

DETERMINANTS OF CUSTOMER SATISFACTION IN TELECOM INDUSTRY - A STUDY OF INDIAN TELECOM INDUSTRY

Manish Madan

*Associate Professor & HOD (BBA), Delhi School of Professional Studies and Research
New Delhi, India*

ABSTRACT

The purpose of this study is to find out those determinants and factors which can affect and have an impact on the satisfaction level of customers in the telecom industry in the National Capital Region of Delhi, India especially the cellular sector. By satisfying the customers, the organization can maximize the number of users. The main objective of this kind of study is to search and find the factors influencing the satisfaction level of the customers in the telecom industry.

The study has identified major six factors through which are responsible for customer satisfaction in telecom industry. A structured questionnaire was developed to analyze the study. A random sampling technique has been used and the sample size was 150. For analyzing the results Descriptive Statistics along with Correlation and regression has been used and analysis is done with the use of SPSS software version 17.

Keywords: *Customer Satisfaction, Cellular Industry, Determinants of customer satisfaction, Telecom industry.*

I. INTRODUCTION

Indian telecom sector is more than 165 years old. Telecommunications was first introduced in India in 1851 when the first operational land lines were laid by the government near Kolkata (then Calcutta), although telephone services were formally introduced in India much later in

1881. Further, in 1883, telephone services were merged with the postal system. In 1947, after India attained independence, all foreign telecommunication companies were nationalized to form the Posts, Telephone and Telegraph (PTT), a body that was governed by the Ministry of Communication. The Indian telecom sector was entirely under government ownership until

1984, when the private sector was allowed in telecommunication equipment manufacturing only. The government concretized its earlier efforts towards developing R&D in the sector by setting up an autonomous body – Centre for Development of Telematics (C-DOT) in 1984 to develop state-of-the-art telecommunication technology to meet the growing needs of the Indian telecommunication network.

The actual evolution of the industry started after the Government separated the Department of Post and Telegraph in 1985 by setting up the Department of Posts and the Department of Telecommunications (DOT). Until the late 90s the Government of India held a monopoly on all types of communications – as a result of the Telegraph Act of 1885. The New Telecom Policy (NTP-99) provided the much needed impetus to the growth of this industry and set the trend for liberalization in the industry. Indian telecom industry is growing at a great pace & India is expected to become a manufacturing hub for telecom equipment. Indian telecom equipment manufacturing sector is set to become one of the largest sectors globally by 2010.

Due to rising demand for a wide range of telecom equipment, particularly in the area of mobile telecommunications, has provided excellent opportunities to domestic and foreign investors in the manufacturing sector. No other industry touches as many technology-related business sectors as telecommunications, which, by definition, encompasses not only the traditional areas of local and long-distance telephone service, but also advanced technology-based services including wireless communications, the Internet, fiber-optics and satellites.

II. REVIEW OF LITERATURE

Customer Satisfaction

Recent interpretations in the consumer domain now couch satisfaction as a fulfillment response. Fulfillment implies that a consumption goal is known, as in basic motives of hunger, thirst, and safety. However, observers of human behavior understand that these and other goals can be and frequently are modified and updated in various ways. Thus, consumer researchers have moved away from the literal meaning of satisfaction and now pursue this concept as the consumer experiences and describe it.

In Oliver (1997, p. 13), the following definition has been proposed as being consistent with the conceptual and empirical evidence to date: Satisfaction is the consumer's fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under- or over-fulfillment. Here, pleasurable implies that fulfillment gives pleasure or reduces pain, as when a problem in life is solved.

Thus, individuals can be satisfied just to get back to normalcy, as in the removal of an aversive state (e.g., pain relief). Moreover, fulfillment is not necessarily limited to the case of met needs. Over-fulfillment can be satisfying if it provides additional unexpected pleasure; and under- fulfillment can be satisfying if it gives greater pleasure than one anticipates in a given situation. Note that it has not been necessary to provide a separate discussion of dissatisfaction. If the word displeasure is substituted for pleasure in the satisfaction definition, dissatisfaction results. Thus, the displeasure of under-fulfillment typically is dissatisfying and, interestingly, over-fulfillment may be dissatisfying if it is unpleasant – the case of "too much of a good thing." Evaluative or cognitive opinion which analyses whether the product represents a satisfactory or poor result for its end users Swan, Trawick, and Carroll (1982, p. 17). The conceptual response by the consumer to the purchase and use of a product which comes from the comparison of the rewards and cost of purchase relative to expectations Churchill and Surprenant, (1995).

