With the purchasing power of the urban Indian growing proportionately with the earning power, the retailer has the opportunity to offer the shopper the entire world on a platter. This would mean an increase in demand for better shopping ambience, superior quality products, and improved service.

Empirical research also points to the fact that retail environment is changing more rapidly than ever before and customer expectations have grown manifold thanks to the global exposure (Dabholkar, 1996). It is a challenge to retailers to differentiate them by serving the needs of their customer better than their competitors. According to Berry, (1986); Hummel and Savitt, (1988); Reichheld and Sasser, (1990), the basic competitive advantage in retailing is the delivery of high service quality. Since services are intangible, heterogeneous, and inseparable, it is difficult to measure service quality objectively. While many researchers have proposed service quality models, the SERVQUAL model developed by Parasuraman, Zeithaml and Berry, 1985 is the most predominant and most widely used. In order to understand the driving factors of a typical Indian retail customer, the key objective of this study was to empirically test the service quality dimensions. The study also opined to carry out the gap analysis and identify the areas for improvements in retail service quality.

Review of Literature

Over the years, many researchers have proposed and evaluated alternative service quality models and instruments for measuring service quality. Among these models, as noted above, SERVQUAL (Parasuraman, Zeithaml and Berry, 1985) is the most prominent and the most widely used. The authors of this model proposed that the consumer's opinion of quality is formed by an internal comparison of performance with expectations. Good service quality means that the customers' perceptions of service performance meet or exceed their expectations of what the service firm should provide. Parasuraman, Zeithaml and Berry (1985) identified five determinants of service quality which include tangibles, reliability, responsiveness, assurance, and empathy. The SERVQUAL scale has been widely used to measure service quality in different service contexts.

According to the study of Gagliano & Hathcote, (1994), measuring service quality is highly complicated and difficult especially in apparel specialty retailing because it combines the selling of goods and services to the customers and also the customers' expectations of knowledgeable, helpful staff to assist them during their shopping. They had conducted a study among the Customers of specialty clothing stores and have used a refined SERVQUAL scale (Parasuraman et al., 1991), for their study, in that the five-factor structure used was reduced to four factors.

Dabholkar et al. (1996) developed a measurement scale and empirically validated the scale to assess retail service quality. Dabholkar et al. had conducted the study on customers of seven selected stores from two department store chains. Their scale known as Retail Service Quality Scale (RSQS) was developed to suit the retail environment after making some modifications to SERVQUAL. A hierarchical factor structure was conceptualized by them comprising of five dimensions, with three of five dimensions having two sub dimensions each and overall service quality as a second order factor.

While consumers think of retail service quality at three levels – a dimensional level, an overall level, and a sub dimensional level, Dabholkar, Thorpe and Rentz (1996) suggested five dimensions – physical aspects, reliability, personal interaction, problem solving, and policy. They also gave sub-dimensions of each dimension to combine related attributes into sub-groups. The first dimension – physical aspects – includes the appearance of the physical

facilities and the convenience offered to the customer by the layout of the physical facilities. Therefore the sub-dimensions of this dimension are appearance (statements 1 to 4 in the scale*) and convenience (statements 5 and 6 in the scale). The second suggested dimension is reliability. It has two sub-dimensions and other variations. Customers view reliability as a combination of keeping promises (Dabholkar, Thorpe and Rentz, 1996). Westbrook (1981) found that availability of merchandise is also a measure of reliability. So, the sub-dimensions of reliability are promises (statements 7 and 8 in the scale) and doing it right (statements 9 to 11 in the scale). The third suggested dimension is personal interaction. It has two sub-dimensions – service employees inspiring confidence (statements 12 to 14 in the scale) and being courteous/helpful (statements 15 to 20 in the scale). These sub-dimensions are very closely related and capture how the customer is treated by the employee. The fourth suggested dimension is problem solving which addresses the issues of handling of goods returned and goods exchanges as well as complaints. Service recovery is recognized as a critical part of good service. Recognizing and resolving problems should emerge as a separate factor in customer evaluation. Westbrook (1981) found that customers were quite sensitive to how service providers attend to problems and complaints. Westbrook (1981) and Mazursky et al (1985) also mention that the ease of returning and exchanging merchandise is very important to retail customers. This dimension does not have any sub-dimension. The fifth proposed dimension – policy – captures aspects of service quality that are directly influenced by store policy. For example, when customers evaluate a store on the basis of convenient hours, it is viewed as whether the store's policy is responsive to customers' needs. Westbrook (1981) and Mazursky et al (1985) have reported that an important criterion on which customers evaluate stores is the credit and charge account policies of the store. Customers also value parking availability as important for retail shopping (Oliver, 1981).

