

# Customer Price Sensitivity as a Basis for Moderation in Satisfaction Among Mobile Customers

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## Abstract

The present study was designed to examine the impact of customer price sensitivity on customer satisfaction in the mobile telecom sector. The major antecedent that develops customer satisfaction was considered as Perceived Service Quality and, therefore, an attempt was made to develop and validate a scale for measuring Perceived Service Quality in the mobile telecom context. Variance-based structural equation modeling was used to analyze the relationships among different constructs considered in the study. The various constructs used in the study were conceptualized as reflective or formative based on theoretical considerations. The study found that the dimensions such as Network Quality, Human Interaction Quality, Product Mix, Infrastructure related aspects, and Image influenced service quality perceptions of the customers in the mobile telecom context. The Price Sensitiveness of the customers explained the possible fluctuations in business volumes due to price changes. This study could identify the impact of Price Sensitivity as a psychographic variable that moderated customers' satisfaction significantly in the mobile telecom context. The mobile telecom sector, being a market for frequent innovations in service offers and pricing schemes, should seriously look into customer price sensitivity to control customer defections.

**Keywords:** perceived service quality, customer satisfaction, customer price sensitivity, telecom sector, service providers

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Price in simple terms can be explained as the quantum of money a customer is willing to offer or pay for a specific service or product. Price is the amount of money charged for a product or service, or the sum of the values that customers exchange for the benefits of having or using the product or service (Kotler & Armstrong, 2010). Prices charged by the firms for services offered determine the level of satisfaction among customers (Turel & Serenko, 2006). It is widely believed that price is an indicator of quality and forms a considerable role in the development of quality perceptions. The value perceptions of the customer are also found linked with price to a certain extent. Price sensitivity of the customer is one of the key factors that explains the behavioral consequences of customer satisfaction (Zeithaml, Berry, & Parasuraman, 1996).

This study was designed to test whether customer price sensitivity significantly moderates customer satisfaction in a service context. The mobile telecom context was considered as an ideal to empirically test the moderating effect of customer price sensitivity for the reason that Indian mobile customers are generally considered to be highly price sensitive. Within two decades of inception, India has emerged as the second nation after China to enjoy the largest mobile customer base. Even though the mobile penetration in India now stands at 74%, the alarming switch over tendencies and the declining average revenue per user (ARPU) demand strategic attention. The frequent pricing innovations by service providers induced unhealthy price wars, which to a large extent motivated customer switch over tendencies. The paper examines the extent of price sensitivity among customers to introduce pricing innovations in the mobile context. This paper also aims to offer innovative ideas for competitive advantage in the national mobile sector.

## Objectives of the Study

In brief, the objectives of the study are as follows :

- ↳ To develop a valid scale for measuring customer perceived service quality in the mobile telecom context.
- ↳ To examine the moderating effect of customer price sensitivity in the mobile telecom context.

## Review of Literature

Price sensitivity is defined as the change in willingness of an individual to pay for a particular product in accordance

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with price changes. Understanding the price sensitiveness of the customer helps in predicting business volume variations due to price changes (Goldsmith & Newel, 1997). Highly price sensitive customers may exhibit switch over tendencies to price escalations, whereas less sensitive customers may not react strongly to price changes. Price sensitivity bears a close relation with price elasticity and price consciousness (Juha & Minna, 2004). Price elasticity is the change in demand for a product with change in price. It is generally measured for the market as a whole. Price elasticity, commonly referred to as price elasticity of demand, is the percentage change in quantity demanded divided by the percentage change in price. Price elasticity relates to the aggregate demand for a product and is a characteristic of a product in a market. Price sensitivity, on the other hand, can be treated as a customer characteristic that explains their sensitiveness to price changes. The degree to which customers are price sensitive can vary from one product or service to the next, one market to the next, or one time to the next (Orme, 2010). Price sensitivity can be regarded as an attitude that varies from customer to customer, and may be equivalent to a concept known as price consciousness, which explains the degree of unwillingness of a person to buy a product at a higher price (Monroe, 1990). The emerging customer characteristic like low price seeking (Jain & Sharma, 2013) can be considered as an outcome of price sensitivity in the minds of the customers.