Service quality is considered as one of the top priorities of firms at the present time because it gives the company a competitive advantage, helps sustain growth and increases efficiency (Wisniewski & Wisniewski, 2005; Ladhari, 2009b). These days" customers expect higher quality services which puts pressure on businesses to have a better understanding and measurement of service quality (Wisniewski & Wisniewski, 2005). In the past 30 years there has been considerable debate among academics and practitioners in the literature on defining and measuring service quality (Martinez & Martinez, 2010).

Service quality is defined as the overall presumption of the customers about the excellence quality of services offered by the service provider or it is the finding of gap between the desire or the expectation of customer and the actual quality of services offered by the retailer or the service provider to the customer (Parasuraman, Zeithaml & Berry, 1988). The desire or the expectation of the customers about the quality of services offered and the perception about the services offered are the parts of the definition of service quality (Parasuraman, Zeithaml & Berry, 1988). The arguments for developing a modified scale as research suggests that the scale is more appropriate if it is country or context specific (Ladhari, 2008). The emphasis is placed on the relationship between service quality, satisfaction and loyalty because research has shown a link between service quality and satisfaction (van der Wal, Pampallis & Bond, 2002).

Evidence shows an increase in satisfaction is linked to an increase in repeat business and the willingness to recommend to other customers (Yuksel, Yuksel & Bilim, 2010). It is quite obvious and certain that if the level of quality of services offered among customers is high will lead to the increase in loyalty towards the service provider (Wicks & Roethlein, 2009), which is further linked to customer retention and ultimately has an effect on the company's profit (Davis- Sramek, 2009).

III. SERVICE

A study carried out by (Johns, 1998) points out that the word „service" has many meanings which lead to some confusion in the way the concept is defined in management literature, service could mean an industry, a performance, an output or offering or a process. Further it was argued by him that services are mostly expressed as „intangible" and output of the services are often observed as an activity instead of tangible object which is quite not understandable as various service outputs like equipments, physical facilities and personnel are tangible in nature. An example is the services offered by the retail stores, which involve mostly retailing goods to customers do have tangibles such as sales assistances, computers, self-service equipments. In order to understand the services provided by the grocery stores in a better way we give considerable attention to the tangible components of the grocery stores. The reason behind this is quite clear as, according to (Gummesson, 1994), the design of service which details a service, service system and the service delivery process must consider staff, customers, physical environment, technology, and the product. It is being summarized that in order to offer the high quality of services, the service firms has to consider the physical aspect of the quality.

In a study carried out by (Gummesson, 1994), he identified three management paradigms; manufacturing paradigm which focuses on goods and mainly concerned with productivity technical standards, the bureaucratic-legal paradigm used mainly in the public sector is more concerned with regulations and rituals before end results. Thirdly, the service paradigm mainly focuses on service management particularly in the marketing area and stresses the importance of customer interaction with service provider in delivering service and creating value. In his study, he lays emphasis on the service paradigm pointing out that, there has been a shift from the goods focused to service-focused management due to automation of manufacturing and the introduction of electronics and technology. He sees service marketing moving from a normal marketing mix (focused on solely on price, product, promo and place) to relationship marketing where people, process and

physical evidence adding to the 4 „P“ (product, price, promotion and place) play a role in increasing an interactive relationship between service provider and consumer and long term profitability and customer satisfaction. We support this argument because, the customer is considered very important and it is very primordial for companies to improve their relationship with customers by knowing their needs and creating more value by trying innovative processes that will lead to customer satisfaction and retention. This is the reason of necessity for organisations to measure the quality of services offered as this will make them to know what is the desire or expectation of customers in regard to the kinds of services and the perception of customers about the services the organisations are offering.

Edvardsson, (1998), thinks that the concept of service should be approached from the customer's perspective because it is the customer's total perception of the outcome which is the „service“ and customer outcome is created in a process meaning service is generated through that process. He points out the participation of the customer in the service process since he/she is a co-producer of service and the customer's outcome evaluated in terms of value added and quality meaning the customer will prefer service offered to be of high value and quality. The process of service either tangible or intangible which is offered by the retailers or the service provider to its customers include interpersonal interaction, performance, and delivery of service or experience of customers about the product and service to improve the quality of services and ensure satisfaction of customers.

