

# RELATIONSHIP BETWEEN SERVICE QUALITY AND BEHAVIOURAL CONSEQUENCES IN TELECOM SECTOR

(A study of telecom service Providers of Chandigarh, Panchkula and Mohali)

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## ABSTRACT

*The influence of service quality and customer satisfaction on complaint behaviour has rarely been studied to date. However, for effective service recovery, it is imperative to know who ends the relationship, who recommends the others to go for the service provider and who complains to the company. This paper provides a framework on how three loyalty types react to a critical incident causing dissatisfaction. Truly loyal customers are expected to complain instead of leaving, whereas disloyal consumers will prefer to choose exit.*

*Considering loyalty for explaining complaining behaviour will support managers in developing effective customer care concepts as well as focusing on the most valuable customers, the truly loyal and profitable ones.*

**Keywords :** Service Quality, Switching Intention, Complaining Behaviour.

### Introduction:

The Indian Telecom sector is passing through a dynamic transitional phase, as it is clearly undergoing the operation of market forces of demand and supply. The sovereignty of consumers is quite evident through their revealed preference in favour of economically rational decisions. Therefore, the task facing the managers in telecom sector is to focus on those activities that result in meeting or exceeding customer expectations. This is possible only by providing quality of services to the customers. Thus the association between Behavioural Consequences of Customer satisfaction And Service Quality on Complaining Behaviour and Switching intentions in Telecom Sector has emerged as a topic of significance and strategic concern in the telecom sector. Present paper makes an attempt to investigate the impact of service quality and customer satisfaction on behavioural outcomes from the perspectives of customers in the telecom industry. Such a study may provide the telecom manager useful guidelines to provide service quality to enhance their customer satisfaction level.

### Concept of Service Quality:

The importance of service and service quality has been growing in the world economy since the late 1970s. Establishing new levels of sophistication and rigor, as well

as a broad set of approaches, Service Quality presents the latest research and theory in customer satisfaction and services marketing. Since the late 1970s, there has been a growing realization of the importance of services in the world economy. This realization is reflected in the increasing number of scholarly articles devoted to such topics as customer satisfaction, service quality, customer service, and services marketing and the number of companies that have reemphasized their relationship with the customer. Service quality and customer satisfaction are now seen as integral parts of total quality management.

### Review of Literature:

In the 1980s, a first wave of researchers defined the service quality. These pioneers included Christian Gronroos of Finland, who established a research agenda for service quality management; Len Barry, A. Parasuraman, and Valerie Zeithaml, who devised an influential service quality rating scale; and Lynn Shostack, who argued successfully that managing services was very different from managing products. Steve Brown established the First Interstate Center for Services Marketing at Arizona State, and some important research resulted, led by such people as Terri Swartz, Larry Crosby, and Mary Jo Bitner. Ray Fisk and Steve Grove pioneered the notion that service could be viewed as a drama. These first wave researchers have had an unusually large impact on

management, and several are "household names" in the business community.

In the 1990s we are experiencing a second wave in the investigation of service quality. The advent of the second wave in service quality research has been marked by several important events. Vanderbilt University founded its Center for Services Marketing in 1990, with the mission of being "the focal point for cutting edge thought in the management of service quality." Vanderbilt's Owen Graduate School of Management also instituted an innovative curriculum in customer service and service quality.

Vanderbilt's strong ties to both leading academic researchers and the business community created a new opportunity to expand the scope of research in service quality. A TIMS Conference on Service Quality, Customer Satisfaction, and Services Marketing (cosponsored by Vanderbilt's Center for Services Marketing) was held at Vanderbilt in September 1990, and again in March 1992. This conference established a forum for leading thinkers in service quality to trade ideas and quickly attracted some of the leading researchers in marketing academia, along with some of the leading researchers in the business community.

### Objectives of The Study:

The study has the following objectives:

1. To investigate the effects of service quality on selected behavioural outcomes i.e. 'Propensity to recommend' 'Switching intention' and Complaining Behaviour.
2. To suggest remedial measures to the telecom companies under study to enhance quality of services and customer satisfaction.