Prior empirical evidence confirmed that superior service quality perceptions resulting in relentless satisfaction may develop positive behavioral consequences, including a “pay more” intention. This transformation of a customer from price sensitive to price insensitive may be regarded as the most successful outcome in the view of the service provider. However, an important question still remains that whether price sensitivity of a customer is actually a behavioral consequence or rather a psychographic characteristic. A price sensitive customer is likely to overlook the superior service quality received in the event of a price increase and resort to switch over tendencies. Price sensitivity exists in every customer in varied degrees and, therefore, requires careful consideration while formulating pricing strategies. The feeling of price fairness developed by comparing the prices with similar brands, and the extent of price tolerance existing in the minds of the customers due to the offer of various attributes develops a characteristic in the form of a price consciousness, which tends to decide the degrees of price sensitivity in the customer. Fair price perceptions of the customers have a significant relation to customer satisfaction and favorable behavioral intentions (Varki & Colgate, 2001). Furthermore, negative price perceptions can adversely affect customer retention (Ranaweera & Neely, 2003). More price sensitive customers may tend to perceive upward price changes as unfavorable and resort to unfavorable behavioral intentions and remain unsatisfied, even when they perceive service quality to be superior.

Perceived service quality is a core management concept that differentiates organizations substantially in the minds of the customers. Empirical evidences are available in literature to establish apparent relationship perceived service quality shares with variables like customer satisfaction (Bolton & Drew, 1991; Boulding, Kalra, Staelin, & Zeithaml, 1993) and customer loyalty (Bou - Llusar, Camisón – Zornoza, & Escrig –Tena, 2001; Dabholkar, Thorpe, & Rentz, 1996; Woodside, Frey, & Daly, 1989). Customer price sensitivity was also proved to have a significant relation with customer satisfaction (Herrmann, Xia, Monroe, & Huber, 2007) and loyalty (Krishnamurthi & Raj, 1991). It was observed that the definitions of quality evolved a lot of conceptual changes and when considered relevant to services, it addressed the discrepancy between consumers' experiences and expectations (Gronroos, 1984) as well as the discrepancy between consumers' perceptions and expectations (Parasuraman, Zeithaml, & Berry, 1988).

Measuring service quality with perception alone (Cronin & Taylor, 1992) rather than considering the gap between expectations and perceptions emanated as a different approach. The effectiveness of quality improvement plans lie in efficient measurement of it. The most popular method to measure service quality was by way of obtaining responses of the customers on certain determinants or dimensions considered relevant to capture the domain of interest (Adlaigan & Buttle, 2002; Al-Hawari & Ward, 2006; Bahia & Nantel, 2000; Cronin & Taylor, 1992; Gounaris, 2005; Mersha & Adlakha, 1992; Parasuraman et al., 1988). The necessity to develop a more country - context specific measure for service quality suited to the industry settings was underlined by various scholars (Brown, Churchill Jr., & Peter, 1993; Buttle, 1996; Imrie, Cadogan, & McNaughton, 2002; Ladhari, 1999; Robinson, 1999; Saurina, 1997).

Various dimensions used in different studies to measure perceived service quality in mobile telecom context are summarized in the Table 1. In this study, the dimensions were selected considering the prevailing trends in quality perceptions of the customers in the mobile sector.

**Table 1 : Dimensions Used in Various Studies on Service Quality in the Mobile Telecom Context**

Author	Year	Country	Dimensions
E. Sutherland (GSM) Association	2007	Global study	Network access, service access, service integrity, and service retainability
J.D. Power and Associates Survey	2009	UK	Coverage, call quality, promotions and offerings of incentives and rewards, prices of service, billing, customer, bundled services
Customer satisfaction Index Survey	2009	USA	Customer satisfaction, billing, brand image, call quality, cost of service, and options for service plans
Telecom Regulatory Authority India	2008	India	Billing, customer care, availability of network, value-added services, and pre-sales & sales
Souki and Filho	2008	Brazil	Customer services, quality of connections, ambience of outlets, and the coverage provided
Mobile phone survey (Telecompaper)	2006	Japan	Handset, price, quality of call, coverage of area, non-voice functions and services, and customer contact strength
Barnhoorn	2008	South Africa	Courteous and facilitating role of front-line personnel, ease of availability for cards and recharge services, availability of products and services at the company outlets, accurate information and facts about services, affordable prices of the packages, and customized services
Sukumar	2007	India	Brand image, customer care, services availability, credit facility for connection, deposit amount, and prices
Customer Satisfaction Survey	2007	Canada	Quality of calls, prices, billing, customers' services, and diversity of bundled options of services
Sigala	2006	Greece	Customization of services, pleasing interaction of staff and customers, company's image and differentiated features
Aydin & Ozer	2005	Turkey	Coverage, responsiveness to customers' complaints, value-added services, promotional activities and their fulfillment
Kim, Park, & Jeong	2007	Korea	Call quality, pricing structure, mobile devices, value added services, convenience in procedures, and customer support
Seth, Momaya, & Gupta	2008	India	Reliability, responsiveness, assurance, empathy, tangibles, convenience, and customer perceived network quality
Vlachos, Giaglis, Lee, & Vrechopoulos	2011	Cross-national	Efficiency quality (ease of use, usefulness), Outcome quality (content variety, aesthetics), Customer care quality (customization, privacy, customer service)
Seth, Momaya, & Gupta	2005	India	Reliability, Responsiveness, Accessibility, Competence, Communication, Security, Convenience Flexibility, Understanding, Efficient service restoration capabilities
Nimako	2012	Ghana	Customer relations, Tangibles, Real network quality and Image quality