According to a study carried out by (Johns, 1998), service is viewed differently by both the provider and the consumer; for the provider, service is seen as a process which contains elements of core delivery, service operation, personal attentiveness and interpersonal performance which are managed differently in various industries. While customer views it as a phenomenon meaning he/she sees it as part of an experience of life which consists of elements of core need, choice, and emotional content which are present in different service outputs and encounters and affect each individual's experience differently. However, factors that are common for both parties include; value (benefit at the expense of cost), service quality and interaction. From his study he concluded that if supermarkets or malls are taken as an example of service industry then these supermarkets have high tangibility or better they have high visibility of output, other factors like giving personal attention to customers is low, service staff is not satisfactorily information provider, high level of choice of products and brands and in such malls the key factor is the quality of services being offered or provided by the retailers.

As our study looks at services in grocery stores from the consumer's perspective, we consider the tangible and measurable aspects of service in grocery stores such as equipments, products, computers, personnel in order to access the intangible qualities of these services through the consumer's perception. We think from the consumer's perspective that service can be considered as an experience whereby the consumer is expected to make choice to satisfy needs in an emotional way through the interaction with service provider.

Service experience is defined by (John, 1998) as the balance between choice and perceived control which depends upon the relative competences of customer and service provider (that is to make the choice or to exert control). Aspects of service experience include core benefit, performance, approaching the service, departing from it, interacting with other customers and the environment in which the service transaction takes place, Service interaction involves interpersonal attentiveness from the service personnel who are to provide core services and this contributes to customer satisfaction with the service offered (John, 1998).

IV. OBJECTIVE

The main objectives of this study are :

- To explore the services being provided by the Cellular Companies in India.
- To determine the effect of pricing on the satisfaction level of the customers in the telecom Industry in India.
- To find out the determinants of customer satisfaction in the telecom industry of India

V. HYPOTHESES OF STUDY

The main or the principal instrument in the research is hypothesis. Its main factors are to suggest new experiments and observations. A number of experiments had been done with the deliberate object of testing of hypotheses. By making the base of testing often the decision makers has to face the condition where they are interested in testing hypotheses. A positivist approach has been taken to the research and to the hypothesis designed to answer the research question.

HYPOTHESIS 1.1

Ho1.1: There is no significant difference in customer satisfaction and the customer services. **H11.1:**

There is significant difference in customer satisfaction and the customer services. **HYPOTHESIS 1.2**

Ho1.2: There is no significant difference in customer satisfaction and the pricing frame of telecom service provider.

H1 1.2: There is significant difference in customer satisfaction and the pricing frame of telecom service provider.

HYPOTHESIS 1.3

Ho 1.3: There is no significant difference in customer satisfaction and the sales promotion. **H1 1.3:**

There is significant difference in customer satisfaction and the sales promotion. **HYPOTHESIS 1.4**

Ho 1.4: There is no significant difference in customer satisfaction and the coverage of cellular companies.

H1 1.4: There is significant difference in customer satisfaction and the coverage of cellular companies.

HYPOTHESIS 1.5

Ho 1.5: There is no significant difference in customer satisfaction and the signal strength of cellular companies.

H1 1.5: There is significant difference in customer satisfaction and the signal strength of cellular companies.

HYPOTHESIS 1.6

Ho 1.6: There is no significant difference in customer satisfaction and the promotional activities of cellular companies.

H1 1.6: There is significant difference in customer satisfaction and the promotional activities of cellular companies.

VI. RESEARCH METHODOLOGY

SAMPLE SIZE

The sample size is taken as 150.

VII. DATA COLLECTION METHOD

Both primary and secondary data sources have been used to answer research questions. Primary data mainly is obtained through the administering of questionnaires while secondary sources like past studies and archives accessed from various databases in order to have a better understanding of the service provided by the cellular companies.

Choice of respondents

As mentioned earlier the study was focused on the customers of national Capital Region of Delhi, India. The researcher had situated himself in front of various malls and retail shops in India so as to be able to access a large number of customers. The researcher had approach any person for the completion of the questionnaire who should have mobile phone.

VIII. DESIGN OF QUESTIONNAIRE:

The structured questionnaire was used for the collection of data as an instrument. In order to get the required information from the respondents a series of close ended questions were composed. Questionnaire was divided into two parts, first was based on Demographical background. Second part based on dependent Variable (customer satisfaction) and Independent Variables (customer service, price structure, sales promotion, coverage, signal strength, promotion). Five point Likert Scale was designed to measure the variables and the purpose was to indicate those variables that can be the reason to compel customers toward any other service provider.

