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Examining the Relationship between Service Quality and Customer Satisfaction in Telecommunication Sector

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ABSTRACT

The growth of any service industry depends on the quality of service delivered by it to its customers. Intense competition is forcing the companies to focus on service quality to increase customer satisfaction that results in long term profitability of the firm. The present study is an attempt to predict the service quality by using SERVQUAL model which has used five dimensions of service quality namely Tan (tangibility), Rel (reliability), Assu (Assurance), Emp (Empathy) and Resp (Responsiveness). The study is based on the sample selected from the five districts of Punjab namely Ludhiana, Jalandhar, Amritsar, Mohali, and Patiala on the grounds of aggressive environment, population and concentrated industry resulting in easy access to the respondents. Data has been collected from 580 respondents through a questionnaire. Results indicate a positive and significant impact of SQ (service quality) on CS (customer satisfaction) where tangibility, assurance and empathy are significantly associated with customer satisfaction.

Keywords: SQ, CS, Telecom Sector

1. Introduction

Quality is a driver for the excellence of any business or any Industry. It is stated as a subjective term which is defined differently by each person. Researchers describe it as "the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs" (Kotler and Keller, 2009). Prentice and Kadan, 2019 in their study apprehended that quality is one of the key measures to define and assess the value of products and services. Service quality is a concept which is important in product as well as in service market and it influences the buying behavior of the customer. Now, the question arises as to how to measure the quality of service. In case of commodities which are tangible in nature, quality can be measured by its usage, durability, packaging, handling etc. However, measuring the quality of a service is very difficult as services are intangible in nature, and it is very difficult to measure this parameter of quality. Service quality is an evasive construct because of the following features of service: -

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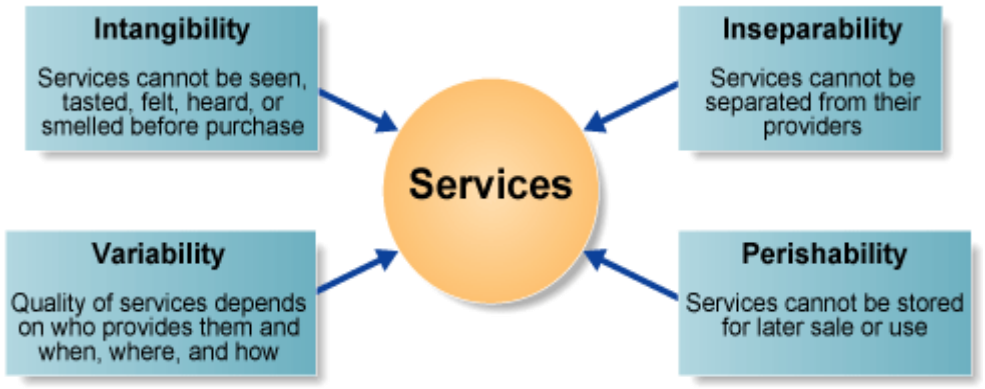
Figure 1

Features of Services



Source: Singla et al., 2022

An analysis of service quality indicates four underlying themes:

1. Service cannot be disjointed from the creator of service. These are created, consumed, and dispensed at the same time.
2. Intangible nature of service is very difficult to measure.
3. It is very difficult to maintain the uniformity in the service quality.
4. Service quality merely does not depend upon service outcome but the service delivery process too.

The telecommunication services have made significant penetration in India over the years, mainly during the last decade there is a commendable shift from fixed-line to mobiles (Barman et al., 2018). Further, the introduction of broadband has re-empowered and strengthened the telecom sector by making use of the existing wireline and infrastructure, thus creating a powerful competition among the service providers (Rajeswari et al., 2017). Under such circumstances, service quality is a pre-requisite for growth, survival, and success, in the competitive environment (Parasuraman et al., 1988). Service quality is a conceptual idea because of three exceptional features of services: inseparability, intangibility, and heterogeneity of production and consumption (Parasuraman et al., 1985). The researchers have discovered that the measures used by customers in evaluating service quality dimensions are: tangibles, reliability, empathy, assurance, communication, competence, security, responsiveness, courtesy, and access. The construct of quality, as measured by the SERVQUAL scale, relate to perceived quality which represents the variance in customer's expectations and perceptions (Parasuraman et al., 1988). Therefore, in the present paper an effort has been made to explain service quality in context of customer satisfaction.