Source: Author's Research

## Theoretical Framework

The perpetual impact of customer satisfaction on loyalty intentions of the customer was empirically established beyond scope for further debate. Various antecedents to customer satisfaction in the mobile telecom context include service quality (Nimako, 2012), perceived value and perceived expectation (Turel & Serenko, 2006), price perception (Peng & Wang, 2006), effective service recovery (Vazquez- Casielles, Suarez - Alvarez, & Martin, 2010), and product and service quality of handsets (Chai, Ding, & Xing, 2009). The Perceived Service Quality overrides many other variables and emerges as the most important factor which determines Customer Satisfaction. The perceived service quality being a multi dimensional construct considers various facets that form quality in a service offer. Hence, this study considered only Perceived Service Quality as the antecedent which generates Customer Satisfaction in the mobile telecom context. The dimensions to measure Perceived Service Quality in the mobile telecom context were finalized by an expert panel after critically evaluating various dimensions listed in the Table 1 with regard to the

existing trends. A five dimensional structure was considered as appropriate and accordingly, Network Quality, Infrastructure, Human Interaction Quality, Product Mix, and Image were chosen as capable of explaining the domain of interest of the study.

## Hypotheses

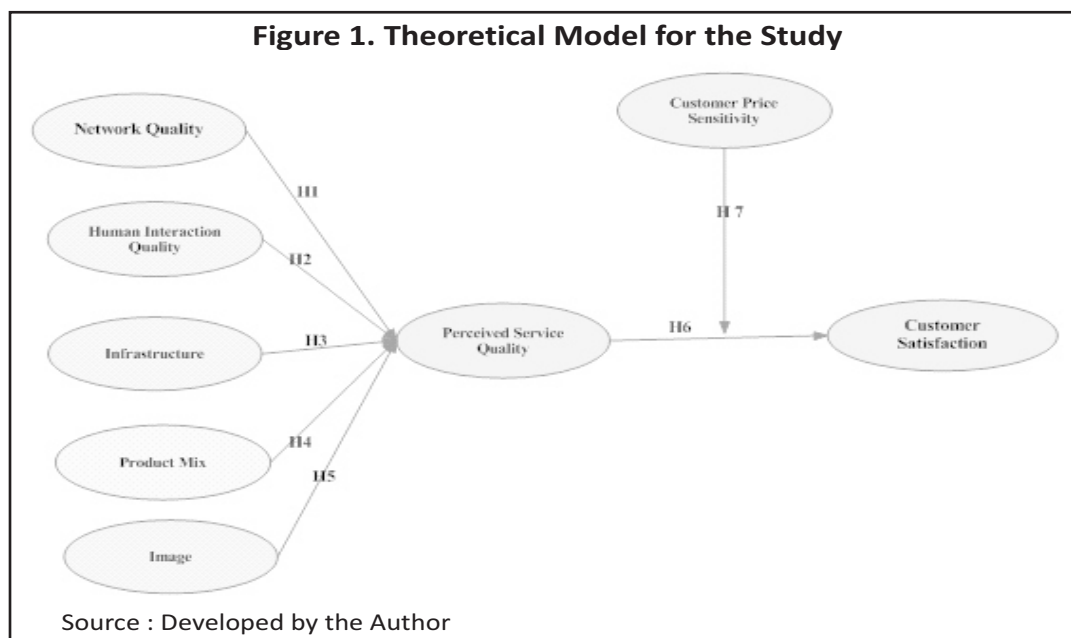
The following hypotheses were proposed for the following study :

- ↪ **H1 : Network Quality significantly develops perceived service quality in the mobile telecom context.**
- ↪ **H2 : Infrastructural aspects significantly develop perceived service quality in the mobile telecom context.**
- ↪ **H3 : Human Interaction Quality significantly develops perceived service quality in the mobile telecom context.**
- ↪ **H4 : Product and Services Mix significantly develops perceived service quality in the mobile telecom context.**
- ↪ **H5 : Image significantly develops perceived service quality in the mobile telecom context.**

In the present study, service quality was conceptualized as a multidimensional and hierarchical construct as proposed by Brady and Cronin (2001) formed from five first order (latent) dimensions mentioned above. The first order latent dimensions were measured using reflective (manifested) indicators. A 21-item instrument was developed for measuring the latent dimensions and was later on subjected to factor analysis to re-confirm the existence of five distinct factors. The outcome of Perceived Service Quality was assumed as Customer Satisfaction. Hence, the following hypotheses were proposed for Customer Satisfaction.