### Hypothesis:

- H1:** All the seven service quality related dimensions have significant influence on propensity to recommend the most preferred service provider.
- H2:** All the seven service quality related dimensions have significant influence on switching intentions
- H2a:** Tangibles have a significant positive influence on customer satisfaction.
- H2b:** Empathy has a significant positive influence on customer satisfaction.
- H2c:** Reliability has a significant positive influence on customer satisfaction.
- H2d:** Assurance has a significant positive influence on customer satisfaction.
- H2e:** Responsiveness has a significant positive influence on customer satisfaction.
- H2f:** Network Quality has a significant positive influence on customer satisfaction.
- H2g:** Other factors have a significant positive influence on customer satisfaction.

**H3:** All the seven service quality related dimensions have significant influence on complaining behaviour.

### Research Methodology:

The purpose of present study was to study the Relationship between Service Quality and Behavioural Consequences in Telecom Sector in selected telecommunication providers of Chandigarh, Panchkula and Mohali. Providers taken for the study were Airtel, BSNL, Hutch, Tata Indicom, Reliance and Spice. These six selected service providers have a market share of 99% in the mobile services in the selected region. To carry out the research study, a systematic model and procedure was developed. The content of this section deals with the method and procedure of the study.

### Research Instrument:

The data required for conducting this study was collected using self administered questionnaire.

### Methods of Data Collection:

To collect the primary data, a face-to-face survey was conducted. Assessment was based on a five point Likert Scale. Secondary data has been collected from the annual reports of the companies, magazines, journals and websites of various national and international institutions.

### Sample Design and Sample Size:

Primary data has been collected from different telecom users in Chandigarh, Panchkula and Mohali. Judgmental sampling was used to select approximately equal no of customers from each type of telecom provider. The main service providers are Airtel, Hutch, BSNL, Spice, Tata Indicom, and Reliance. A total of 900-customer of above service providers had been approached, from whom 720 correctly completed questionnaires had been obtained. Data was collected using the "Personal contact" after approaching the respondents personally and explaining in detail about the survey objectives and purpose of the study. Questionnaires were distributed to the customers and had been asked to contact the researcher whenever they encounter any difficulty in responding to the questionnaire.

### Analysis of Data:

To arrive at certain conclusions regarding the hypothesis advanced in the present investigation, the following statistical tools for the analysis of data were employed i.e. Descriptive Analysis, Correlation Analysis, T-test, Multiple Regression, Multicollinearity Kruskal-Wallis test. Statistical calculations have been made, making extensive use of Microsoft Excel and SPSS Software Packages on the computer. The present study was designed to investigate the relationship between service quality and behaviour consequences in telecom sectors. In order to study this relationship, the descriptive – survey method of

investigation coupled with techniques of correlation analysis and multivariate analysis was used

**Limitations of the Study:**

An attempt has been made to complete the research work in best manner but still there are a few obvious limitations.

1. The limitation concerns the nature of the measure used. The measures included in this research were all based upon the perceptions of the participating customers. Therefore, the potential for data inaccuracies due to item misinterpretation or predisposition to certain response on the part of the participant does exist.
2. Responses with respect to behaviour intentions have been solicited from the customers of telecom providers in Chandigarh, Panchkula and Mohali. Perception of people may vary those living in other parts of India.

**Profile of The Respondents Taken For The Study:**

This section of the study deals with the profile of the respondents.

**Customers Profile:**

The success of telecom companies in formulating effective marketing strategies largely depends on maintaining up-to-date profile information of the customer in the form of customer-based data. The availability of such a comprehensive profile provides the telecom companies with a strong basis for designing effective plans and program's regarding the marketing of products and services. The questionnaire included a section on customer's profile. It included customer's age, income, education level, profession and other socio-demographic information.

Table No. 1.1 to 1.7 present a comprehensive profile of the telecom customers who had participated in this study. A total of 900 questionnaires were sent out. After editing all returned questionnaire a total of 720 questionnaires were usable for analysis.