1.1 Customer Satisfaction (*CS)*

Hong et al., 2020 defined the customer satisfaction as a perception created by the customers for a particular service. It is an assessment of the perceived inconsistency between expectations

and real performance of the product (Richard & Oliver, 1999; Tse & Wilton, 1988). Satisfaction is how the customer evaluates the systematic execution of services (Gustafsson, Johnson and Roos, 2005). It has emerged as a factor to attain improvement for all the companies (Hennig-Thurau & Klee, 1997) with different levels of specificity in different contexts. The services offered by a brand and the price charged is a common phenomenon to determine the level of customer satisfaction (Turel et al., 2006) that not only brings loyalty for the service provider but also helps the companies to shape long and lucrative relationships (Tahanisaz and shokuhyar, 2020).

1.2 Relationship between Service Quality (*SQ)* and Customer Satisfaction (*CS)*

Customer satisfaction is based on the customer's familiarity with the service (Cronin & Taylor, 1992) and emerges with the thought of having a strong relationship between SQ and CS. Oliver (1993) suggested service quality as an antecedent to customer satisfaction regardless of the constructs being cumulative or transaction specific. Akbar and Parvez (2009) investigated the emerging effects of SQ, CS on trust and customer loyalty. Frempong (2005) adapted the SERVQUAL model for analyzing the service quality dimensions to be predictors of understanding customer satisfaction. Johnson and Sirikit (2002) also applied SERVQUAL dimensions in Thai telecommunication industry on both the landline and mobile service users where the author apprehended service quality as a multidimensional construct of SQ comprising of Res, Assu, Tan, Emp, and Rel. Further, Kassim (2006) also highlighted the positive association between CS and SQ in Malaysia. Wang and yang (2004) also emphasized on the relationship between SQ and CS for the retention of customers in the long run.

2. Research Design and Methods

2.1 Research Objectives

The present study is conducted to analyze the following research objectives.

1. To ascertain the perception of customers towards SERVQUAL dimensions.
2. To study the impact of Service quality on Customer satisfaction.

2.2 Hypothesis

Following hypothesis are framed for the present study

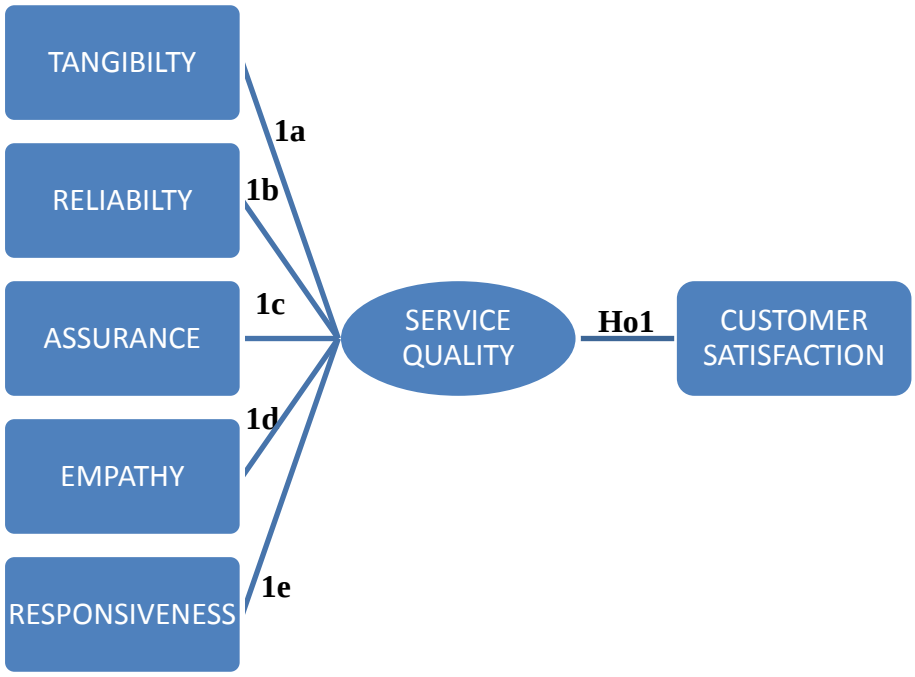
H01: SQ has no significant effect on CS

As SQ is dependent mainly upon its five dimensions, therefore it is important to test the following Hypothesis

1a Tangibility does not impact CS
1b Reliability does not impact CS
1c Assurance does not impact CS
1d Empathy does not impact CS.
1e Responsiveness does not impact CS.