- ↪ **H6 : Perceived Service Quality and Customer Satisfaction are significantly linked in the mobile telecom context.**
- The reverse impact of Price Sensitivity of the customer that tends to reduce Customer Satisfaction was developed from superior service quality perceptions, and were examined in this study. Hence, the following hypothesis was proposed :
- ↪ **H7 : Price sensitivity of the customer significantly moderates Customer Satisfaction in the mobile telecom context.**

The following model (as illustrated in the Figure 1) was conceptualized as capable of testing the theory proposed in this study. The construct of price sensitivity was assumed to be moderate Customer Satisfaction. The paths between each latent construct were assumed as hypotheses to be tested in this study. The analysis was conducted with and without including Customer Price Sensitivity construct to critically evaluate the mediating role played in the nomological framework.



**Table 2. Definitions of Constructs Used in the Study**

<b>Definitions - Constructs</b>	
Perceived Service Quality	The Quality of Service as Perceived by mobile customers in Kerala from their respective service providers in terms of Network Quality, Human Interaction Quality, Infrastructure Related, Products and Services, and Brand image
Customer Satisfaction	The feeling of pleasure or disappointment felt by the mobile customers in Kerala due to the perception of superior service quality.
Customer Price Sensitivity	A characteristic exhibited by mobile customers in Kerala that explained the reason(s) for variation in their satisfaction level in accordance with price changes.
Network Quality	The perceived quality felt by the mobile users in Kerala due to sufficient signal strength for clear and uninterrupted communications in the geographical area.
Human Interaction Quality	The perceived quality felt by the mobile users in Kerala with reference to the qualities of the service personnel such as communication skills, timeliness, courtesy, attitude, and problem solving ability.
Infrastructure	The perceived quality felt by the mobile users in Kerala due to infrastructural superiority in terms of mobile towers, connections, and tie-ups with other service providers, etc.
Product Mix	The perceived quality felt by the mobile users in Kerala due to the range of products and services offered by the service providers.
Image	The perceived quality felt by the mobile users in Kerala due to the credibility and reputation enjoyed by the service providers.

Source: Compiled by the Author

**Table 3 . Details of the PSQ Construct**

Sl.No	Construct	Nature	Indicators (Customers' perceptions on statements connected with indicators were used for measurement)
1	Network Quality	Reflective	Geographical coverage, communication clarity, absence of disturbances, fast connectivity, absence of network congestion (5 indicators)
2	Infrastructure	Reflective	Tangibles at customer contact point, sufficient mobile towers, up-to-date IT architecture, tie-ups with other service providers (4)
3	Human Interaction Quality	Reflective	Communication skills, attitude, courtesy, problem solving abilities (4)
4	Products and Services	Reflective	Offer mix range, value added services, tariff plan options (3)
5	Brand Image	Reflective	Reliability, responsiveness, service recovery efficiency, truthful transactions, safety (5)
6	Perceived Service Quality	Formative	Network Quality, Infrastructure, Human Interaction Quality, Products and Services, Brand Image(5)

Source: Compiled by the Author

**Table 4. Indicators used to Measure Price Sensitivity and Customer Satisfaction**

Sl.No	Construct	Nature	Indicator questions
1	Price Sensitivity	Reflective	I maintain a vigil over price changes introduced by mobile service providers. I normally compare the tariff structure of different service providers. I always go for the most economical tariff plans for my mobile usage. I am willing to sacrifice certain value added services for remaining in the economical tariff plan.
2	Customer Satisfaction	Reflective	I am satisfied with the Quality of Service offered to me. The service I received was more than what I expected. I am happy with the way my grievances are handled. I found the employees to be responsible and helpful. The various products and services that are offered suit my requirements.

Source: Compiled by the Author



## Measurement Strategy

The most popular approach for measuring latent variables involves the usage of reflective indicators conceived as manifestations of latent variables (Morrison, 2002). However, in many cases, the latent variables are formed by the joint influence of indicators (Jarvis, Mackenzie, & Podsakoff, 2003 ; MacCallum & Browne, 1993). Automatic acceptance of reflective indicators was proved to lead misspecifications (Diamantopoulos & Winklhofer, 2001), and to avoid such an issue, constructs were defined as per C-OAR-SE procedure (Rossiter, 2002) (Table 2), and the nature of the constructs were finalized. The construct of Perceived Service Quality was considered as a multidimensional and hierarchical one formed with five first order dimensions measured in the reflective manner (Table 3). The perception alone criterion was adopted for measuring indicators of Perceived Service Quality. All other constructs were conceptualized as reflective ones, with indicators as summarized in the Table 4.