This instrument also captures, apart from the common dimensions that are likely to be shared by pure service environments and retail environments, additional dimensions of retail service quality relevant to the retail environment. However, very few studies have utilized the instrument for evaluating service quality of retail stores. Like SERVQUAL, the reliability and validity of this instrument could also be questioned. Only one study by Boshoff (1997) was found which evaluated the reliability and validity of the instrument in South African retail environment. Although the study found the instrument to be valid and reliable for measuring retail service quality in South Africa, its applicability in India must be investigated through a formal research.

Christo & Terblanche(1997) had conducted a study on hypermarket shoppers by using RSQS (Dabholkar et al., 1996). Confirmatory factor analysis had conducted for hierarchical factor structure. The five factor structure of retail service quality dimensions suggested by Dabholkar et al. (1996) was in a reasonable fit.

Mehta et al. (2000) in their study on the Customers of supermarkets and electronic goods retailers, had used RSQS (Dabholkar et al., 1996) and SERVPERF (Cronin & Taylor, 1992). Leung & To (2001) had conducted study on undergraduate students who were shoppers at fashion stores- Reliability and correlation analysis Principal component factor analysis with varimax rotation had applied in their study. A 34-item scale developed by Leung & Fung (1996) for measuring service quality specifically in fashion chain stores has been used. The scale, comprising of five factors, possessed high internal consistency but low temporal stability.

Siu & Cheung (2001) had conducted a study on customers of five stores from a multinational department store chain; RSQS (Dabholkar et al., 1996) had been used. Confirmatory factor analysis with partial disaggregation was used. RSQS was found to be suited more in a “more goods, less services” environment, i.e. supermarket, while SERVPERF was better for a retailing context where the service element is prevalent. A modified scale resulting from a combination of RSQS and SERVPERF was developed. Six factors emerged as opposed to the five factor structure suggested in RSQS.

Kim & Jin (2002) in their study on College students who were shoppers of discounts stores- RSQS (Dabholkar et al., 1996) had been used - The scale, comprising of five factors, possessed high internal consistency but low temporal stability- A three-factor structure was found. In his observation the RSQS presented a better fit for the US sample than the Korean consumers.

The instrument proposed by Dabholkar, Thorpe and Rentz (1996) was used as the questionnaire with the addition of two more variables which are relevant for the Indian context after pilot survey among small group of consumers which employed a 5-point Likert scale (1-strongly disagree, 5-strongly agree) to measure service quality of the retail shop.

Research Methodology

Dabholkar, Thorpe and Rentz (1996) proposed an instrument based on SERVQUAL which measures service quality in a retailing environment. In addition to common dimensions of pure service environment, additional dimensions of retail service quality relevant to the retail environment were added.

The present study adopted the instrument proposed by Dabholkar, Thorpe and Rentz (1996) and in addition to that added two more variable. The constructs in the questionnaire were measured using a 5-point Likert scale (1-strongly disagree, 5-strongly agree) and measured the gap between the customers’ expectations and their perceptions about the service quality of big bazaar Bangalore.

The study was descriptive in nature and data was collected using non probability convenience sampling method. Population was active retail shoppers from Bangalore city. The sample consisted of 80 retail shoppers in a hyper market. 67% of the respondents were female and 33% of the respondents were male. Respondents were mostly between the ages of 21 and 40 (79%). 55% of the respondents were single and 45 % were married. Most of the respondents were with the minimum qualification of bachelor’s degree. Personal interviews were conducted after the completion of their shopping experience.