IX. DATA ANALYSIS METHOD

Questionnaire were filled by 192 respondents, of which 150 were considered for analysis purpose as others were partially filled and some questions were left blank. For final analysis 150 questionnaires were considered and conducted descriptive statistics and correlation and regression analysis using SPSS version 17.0.

ETHICAL CONSIDERATIONS

The researcher had treated any information got from any individual confidentially without disclosing the respondents identity, and the researcher is open minded as possible and expressed opinions as they were given. Nothing had been modified by the researcher.

Reliability of Scale:

The table below shows the reliability of the data collected from respondents. It shows that the data collected from mentioned sample is reliable and respondents answered accurately. Because the variables are exceeding from 70% which is the standard level of acceptance for reliability. The calculations suggest that the responses given by respondents of the study are reliable.

RELIABILITY SCALE OF THE STUDY

S. NO.	VARIABLES	CRONBACH'S ALPHA
1	SATISFACTION OF CUSTOMERS	0.914
2	SERVICES PROVIDED BY COMPANIES	0.854
3	FAIRNESS IN PRICES	0.942
4	SALES PROMOTION	0.724
5	COVERAGE	0.861
6	STRENGTHS OF SIGNALS	0.748
7	PROMOTIONAL ACTIVITIES	0.822

DEMOGRAPHIC PROFILES OF RESPONDENTS

MEASURES	ITEMS	FREQUENCY	PERCENTAGE
Gender	Male	81	54%
	Female	69	46%
Age	Less than 18	12	8%
	18 – 24	88	58.67%
	24 – 30	32	21.33%
	30 and More	18	12%
Type of Connection	Prepaid	119	79.33%
	Postpaid	31	20.77%
Time of using same Connection	Less than one month	14	9.33%
	About 6 months	20	13.33%
	Less than one year	22	14.67%
	More than one year	94	62.67%

ANALYSIS OF DATA

In order to analyze the data SPSS version 17.0 has been used. Multiple linear regression is used and the following results are being obtained as follows:

MODEL SUMMARY

Model	R	R Square	Adjusted R Square	S.E. of estimates
1	0.852a	0.726	0.701	0.558

a. Predictors: (Constant), CUSTOMER SERVICE, PRICE FAIRNESS, SALES PROMOTION, COVERAGE, SIGNAL STRENGTH, PROMOTION

The above results were obtained after setting multiple linear regressions. In the above table the value of adjusted R-square is showing that the dependent variable (customer satisfaction) is influenced 70.1% by independent variables (customer service, price fairness, sales promotion, coverage, signal strength & promotion). It is being observed that the value of R. Square is close to one so it indicates that these variables can impact the customer satisfaction in cellular industry.

ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	9.247	6	1.539	4.852	.000 ^b
Residual	46.985	143	0.347		
Total	56.232	149			

a. Dependent Variable: CUSTOMER SATISFACTION

b. Predictors: (Constant), CUSTOMER SERVICE, PRICE FAIRNESS, SALES PROMOTION, COVERAGE, SIGNAL STRENGTH, PROMOTION.

In the above table of ANOVA explained that overall model was significant. Since the sig. value is less than 0.05 so it indicates that the model is statistically significant. It is clear that all the independent variables, that is,

customer service, price fairness, sales promotion, coverage and promotion are connected to the dependent variable, that is, customer satisfaction.

REGRESSION COEFFICIENT

COEFFICIENTS					
	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
Model	B	Std. Error	Beta		
(Constant)	2.048	0.398		5.217	.000
CUSTOMER SERVICE	.147	.084	.158	1.878	.000
PRICE FAIRNESS	.139	.046	.236	3.014	.000
SALES PROMOTION	.009	.059	.011	0.152	.000
COVERAGE	.013	.003	.221	3.001	.000
SIGNAL STRENGTH	.012	.062	.011	0.174	.000
PROMOTION	.068	.066	.091	1.158	.000

It is being observed that in all the variables the significance value is $0.00 < 0.05$, so we reject the null hypothesis and accept the alternative hypothesis that there is a significant relationship between dependent and independent variables. Thus it is clear that each and every independent variable is significantly connected to customer satisfaction. Among all variables, price fairness is the major variable with standardized coefficient $b=0.236$ that can satisfy the customer toward their particular service provider. While coverage is the second momentous variable with a standardize coefficient of $b=0.221$. Furthermore with a standardize coefficient 0.158, customer service is the third variable that can influence customer satisfaction in cellular industry. Remaining variables such as signal strength ($b=0.011$), sales promotion ($b=0.011$) and promotion ($b=0.091$) are comparatively less influenced customer satisfaction in cellular industry.