## Research Methodology

The first phase of research was explorative in nature, ending with finalization of the theory to be tested. A preliminary study was conducted at this stage by way of discussions with experts to identify the relevant dimensions. The focus group suggested that a detailed introduction about the study and the purpose of including each question or a set of questions should be provided in the questionnaire in a noticeable manner. Furthermore, it was also suggested that the respondents should be met in person, and their responses should be collected after clarifying all doubts about the purpose of the study. These suggestions were followed seriously to avoid misinterpretation of the questions, which could produce biased results.

Data from 250 respondents were collected using a structured questionnaire. The questionnaire was set in three parts. The first part explained the purpose of the study. The second part contained enquiry on demographic as well as length of association details of the customers with a service provider. In the third section, a detailed explanation about the inclusion of each set of questions was provided. The questions were designed as closed - ended questions, where the respondents had to mark their responses on a 5 - point Likert scale, varying from “*Strongly disagree*” to “*Strongly agree*”. The study was conducted during the months of January and February 2013. The respondents were customers within the State of Kerala. The population of the study were all mobile phone users in the State of Kerala. The urban hub of Kerala - Cochin was selected as the sample area for the study. A probability sampling approach by randomly selecting customers of various service providers operating in the State was adopted to get usable responses of 250 respondents.

A variance-based PLS (Partial Least Squares) approach was adopted for estimation of the theoretical model being

**Table 5. Various Validity/Reliability Criteria Adopted in this Study**

Sl. No	Consideration	Guideline (WarpPLS 3.0)	
		Reflective Constructs	Formative Constructs
1	Cronbach's alpha coefficient	>0.7	NA
2	Composite reliability	>0.7	NA
3	Average variance extracted	>0.5	>0.5
4	Convergent validity	<i>p</i> values associated with the loadings be lower than .05; and that the loadings be equal to or greater than 0.5; cross loading less than 0.5.	<i>VIF</i> <5 : all indicator weights should be with <i>p</i> <0.05
5	Discriminant validity	The square root of the average variance extracted should be higher than any of the correlations involving that latent variable.	The square root of the average variance extracted should be higher than any of the correlations involving that latent variable.
6	Effect sizes of Path Co-efficient	Effect sizes ( <i>f</i> -squared) of 0.02, 0.15, and 0.35, respectively for small, medium, or large effect (Cohen, 1988).	
7	Predictive Validity	Positive higher value of Stone-Geisser <i>Q</i> -squared co-efficients	

Source: Compiled by the Author

superior in handling of both formative and reflective constructs (Fornell & Bookstein, 1982) and tolerant to priori distributional assumptions and sample size limits (Chin, Marcolin, & Newsted, 2003). WarpPLS 3.0, PLS based software was used for estimation of the model in which the validity and reliability criteria vary depending upon the nature of the construct. The various guidelines are illustrated in the Table 5. For evaluation of measurement indicators, the loading / weights of the indicators should be more than 0.5, and the corresponding  $p < 0.001$  after estimation, or else the indicator is not considered relevant, and is removed to be re-estimated to obtain a valid model. Causality assumptions were verified on the basis of a valid model.

## Results and Analysis

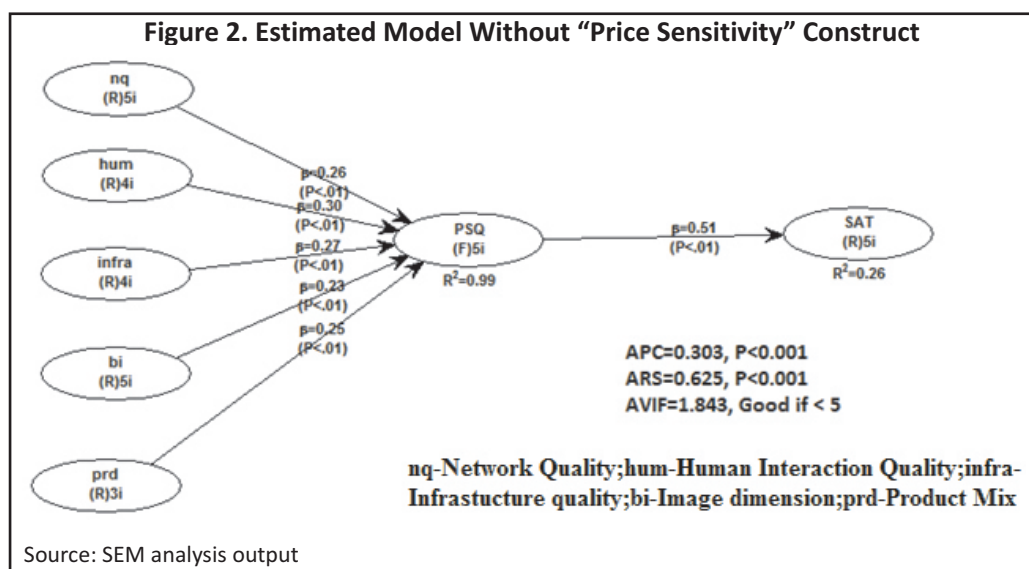
The sample contained 75.3% male respondents . 19.2% of the respondents were in the age group of less than 20 years, 36.1% were in the age group of 20-35 years, 32.2% of the respondents were between 35-50 years of age, and 12.5% of the respondents were above 50 years of age. 2.9% of the respondents had a length of association with their service provider for more than 5 years, 11.4% had the same between 3 years and 5 years, 15.6% of the respondents had an association with their service provider between 1 year and 3 years, and 70.1% of the respondents were associated with their existing service provider for a period of less than 1 year. The length of association trends revealed lack of customer retention and switch over tendencies prevailing in the mobile telecom context in the State.