Statistical Analysis

The exploratory factor analysis was used in order to identify the various factors that are very important for the retail customers. Principal Component analysis was employed for extracting factors and orthogonal rotation with Varimax was applied. As latent root criterion was used for extraction of factors, only the factors having latent roots or Eigen values greater than one were considered significant; all other factors with latent roots less than one were considered insignificant and disregarded. Table 1 shows eigen values of extracted factors.

Suitable names have been given to the each factors based on the variables represented in each case.

The names of the factors, the statements, the labels and factor loading have been summarized in tables 1 and 2. There are six factors each having Eigen value exceeding one for motivational factors. Eigen values for six factors are 9.451, 2.975, 2.157, 1.968, 1.742 and 1.410 respectively. The index for the present solution accounts for 65.075% of the total variations for the factors. It is a good extraction because we are able to economise on the number of choice factors (from 30 to 6 underlying factors), we lost 34.025% of information content for choice of variables.

The percentages of variance explained by factors one to six are 31.504, 9.318, 7.188, 6.560, 5.806 and 4.702 respectively. Large number of variance has been considered for by the factor solution that was indicated by large communalities. Factor analysis results of factors are shown in table 1. Six factors are extracted and retained the communality is 0.611 for variable 1, 0.692 for variable 2 and so on. Communality here indicates that around 60% of the variance of variable i.e., information content of variable 1 is being captured by six extracted factors (Nargundkar).

Statements	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Communalities
The facilities at the store are visually appealing	0.774						0.611
Materials associated with the store services (such as shopping bags, catalogues or statements) are visually appealing	0.745						0.692
The store has clean, attractive and convenient public areas (eg. Rest room)	0.734						0.701
The store lay out arrangements makes it easy for the customer to find they need	0.636						0.715
When the store promises to do something by certain time, it will do so.	0.628						0.728
The store provides its services at the time it promises to do so.	0.619						0.601
The store has merchandise available when the customers want it.	0.595						0.693
The store has modern looking equipment, facilities and fixtures.		0.785					0.536
The store performs the services right the first time.		0.638					0.622
Employees in the store are able to handle customer's complaints directly and immediately.		0.619					0.741
The store offer high quality merchandise		0.577					0.773
The store has operating hours convenient for all customers		0.523					0.780
Store insists on error free sales transactions and records.			0.762				0.703
When a customer has a problem, the store shows a sincere interest in solve it			0.745				0.785
The store offers its own credit cards			0.709				0.757
The store has very good billing system.			0.599				0.685
Employees in the store gives prompt service to the				0.687			0.715

customer							
Employees in the store are never too busy to respond to customer request.				0.661			0.687
Employees in the store treat customer courteously over the phone				0.634			0.716
Store willingly handles exchanges and returns				0.518			0.698
Employees in the store have knowledge to answer customer's questions.					0.769		0.652
Behavior of the employees in the store instills confidence in the customer.					0.587		0.790
Employees in the store tell customer exactly when service will be performed.					0.573		0.583
The store gives good shopping experience					0.512		0.556
The store layout in the store makes it easy for the customers to move around the store.						0.791	0.490
The store gives customer individual attention.						0.588	0.637
The store provides plenty of convenient parking for the customer.						0.541	0.593
<i>Eigen Values</i>	9.451	2.975	2.157	1.968	1.742	1.41	
<i>% of Variation</i>	31.504	9.318	7.188	6.560	5.806	4.702	
<i>cumulative % of Variation</i>	31.504	40.822	48.010	54.570	60.376	65.079	

Discussion on key findings

Table 1 indicates that the 30 items do not match the five-factor structure as described by Dabholkar, Thorpe and Rentz (1996). In fact, the analysis obtained gives seven-factor structures instead of five factors. Also, except the variable 1 "The store has modern-looking equipment, facilities and fixtures", all other variables merged in one factor along with variable representing reliability, all personal interaction variables, one problem solving variable and one policy variable. Totally the first factor is a mix of all five factors. The second factor merged with the three variable of the sub component "being courteous" with problem solving variables. The third factor merged with the remaining problem solving factor with two of the policy factors. The fourth factor is merged with reliability variable and one policy variable. Similarly the rest of the factors have not merged properly. So, the factors do not match according to the factor structure given by Dabholkar, Thorpe and Rentz (1996). It is clearly mentioned that gaps between perception and expectation do not support the five factor structure of Dabholkar, Thorpe and Rentz (1996). Other rotation methods also failed to improve the factor structure.