Figure 2

Conceptual framework



2.3 Scope of the Study

The present study is restricted to the state of Punjab. The evidence for the present study is collected from four telecom service providers namely Vodafone Idea Ltd, Reliance, Bharti, and BSNL have been included in the study based on their market share. The selection of service providers is made on the basis of their market share of which the maximum share is of Vodafone Idea Ltd (32.34%), followed by Reliance (27.92%) and Bharti (27.36%). The share of BSNL is only 10.69% and it is the only public sector undertaking.

2.4 Sample

The data has been collected from five districts of Punjab namely Ludhiana, Jalandhar, Amritsar, Mohali, and Patiala on the grounds of aggressive environment, population and concentrated industry resulting in easy access to the respondents. Total 630 questionnaires were distributed out of which 580 were used for the final analysis.

2.5 Data Collection Method

For the present study, the data has been collected through primary mode of data collection by distributing the questionnaires to the respondents through online mode, offline mode, personal contacts, interviews, and surveys.

3. Results and Discussion

After the application of SERVQUAL model through factor analysis, the five major dimensions of the model were confirmed to be applicable on telecom sector (Leong et al., 2015; Lee et al., 2020). As SQ and CS are associated with each other, therefore, to synthesize the effect of SQ

on CS, SERVQUAL model dimensions were taken as independent variables. CS was taken as dependent variable.

Table 1
Level of Agreement of Service Quality Dimensions

Dimensions	Mean	Standard Deviation
Tangibility	3.775	.732
Reliability	3.638	.778
Assurance	3.505	.751
Empathy	3.224	.832
Responsiveness	3.547	.805

Table 1 illustrates the mean and S.D of SQ. The mean values of all the dimensions show the level of agreement by the respondents. The highest mean score is found for tangibility followed by reliability and responsiveness.

Table 2
Regression Analysis of Service Quality and Customer Satisfaction

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.638[a]	.607	.602	.57822

A. Predictors constant (Service Quality)
B. Dependent variable (Customer Satisfaction)
Source: Primary Study

Table 3
ANOVA Analysis of Service Quality and Customer Satisfaction

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	139.280	5	27.856	83.317	.000
Residual	202.945	607	.334		
Total	342.225	612			

A. Predictors constant (Service Quality)
B. Dependent variable (Customer Satisfaction)
Source: Primary Study

Table 4
Coefficient Analysis of Service Quality and Customer Satisfaction

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	1.041	.132		7.890	.000		
Tangibility	.198	.047	.194	4.232	**.000**	.466	2.145
Reliability	.054	.048	.056	1.118	.264	.391	2.560
Assurance	.196	.050	.197	3.943	**.000**	.392	2.550
Empathy	.212	.040	.236	5.345	**.000**	.501	1.997
Responsiveness	.067	.046	.072	1.465	.144	.404	2.475

Source: Primary Study

Table 4 displays results of coefficient analysis where three out of five dimensions of SQ influence CS positively. The descriptive power of the model, as given by R-Square value, is

0.607 (see Table 2) acknowledge that the five dimensions of SQ can elucidate about the variation in CS (Farooq et al., 2018). The results show that 60% variation in dependent variable is explained by independent variables. The value of adjusted $R^{2,}$ is reported as .602. The value of F test is reported as 83.317 (see Table 3), considering the result of significant level is .000 which is below .05 for testing of hypothesis. It indicates that above five factors are the best indicators of service quality. The results further signify that the three dimensions i.e. tangibility, assurance and empathy are statistically significant.