X. CONCLUSION

The main and ultimate objective of the research was to find out the determinants or the factors that influence the services of the telecom industry. The results obtained from the analysis led to the following conclusions :

(1) There are two factors which have great impact on the services of cellular companies that leads to the customer satisfaction and ultimately to the maximization of profit of the organization have been observed the fairness in the prices and the coverage area.

(2) Customers are more dissatisfied with the level of fairness in the prices.

(3) Customers, especially in the rural area feel that the coverage of cellular service provider is not upto the mark. This is the most important factor in the switching of brands as mouth to mouth publicity about the coverage and signal strength plays a vital role in switching of the brands of cellular companies in India.

(4) Customer services also impact the customer satisfaction regarding any service provider.

The customer services staff should be trained to be good enough to handle the customers " complaints in respect of any service.

(5) The main objective of this study was to determine which independent variables can influence customer satisfaction in cellular industry. As we all are aware that mobile phone has an important place in our daily life. From the analysis it is being observed that it is the category of customers on which the satisfaction of customers depends. The categories can be divided on the basis of age, gender, profession, status, etc.

(6) Normally Business class category goes for that service provider which offers better international and local connectivity plus value added services such as Miss Call " s alerts, conference calling, data connectivity and business solution such as Blackberry services. Furthermore if we come to students they go for that service provider which offer better SMS packages, internet buckets and call packages. The service providers should focus on the services as per the requirements of the segmented customers.

REFERENCES

- [1.] Churchill and Surprenant, "The Benefits Of Measuring Customer Satisfaction." CMA Magazine,
- [2.] 69(7): 1995, 32-37.
- [3.] Davis-Sramek, B., Droge, C., Mentzer, J., & Myers, M. (2009). Creating Commitment and Loyalty Behavior Among Retailers: What are the Roles of Service Quality and Satisfaction. *Journal of Academic Marketing Science*, 37,440-454.
- [4.] Edvardsson, B. (1998). Service Quality Improvement. *Managing ServiceQuality*, 8(2), 142-149.
- [5.] Gummesson, E. (1994). Service Management: An Evaluation and the Future. *International Journal of Service Industry Management*, 4(1), 77-96.
- [6.] Johns, N. (1998). What is this thing called Service? *European Journal of Marketing*, 33(9/10), 958-973.
- [7.] Ladhari, R. (2008). Alternative Measures of Service Quality: A Review. *Managing Service Quality*, 18(1), 65-86.
- [8.] Martinez, J., & Martinez, L. (2010). Some Insights on Conceptualizing and Measuring Service
- [9.] Quality. *Journal of Retailing and Consumer Services*, 17, 29-42.
- [10.] Oliver, R. L. (1997). *Satisfaction: A behavioral perspective on the consumer*. New York: Irwin/McGraw-Hill.
- [11.] Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1988). SERVQUAL: A Multi-item Scale for
- [12.] Measuring Consumer Perceptions of the Service Quality. *Journal of Retailing*, 64(1), 12-40.
- [13.] Swan, Trawick, and Carroll "Customer Satisfaction Measurement in The Private Bank Sector, *European Journal of Operational Research* 130 (2001) 347-360.
- [14.] Van-der-wal, R. W. E., Pampallis, A., & Bond, C. (2002). Service Quality in a Cellular
- [15.] Telecommunications Company: A South African Experience. *Managing Service Quality*, 12(5), 323-335.
- [16.] Wicks, A., & Roethlein, C. (2009). A Satisfaction-Based Definition of Quality. *Journal of Business and Economic Studies*, 15(1), 31-32.
- [17.] Wisniewski, M. (2001). Using SERVQUAL to Assess Customer Satisfaction With Public Sector Services. *Managing Service Quality*, 11(6), 380-388.
- [18.] Yuksel, A., Yuksel, F., & Bilim, Y. (2010). Destination Attachment: Effects on Consumer
- [19.] Satisfaction and Cognitive, Affective and Cognitive loyalty. *Tourism Management*, 31(2), 274-
- [20.] 284.