**Table 1.1**  
**Age Profile of the Respondents**

Age	Frequency	Valid Percentage	Cumulative Percentage
Less than 25 years	323	44.9	44.9
25-34 years	189	26.3	71.2
35-44 years	136	18.9	90.1
45-54 years	42	5.8	95.9
Above 55 years	30	4.1	100.0
Total	720	100.0	100.0

**Table 1.2**  
**Gender Profile of the Respondents**

Frequency	Gender	Valid %	Cumulative %
455	Male	63.2	63.2
265	Female	36.8	100.0
720	Total	100	100.0

**Table 1.3**  
**Educational Profile of the Respondents**

Education	Frequency	Valid %	Cumulative %
Below Secondary level	14	1.9	1.9
Secondary level	35	4.9	6.8
University Degree/ Bachelor degree	322	44.7	51.5
Master Degree(PG)	348	48.3	99.8
Others	1	.2	100
Total	720	100	100

**Table 1.4**  
**Monthly Income Profile of the Respondents**

Monthly Income	Frequency	Valid %	Cumulative %
Up to Rs 5000	253	35.1	35.1
Rs. 5000 1 to 1000	78	10.8	45.9
Rs 10001 to 1500	213	29.6	75.5
RS. 15001 to 20000	105	14.6	90.1
Rs. 20001 to 25000	36	5.0	95.1
Rs. 25001 and above	35	4.9	100.0
Grand total	720	100.0	100.0

**Table 1.5**  
**Professional Profile of the Respondents**

Profession	Frequency	Valid %	Cumulative %
Own Business	38	5.3	5.3
Student	234	32.5	37.8
Service Class	319	44.3	82.1
Others	129	17.9	100.0
Total	720	100.0	100.0

**Table 1.6**  
**Service Provider Profile of the Respondents**

Company	Frequency	Valid %	Cumulative %
Airtel	154	21.4	21.4
BSNL	116	16.1	37.5
Tata Indicom	91	12.6	50.1
Spice	132	18.3	68.5
Reliance	86	11.9	80.4
Hutch (Vodafone)	141	19.7	100.0
<b>Total</b>	<b>720</b>	<b>100.0</b>	<b>100.0</b>

**Table 1.7**  
**History of Relationship with Service Providers**

Duration of Relationship with service providers	Frequency	%	Cumulative %
Less than 2 years	286	39.7	39.7
2 to less than 3 years	202	28.1	67.8
3 or less than 4 years	110	15.3	83.1
4 to less than 5 years	57	7.9	91.0
Above 5 years	65	9.0	100.0
	720	100.0	100.0

**Relationship Between Service Quality And Behavioural Responses:**

Much of current marketing action is based on the assumption that the perception of service quality either positive or negative, by a consumer is connected to future behaviour response. Logic would indicate that if consumers perceive positive quality they would most likely intend to repurchase or recommend the services to others. While if they perceive service quality to be negative, they would most likely to complain, or switch to other provider and will not use the services again. The relationship between service quality and behaviour responses are tested with the variables Propensity to recommend, Switching Intention, and Complaining Behaviour as dependent variables. The results of the analysis are shown below.

**Relationship between Service Quality and Propensity to Recommend:**

The relationship between service quality and propensity to recommend was initially investigated using Pearson Correlation.

**Table 1.8**  
**Correlation – Service Quality and Propensity to Recommend**

	Assurance	Reliability	Tangibility	Responsiveness	Empathy	Network Quality	Other Factors
Propensity to Recommend	0.388	0.342	0.313	0.378	0.442	0.549	0.327

Correlation Significant at 0.05 level  
To examine the fit of the regression model and to discover the best predictors of Propensity to recommend, stepwise regression was used with the dimensions of propensity to recommend as the predictor. Preliminary analysis revealed no violation of the assumption regarding sample size and multicollinearity. Table 5.16 indicates that model explained 40.4% of the variance in the service quality. It was found that the dimensions of Network Quality,

Responsiveness, Other factors, Empathy and Assurance were strong factors in recommending behaviour model. Means if customer is not satisfied with these service quality measurements he will not recommend it to others. Table 5.17 also explains the multicollinearity statistics.