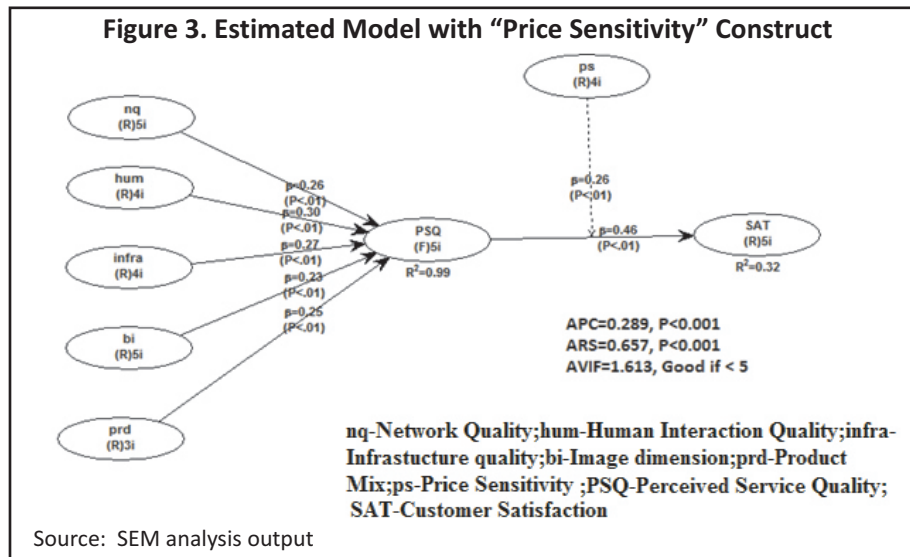
A three-level approach was adopted to analyze the data collected after screening the data for missing values, outliers, normality, and so forth. The first attempt was to identify the existence of five distinct factors with regard to service quality construct by performing an exploratory factor analysis of 22 indicators used for measurement. The analysis confirmed the existence of five factors and in the process, one indicator variable was eliminated for poor

**Table 6. Reliability Statistics of the PSQ scale**

Sl.No	Dimension	No. of items	Reliability Analysis (Cronbach's alpha)
1	Network Quality	5	0.825
2	Infrastructure	4	0.813
3	Human Interaction Quality	4	0.925
4	Products and Services	3	0.801
5	Brand Image	5	0.936
6	Perceived Service Quality Scale	21	0.922

Source: Compiled by the Author





**Table 7. Results of Hypotheses Testing**

Sl.No	Hypothesis	" $\beta$ " value	Effect size	Result
H1	Network Quality significantly develops perceived Service Quality in the mobile telecom context.	0.26	0.199	Accepted
H2	Infrastructural aspects significantly develop perceived Service Quality in the mobile telecom context.	0.30	0.243	Accepted
H3	Human Interaction Quality significantly develops perceived Service Quality in the mobile telecom context.	0.27	0.207	Accepted
H4	Product and Services Mix significantly develops perceived Service Quality in the mobile telecom context.	0.26	0.188	Accepted
H5	Image significantly develops perceived Service Quality in the mobile telecom context.	0.23	0.154	Accepted
H6	Perceived Service Quality and Customer Satisfaction are significantly linked in the mobile telecom context.	0.46	0.233	Accepted
H7	Price Sensitivity of the customer significantly moderates Customer Satisfaction in the mobile telecom context.	0.26	0.090	Accepted

Source: Compiled by the Author

loading of less than 0.5. The Table 6 provides the five dimensional structure of proposed scale for measuring mobile service quality. The high values of reliability coefficient underlined the appropriateness of reflective indicators. The second attempt was to develop measurement models for all latent constructs considered for the study. In a structural equation modeling (SEM) analysis, the inner model (structural) is the part of the model that describes the relationships between the latent variables, and the outer model (measurement) is the part of the model that describes the relationships between the latent variables and their indicators. Warp PLS 3.0 estimates the measurement model and the structural model simultaneously. The analysis also offered validity considerations of the Perceived Service Quality scale. The pre-processing of the data included in the algorithm of Warp PLS 3.0 confirmed the quality of data for further analysis with regard to missing values, zero variance, and so forth. The PLS regression algorithm with boot strapping procedure was used for estimation of the model in which indicators' weights, loadings, and factor scores are calculated based upon an algorithm that maximizes the variance explained in the latent variable scores by the latent variable indicators. Separate estimation was undertaken with and without considering the moderating variable of Customer Price Sensitivity. The estimated models with all path coefficients and corresponding  $p$  values are illustrated in the Figures 2 and 3.