3.1 Hypothesis Testing

Multiple regression analysis evidences that null hypothesis is rejected in three out of five dimensions where service quality is inducing the level of customer satisfaction with positive impact. Specifically, **Tangibility (t=4.232, P< 0.01), Assurance (t=3.943, P<0.01), Empathy (t=5.345, P<0.01),** contribute to customer satisfaction. However, service quality is positively associated switch all five dimensions. Therefore, null hypothesis is rejected and can be said that service quality has a positive impact on customer satisfaction (Farooq et al., 2018).

The results prove that H1a Tangibility influences the level of customer satisfaction**, H1c Assurance and H1d Empathy** also has influence on customer satisfaction. Empathy is considered as the best predictor of customer satisfaction followed by tangibility and assurance. However, reliability and responsiveness do not affect customer satisfaction at statistically significant level. The mathematical equation of the model is as follows:

Customer Satisfaction = 1.041+0.198 (Tangibility) +0.054 (Reliability) +0.196 (Assurance) +0.212 (Empathy) +.067 (Responsiveness)

4. Conclusion

This paper aims to determine the role of service quality towards customer satisfaction for telecom service users. All the dimensions of service quality positively contribute to customer satisfaction. Tangibility, assurance, and empathy are the most important factors that impact customer satisfaction. However, out of all the dimensions, empathy contributes maximum for the customer satisfaction. It signifies that in the service Industry like telecom, the behavior of staff should be empathetic towards the customers to bring high customer satisfaction. Multiple regression analysis confirms that customer satisfaction is dependent on service quality. Therefore, telecom companies should try to put more emphasis on improvement of quality in services to increase customer satisfaction.

References:

- Akbar, M. M., & Parvez, N. (2009). Impact of service quality, trust, and customer satisfaction on customers loyalty. *ABAC Journal*, *29*(1), Jan-April,
- Anderson, E.W., Fornell, & Mazvancheryl, S.K. (2004). Customer Satisfaction and Shareholder Value. *Journal of Marketing*, Vol. 68, 172–185.
- Arokiasamy, A. R. & Abdullah, A. G. (2013). Service quality and customer satisfaction in the cellular telecommunication service provider in Malaysia. *Researchers World*, *4*(2), 1.

- Belwal, & Amireh, M. (2018). Service quality and attitudinal loyalty: Consumers' perception of two major telecommunication companies in Oman. *Arab Economic and Business Journal*, *13*(2), 197-208.
- Bhattacherjee, A. (2001). Understanding information systems continuance: an expectation-confirmation model. *MIS Q.*, *25*(3), 351-370. http://dx.doi.org/10.2307/3250921
- Cronin, J & Taylor, S. A. (1992). Measuring service quality: A re-examination and extension. *Journal of Marketing*, 56 (July), 55-68.
- Eshghi, A., Haughton, & Topi, H. (2007). Determinants of customer loyalty in the wireless telecommunications industry. *Telecommunications policy*, *31*(2), 93-106.
- Farooq, M. S., Salam, M., Fayolle, A., Jaafar, N., & Ayupp, K. (2018). Impact of service quality on customer satisfaction in Malaysia airlines: A PLS-SEM approach. *Journal of Air Transport Management*, *67*(September 2017), 169–180. https://doi.org/10.1016/j.jairtraman.2017.12.008
- Frempong, G. Telecommunication Reforms-Ghana's Experience National Communication Authority. *Ghana National Telecom Policy* 2005.
- Gustafsson, A., Johnson, D. M., & Roos, I. (2005). The Effects of Customer Satisfaction, Relationship Commitment Dimensions, and Triggers on Customer Retention. *Journal of Marketing*, *69*(4), 210-218.http://dx.doi.org/10.1509/jmkg.2005.69.4.210.
- Hanif, M., Hafeez, S., & Riaz, A. (2010). Factors affecting customer satisfaction. *International research journal of finance and economics*, *60*(1), 44-52.
- Hennig, T., & Klee, A. (1997). The Impact of Customer Satisfaction and Relationship Quality on Customer Retention: A Critical Reassessment and Model Development. *Psychology and Marketing*, *14*(8), 737-764. http://dx.doi.org/10.1002/(SICI)1520-6793(199712)14:8<737::AID-MAR2>3.0.CO;2-F
- Hong, S.-J., Choi, D., & Chae, J. (2020). Exploring different airport users' service quality satisfaction between service providers and air travelers. *Journal of Retailing and Consumer Services*, *52*, 101917. https://doi.org/https://doi.org/10.1016/j.jretconser.2019.101917
- Johnson, W. C., & Sirikit, A. (2002). Service quality in the Thai telecommunication industry: A tool for achieving a sustainable competitive advantage. *Management Decision*, *40*(7), 693-701.
- Kassim, N. M. (2006). Telecommunication industry in Malaysia: Demographics effect on customer expectations, performance, satisfaction, and retention. *Asia Pacific Business Review*, *12*(4), 437-463.
- Kotler, P., & Keller, K. (2009). Marketing Management, 13th edition. New Jersey: Pearson Prentice Hall.
- Lee, & Seong, M. H. (2020). A study on the effects of business service quality on satisfaction, commitment, performance, and loyalty at a private university. *Journal of Asian Finance, Economics and Business*, *7*(9), 439–453. https://doi.org/10.13106/JAFEB.2020.VOL7.NO9.439
- Leong, L.-Y., Hew, T.-S., Lee, V.-H., Ooi, K.-B., 2015. An SEM–artificial-neural-network analysis of the relationships between SERVPERF, customer satisfaction and loyalty among low-cost and full-service airline. Expert Syst. Appl. 42, 6620–6634. https:// doi.org/10.1016/j.eswa.2015.04.043.
- Lewis, B. R. (1993). Service quality: recent developments in financial services. *International Journal of Bank Marketing*, 2 (6), 19-26.