**Table 1.9**  
**Regression Model Summary–Propensity to Recommend**

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std error of the estimate
5	0.639	0.409	0.404	2.32

- 1) Independent Variable: - dimensions of Service quality.
- 2) Dependent variable:- Propensity to recommend

**Table 1.10**  
**Stepwise Regression Analysis: Propensity to Recommend**

Variable	Beta	t-value	Significance Value	Multicollinearity Statistics	
				T.V	VIF
Constant					
Network Quality	0.383	11.559	0.000	0.755	.325
Responsiveness	0.119	3.366	0.001	0.660	.515
Other Factors	0.163	5.403	0.000	0.909	1.101
Empathy	0.133	3.642	0.000	0.622	1.608
Assurance	0.106	3.073	0.002	0.693	.443

Dependent variable:- Propensity to recommend

**Relationship between Service Quality and Switching Intention:**

The relationship between Service quality and Switching Intention was investigated using Pearson Correlation. Preliminary analysis revealed that there were no violations of the assumptions of linearity and homoscedasticity, and all associations were found to be significant at 95% level. Table 1.12 indicate the Switching intention model. Two significant determinants are Assurance and Network Quality, Improvement in these two determinants will improve the tendency to switch. However other service quality dimension does not play any role in switching intention.

**Table 1.11**  
**Correlation – Switching Intention and Service Quality**

	Assurance	Reliability	Tangible	Responsiveness	Empathy	Network Quality	Other Factors
Switching Intention	0.184	0.71	0.117	0.125	0.129	0.43	0.102

Correlation Significant at 0.05 levels

**Table 1.12: Regression Model Summary**

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std error of the estimate
2	0.202	0.041	0.038	2.2018

1. Independent variable - Service quality
2. Dependent variable:- Switching Intention

**Table 1.13: Stepwise Regression Analysis Switching Intention**

Variable	Beta	t-value	Significance level	Collinearity Statistic	
				TV	VIF
Assurance	0.152	3.891	0.000	0.873	1.146
Network Quality	0.089	2.276	0.023	0.873	1.146

**Relationship between Service Quality and Complaining Behaviour:**

The relationship between Service quality and Complaining behaviour was initially investigated using Pearson Correlation. As shown in Table 1.14.

**Table 1.14: Correlation: - Service Quality & Complaining Behaviour**

	Assurance	Reliability	Tangible	Responsiveness	Empathy	Network Quality	Other Factors
Complaining Behaviour	0.128	0.046	0.136	0.121	0.142	0.146	0.061

Correlation Significant at 0.05 level

To examine the fit of the regression model and to discover the best predictors of complaining behaviour, stepwise regression was used with the dimension of complaining behaviour as the predictor. Preliminary analysis revealed no violation of the assumption regarding sample size and multicollinearity. Table 1.15 indicates that model explained 27% of the variance in the service quality. It was found that Network Quality and Tangibility were strong factors in Complaining Behaviour. Means if customer is not satisfied with these service quality measurements they will complain to others. Table 1.16 explains the multicollinearity statistic.

**Table 1.15: Regression Model Summary :- Complaining Behaviour**

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std Error of Estimate
2	0.174	0.030	0.027	1.943

- 1) Independent variable ; dimensions of Service quality
- 2) Dependent variable; Complaining Behaviour

**Table 1.16: Stepwise Regression Analysis: - Complaining Behaviour**

Variable	Beta	t-value	Sig. Value	Multicollinearity Statistics	
				TV	VIF
Constant					
Network quality	0.114	2.942	0.003	0.897	1.115
Tangible	0.099	2.552	0.011	0.897	1.115

- 1) Dependent variable; Complaining Behaviour
- 2) Independent variable; dimensions of service quality

**Hypothesis Testing:**

All the seven service quality related dimensions were not found to have a significant influence on propensity to recommend once most used telecom service provider. It was found that only the dimensions of Network Quality, Responsiveness, Other factors, Empathy and Assurance were found to be important factor to recommend a particular service provider. Whereas the dimension of Assurance and Network quality are significant predictors of intentions to switch. No statistical significant relationship was found between rest of the service quality dimensions and behavioural responses. On the other hand in complaining behaviour responses Network Quality and Tangibles were found to be important predictors motivating the customers to complain to other customers or external agencies.