The validity of both the models was evaluated with various fit indices. It was recommended that the  $p$  -values for both the average path coefficient (APC) and the average  $r$  -squared (ARS) be both lower than .05; and the average



variance inflation factor (AVIF) be lower than 5 (Kock, 2010). As all the three fit criteria were met, the model was considered good for drawing conclusions on causality assumptions put forth in the study. All the factor loadings of the reflective indicators were found to be more than 0.5 with  $p < 0.01$ . The formative indicators were with  $VIF < 5$  and  $p < 0.01$ . The composite reliability, Cronbach's alpha, and average variance extracted were above the threshold limits. The model emerged as one with satisfactory value for  $R$ -squared and  $Q$ -squared being indicators for predictive validity. The square root of AVE of all constructs was found to be more than any of the correlations involving that latent variable. All these observations confirmed the reliability and validity of the constructs, making it suitable to draw conclusions on causality. The hypotheses testing results are presented in the Table 7.

## Discussion

The study could empirically conclude about dimensions contributing to perceived service quality in the mobile telecom context. The scale developed for PSQ was validated, and was found to be a reliable instrument for measuring Perceived Service Quality. All indicators used for measurement were found to be significant and valid. The results confirmed that the structure of Perceived Service Quality is a multilevel, multi dimensional formative one with five first order reflective dimensions. The validated scale contained 21 indicators related to Network Quality (5), Human Interaction Quality (4), Infrastructure (4), Product Mix (3), and Image (5) dimensions. All the hypotheses tested were found to be significant, and the causality assumptions were found to be statistically valid.

The literature has suggested three types of service encounters - such as the direct personal encounter, the indirect personal encounter, and the remote encounter, in which no human interaction occurs (Shostack, 1984). In contemporary mobile telecom context, service delivery takes place through a series of technological applications, and in many instances, human interactions are limited. However, prompt back office support by qualified personnel is an essential pre-requisite for fast and prompt service as per the satisfaction of the customers. Empirical research on service encounters were largely focused on personal encounters between the employee and the customer (Bitner, Booms, & Mohr, 1994), and a more detailed research where both direct and remote personnel involvement in effective service delivery are limited, especially in the Indian context. The growing importance of technical quality in cellular mobile services for competitive advantage (Johnson & Sirikit, 2002) and customer satisfaction (Wang & Lo, 2002) was established in prior studies. The importance of human related dimensions, including empathy, responsiveness, and assurance were analyzed in detail by various scholars, starting from the SERQUAL era. This study provided significant contribution to theory by developing a reliable and valid scale that considered dimensions that offered both technical and functional quality as conceptualized in Gronroos' (1984) model.

The results of the model estimates revealed the relative importance of each of the dimensions that contributed to service quality in the mobile telecom context. The study indicated that among the various service quality dimensions, Human Interaction Quality (with the largest  $\beta$  value) was the best predictor, followed by Infrastructure related aspects and Network Quality. The best sought indicator which imparts Human Interaction Quality was identified as Problem Solving Ability ( $\beta = 0.947$ ). The interaction quality of contact employees needs to be enhanced by providing them with adequate resources to ensure prompt actions to customers' queries and complaints. Thus, improved performance on the most important dimensions may be helpful in providing superior quality of service to resist adverse impact on loyalty intentions due to customer price sensitivity.

The Infrastructure related dimension was measured using indicators such as tangibles at customer contact point, sufficient mobile towers, up-to-date IT architecture, and tie-ups with other service providers. The best sought indicator of Infrastructural capability was up to date IT Architecture ( $\beta = 0.848$ ), and the best sought indicator for Network

**Table 8. Trends in PSQ and Price Sensitivity on Length of Association**

Length of Association	PSQ Score	Price Sensitivity Score
Less than 1 year	78.67	16.81
Between 1yr and 3 yrs	79.45	15.63
Between 3yrs and 5 yrs	81.21	15.94
Above 5yrs	82.27	14.18