- Oliver, R.L. (1993). *A conceptual model of service quality and service satisfaction: compatible goals, different concepts* in Swartz, T.A., Bowen, D.E. & Brown, S.W. (Eds), Advances in Services Marketing and Management, Vol. 2, JAI Press, Greenwich, CT, 65-85.
- Parasuraman, A., V.A. Zeithamal & L.L. Berry (1985). A Conceptual Model Service Quality and its Implication for Future Research. *Journal of Marketing*, 49, 41-50.
- Parasuraman, Zeithaml, & Berry. (1988). Servqual: A multiple-item scale for measuring consumer perception. *Journal of Retailing*, *64*(1), 12–37.
- Prentice, C., & Kadan, M. (2019). The role of airport service quality in airport and destination choice. *Journal of Retailing and Consumer Services*, *47*, 40–48. https://doi.org/https://doi.org/10.1016/j.jretconser.2018.10.006
- Rajeswari, S., Srinivasulu, Y., & Thiyagarajan, S. (2017). Relationship among Service Quality, Customer Satisfaction and Customer Loyalty: With Special Reference to Wireline Telecom Sector (DSL Service). *Global Business Review*, *18*(4), 1041–1058.
- Richard, & Oliver (1999). Whence Consumer Loyalty. *The Journal of Marketing Fundamental Issues and Directions for Marketing, 63* (special issue), 33-44.
- Russell-Bennett, R, McColl-Kennedy, J.R., Coote, L.V. (2007). Involvement, satisfaction and brand loyalty in a small business services setting. *Journal of Business Research*, 60(12), 1253-1260.
- Singla,M., Parkash,J., & Kumar, S. (2022). *Services Marketing*. V.K. Global Publications
- Tahanisaz, S., & Shokuhyar, S. (2020). Evaluation of passenger satisfaction with service quality: A consecutive method applied to the airline industry. *Journal of Air Transport Management*, *83*, 101764. https://doi.org/https://doi.org/10.1016/j.jairtraman.2020.101764
- Tse, K. D., & Wilton, C. P. (1988). Models of consumer satisfaction formation: An extension. *Journal of Marketing Research, 25*(2), 204-212. http://dx.doi.org/10.2307/3172652.
- Turel, O., & Serenko, A. (2006). Satisfaction with mobile services in Canada: An empirical investigation. *Telecommunication Policy*, 30(5-6), 314-331
- Wang, Y., Lo, H. P., & Yang, Y. (2004). An integrated framework for service quality, customer value, satisfaction: Evidence from China's telecommunication industry. *Information systems frontiers*, *6*(4), 325-34