**Empirical Findings of The Study:**

The main findings of the study are the following:

- 1) The results of the study found that 44.9% of the respondents are less than 25 years, while 26.3% of the respondents are between the age group of 25 to 34 years. 18.9% of the customers are between the age group of 35-44 years while the 5.8% of the customers lie in the 45-54 years range. 4.1% of the customers are above 55 years of age. These results indicate that customers who are in the above 45 age category may be using less mobile as compared to those who are in less age category.
- 2) An examination of the Gender profile of the respondents indicates that out of those who use mobile connection 63.2% are male while 36.8% are female.
- 3) The findings of the study showed that 39.7% of the respondents had maintained a relationship with the service provider for less than 2 years, 28.1% for a period of 2 to less than 3 years 15.3% and 7.9% for a period of 3 to less than 4 years and 4 to less than 5 years. These results indicate that there was relatively higher degree of instability of the customers. Customer in case of Telecom Company does not maintain a long time relationship with the provider.
- 4) It is interesting to note that the dimensions of Tangibles did not have a significant relationship between service quality, and behavioural intentions. This finding may be explained by the Herzberg's (1968) two factors theory. Herzberg (1968) identified two sets of factors including hygiene factors that can lead to dissatisfaction, and motivation factors that can produce satisfaction. As service provider continues to use services, tangibles probably have changed from a "motivation" factor to a "hygiene" factor. That is, if a service provider fails to provide tangibles in sufficient quantity to its customers, customer dissatisfaction will result. But when the items representing tangibles are

- 5) provided in sufficient quantity. Customer will not necessarily experience increased satisfaction. Instead they will only experience no dissatisfaction.
- 6) Much of current marketing action is based on the assumption that perception of service quality (either positive or negative) by a consumer is connected to future consumer behaviour. The research measured the strength of behavioural intention regarding a range of future action for telecom service providers. Result indicated that significant relationship exist between perceived Service quality and recommending the telecom provider to other customers and Switching intentions. The relationship was tested by stepwise regression analysis using propensity to recommend and switching intentions as the dependent variables, and the combined 32 items perceived service quality as the independent variables. The results of the models are statistically significant at the 0.05 level The R<sup>2</sup> value for the propensity to recommend model and switching intention explained variation of 40.9% and 41% respectively. It was found that dimensions of Network Quality are the strong driver in case of Propensity to recommend whereas in case of Switching intention, Assurance is the most important factor followed by Network quality.
- 7) The result indicated that the factors corresponding to the Empathy, Network quality, Responsiveness, Other factors and Reliability are significant in determining the overall customer satisfaction and inducing positive behavioural outcomes by reducing negative ones. Network quality has been shown to be an important factor in case of telecom services. If customers are not satisfied with the network coverage of any telecom service provider they don't feel satisfied. Even they switch to other service provider if they are not satisfied.
- 8) The findings show that respondents who experienced a problem has a significant and dramatic drop in customer satisfaction, willingness to recommend and conversely an increase in customer switching. This confirms and reinforces the serious consequences of unsatisfactory customer service. The result also showed that respondents who had encountered a problem with the telecom provider would not recommend the provider to others and would consider switching. On the other hand, the satisfaction with the problem solution is the right step towards customer satisfaction. To conclude, once the problem exists no matter how it is resolved, it will influence the customer switching to other service providers.

#### Implications For Managers:

Following are some of the suggestions which telecom companies should take into account to enhance service quality.

- 1) It provides the managers with the comprehensive

- model of the factors which influence the perception of service quality and consequently with the specific priorities so as to increase customer satisfaction and positive behavioural outcomes.
- 2) Network quality, Other factors and Empathy seem to be an important factor for recommending any telecom provider to others, whereas improvement in Assurance and Network quality and Empathy aspects of service quality will reduce the intentions to switch.
- 3) Regarding the customer complaints, managers should attempt to "get things right the first time". When the customer had any complaint, it was found that satisfaction problem recovery leads to satisfaction but switching intention increases. Unsatisfactory problem recovery leads to dramatic decline in customer satisfaction and increase in switching intentions.

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