Source: Compiled by the Author

Quality perceptions was Fast Connectivity ( $\beta = 0.864$ ). These observations underline the importance the mobile customers accorded to technical quality. The study statistically established that Price Sensitivity of the customers is a significant factor that moderates Customer Satisfaction in the mobile telecom context. The reduced value of  $\beta$  coefficient on introducing the construct of Price Sensitivity underlines the moderating ability of the variable. The reflections of the customers on Price Sensitivity were measured using four indicators in this study. A critical evaluation of relative  $\beta$  values revealed that the customers always preferred to remain in an economical bracket, and for that, they were willing to sacrifice some of the Value Added Services ( $\beta = 0.890$ ). The switch over tendency among mobile customers was indicated from the finding that 70.1% of the respondents had an association of less than 1 year with their respective service providers. With this backdrop, an attempt was made to compare the Perceived Service Quality scores (cumulative response to 21 indicators) and Price Sensitivity Score (cumulative response to 4 indicators) of the respondents, with the length of association they had with their service provider. The details of the analysis are provided in the Table 8. The trend indicated that as the respondents' length of association increased, the Perceived Service Quality increased gradually, and the Price Sensitivity reduced considerably. The continued association with the service provider tends to transform the customer to price insensitiveness.

## Conclusion

The research identified that Price Sensitivity of the customers is a significant factor that moderates customer satisfaction in the mobile telecom context. The prevailing level of competition in the mobile context compels service providers to consider frequent pricing innovations to encourage switch over tendencies. A more price conscious customer is likely to be motivated by small price reductions or extra benefits at incremental increases in prices and change the service provider. The perception of added value by remaining in the economical bracket makes customers believe that price escalations are unfavorable, and price reductions are favorable. A drop in Customer Satisfaction can be expected in such a scenario. Thus, this implies that if poor attention is paid to price sensitiveness of the existing customers before introducing upward price changes, it may prove to be detrimental to the service provider and may lead to customers switching over to rival service providers. The various directives of the regulatory authorities to offer better services to the customers such as mobile number portability, has, to a great extent, motivated customers for switching over, disregarding the brand identity.

The significance of relationship management strategies demands a special mention in this context. Effective customer relationship initiatives can produce many benefits for service providers, including higher barriers to customer switching (Dwyer, Schurr, & Oh, 1987), decreased customer price sensitivity (Beaton, M. & Beaton, C., 1995 ; Gronroos, 1984; Perrien & Ricard, 1995). Success of every customer relationship program demands customer satisfaction that can be achieved only through superior quality in service delivery. The ability of the service provider to increase the span of association with customers gradually makes customers less price sensitive, and develops a pay more intention. Service providers can think about innovative strategies of introducing customized pricing options to suit the demands of the loyal customers. Loyalty bonuses for these customers who remain loyal for a long span are likely to appeal price sensitive customers.

## Managerial Implications

Perceived Service Quality, being the cardinal means to enhance Customer Satisfaction was measured in this study using contemporary dimensions. The study could find that evaluation of Service Quality in the mobile context is based on :

- ↳ Network Quality dimension that evaluated signal strength for clear and un-interrupted communications.
- ↳ Human Interaction Quality dimension that evaluated service personnel qualities such as communication skills, timeliness, courtesy, attitude, and problem solving ability.
- ↳ Infrastructure dimension that evaluated infrastructural superiority in terms of mobile towers, connections, and tie-ups with other service providers, and so forth.
- ↳ Product mix dimension that evaluated the range of products and services offered.
- ↳ Image dimension that evaluated credibility and reputation enjoyed by the service provider.

The study offers significant inputs for managers to understand the nature of the Service Quality construct and the “art” of Service Quality measurement (service quality paradigm). This knowledge will empower them to creatively handle the issues and to take strategic or innovative decisions related to service quality or service excellence. The relative importance a customer attaches to each dimension in quality perceptions as identified from the study shows that the Human Dimension is the highest predictor of service quality. It was generally felt that in the contemporary scenario, where most of the service delivery takes place in an automated manner, the human element might have lost its prior importance. The finding further implies that in the contemporary condition, the customer personally visits the service provider on emergency issues, and he then expects more attention and confidence inducing behavior from the employees. Such actions are likely to develop more quality perceptions and customer satisfaction. Hence, I feel that more training needs to be given to employees to immediately react to the needs of the customers and offer sensible suggestions.

## Limitations of the Study and Scope for Future Research

This study had several limitations, including time constraints, lack of geographical coverage, and absence of variety in customer demographic profiles. The majority of the respondents were with less span of association, and hence, were likely to have inadequate knowledge to comment on quality considerations. Even though this study incorporated Price Sensitivity as a psychographic variable into the Consumer Satisfaction framework, the details regarding what accounts for Price Sensitivity of the customer or various price perceptions of the customer were not considered this time. Furthermore, the factors developing continuance intentions and expectations about a customer based pricing model can be considered as a potential for future research in this area.

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