None of the dimensions of RSQS fit with the data, indicating that the RSQS factor structure is not applicable to the Indian retail setting. The findings of the RSQS in India are thus different from those of researchers (Dabholkar, Thorpe and Rentz, 1996; who found all the RSQS component factor structures as examined in this study to be appropriate. The data in this study does not support the basic five dimensional structure contrary to the findings of Christo & Terblanche (1997), Leung & Fung (1996), or even a four factor structure as reported by Kim and Jin (2001).

So Gap analysis has been done with help of perception and expectation scores. From the gap scores (Expectation - Perception), variables like modern equipment and fixtures, convenient parking, operating hours and employees courteous with customers show negative

scores which indicates customers are happy about the above mentioned point. The remaining variables show positive gap score indicates there is a quality gap.

Limitations and scope for further research

The major limitation of this study was the small sample size of the respondents. A larger sample size would validate the statistical findings better. Also another constraint was that the respondents were all from only one city and not spread across the country.

Therefore, it would be advisable to redefine the factors according to the results obtained under the Indian conditions and then carry out the gap analysis. Also, similar studies with relatively large sample, covering across all the states of India, which would measure the validity and reliability of the proposed instrument by Dabholkar, Thorpe and Rentz (1996), would complement this study.

Conclusion

The generality of SERVQUAL in various service industries has been questioned. Babakus and Boller (1992) used the SERVQUAL scale to measure service quality in an electric and gas utility company and found that the proposed five-factor structure of SERVQUAL is problematic and doubted the suitability of the scale. The applicability of SERVQUAL across different cultures is also an issue because SERVQUAL scale was developed in a Western environment and, cultural differences may influence its applicability. Donthu and Yoo (1998) studied the effect of the cultural orientation of consumers on their service quality expectations. Their study was based on Hofstede's dimensions of culture and found that consumers varied in both their overall expectations with regard to service quality and their expectations of each of the service quality dimensions as a result of cultural orientation.

In services ,expectations are retrieval belief about a product that serves as standards or reference points against which that product's performance is judged (Zeithaml et al. 1993).expectations are important in shaping consumer behavior (Parasuraman et al. 1991b, p. 39).cultural norms influence individuals 'expectations of goods and services they purchase (Stauss and Mang 1999).For example, consumer's expectation of store opening hour vary with country to country especially northern and southern Europe (Usunier 2000).SERVQUAL frame work originally established in North America by Parasuraman, and Zeithaml. Many researchers have applied the SERVQUAL dimensions developed in North America to examine the same issue in a similar manner in other cultures (Lam 1997; Zhao et al. 2002, Donothu and Yoo 1998; Espinoza 1999; Furrer et al.2000).

Donthu and Yoo (1998) have carried out a study on the relationship of the SERVQUAL dimensions - reliability, responsiveness, empathy, assurance, and tangibles with Hofstede's classification of culture in the banking industry across four countries - U.S., Canada, UK, and India .They found that the structure of the SERVQUAL dimensions varied considerably across cultures and related highly with Hofstede's cultural dimensions. Consumers high on uncertainty orientation and short-term oriented consumers had higher overall service quality expectations than those who are low on uncertainty orientation and long-term oriented. Moreover, they found that consumers low on power distance had high service quality

expectations, expecting more responsive and reliable service, whereas those in individualistic countries also had high expectations, but focused more on empathy and assurance.

Furrer et al. (2000) in his study linked Hofstede's cultural dimensions with the importance of the SERVQUAL dimensions. They found that in cultures with a large power distance (e.g., Singapore, China and Korea versus U.S. and Switzerland), weaker respondents (in terms of social class, education level and occupation; e.g., students) were more likely to tolerate poor service from more powerful service providers. In cultures with a high degree of individualism, respondents expected a higher level of service quality, while in cultures with a high degree of masculinity, respondents expected a female service provider to be more feminine than professional. So, Individuals from different cultures evaluate services quite differently. Due to their cultural differences individual try to use different dimensions to evaluate the service experience. Ultimately RSQS scale is not applicable in Indian context because of cultural differences.

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