

Factors which influence customers towards service providers in Telecom Industry

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Abstract:

Telecommunication industry has gained a ground very fast in the last decade as an accepted and used business paradigm. Most of the telecommunication companies are providing functionality for performing commercial transactions over the mobile phones. This paper describes the importance of customer satisfaction in mobile telecom sector. The objective of study is to find the attributes which attract customers towards service providers. The tool used is questionnaire based survey of cellular subscribers. For the complete study, 1000 responses are generated using the pilot tested questionnaires. In our study, we have used three methods of scaling i.e. method of paired comparison, method of equal intervals and the method of successive intervals. From our survey, we conclude that good network coverage and lower cost of tariff voucher are two important attributes which customer consider while taking connection.

Key words: Telecommunication, factors, Customer satisfaction, Service providers.

INTRODUCTION

Customer satisfaction is the most important issue for telecommunication service providers. Customer satisfaction means how much a customer is satisfied with his relevant service provider. The telecom sector wants to retain his customers, it must be known why a customer chooses to disconnect service or switch over between the types of service providers. We have to determine what factors are responsible for switching behavior of customers.

Satisfaction can be divided into involuntary and voluntary satisfaction. In involuntary satisfaction, service provider cuts off the services due to non- payment of invoices and transfers, and voluntary satisfaction is that in which customer chooses to disconnect service. We have to identify the key determinants of customer satisfaction and dissatisfaction in Indian telecom market. Most mobile telecom sector in India today have six GSM operators and two CDMA operators. In this highly competitive world due to bad services most of the customers are switching from their mobile services providers. While teenagers are attracted by goodies such as free SMS, for executives it could be the free long distance minutes and value added services. But while acquiring new customers is good news for any telecom sector, the flip side is the loss of customers. Customer satisfaction is widely recognized problem today for most mobile telecom service providers.

Though many service providers are affected by the switching phenomenon, the problem is extremely acute in the telecom sector, with customers joining and quitting in short periods. Switching off rates in Lucknow telecom market is anywhere between 2.4% and 5.4% per month. Considering that the cost of acquiring a new customer is as high as Rs.3000, the losses are immense. The cost of acquiring a new customer is more than that of retaining one. The cost of acquiring a new customer is more than five times that of retaining an existing

customer. Even if we calculate a customer dissatisfaction of 2% a month, an operator is losing 24% of its customer every year. Whatever the numbers are; the fact remains that the telecom sector bottom line is getting affected significantly. The main objective of our project is to identify the key determinants of customer satisfaction in telecom sector.

METHODS

Research Design

The research is conducted in Lucknow city. The tool which we employed for generating responses is questionnaire based survey of cellular subscribers. Focused Group Discussions (FGD) are conducted which provided us the information of the major factors responsible for customer satisfaction in telecom industry and the customer aspirants from different service providers. The pilot testing of questionnaire is done on a group of hundred respondents. Unwanted and ambiguous questions are removed and some new alternatives are introduced in the questionnaire after conducting reliability analysis. Only primary data is used in the research, which is obtained from the questionnaire. Different type of scales used included nominal, ranking scale and seven point Likert scale.

Method of paired comparison:

This method was developed by L. L. Thurstone in 1927. As it was developed by Thurstone it is also called as 'Thurstone scale'. The law of comparative judgment assumes that for a given statement there is associated modal discriminial process on a psychological continuum. A discriminial process, denoted by S, is a theoretical concept and represents the experience or reaction of individual when confronted with statement and asked to make a judgment of some attribute. In this method all possible pairs of a number of statements are made and question is asked in pair which would you prefer. The scale value is

calculated by transforming the proportion of persons preferring particular item of pair into z-values (standard normal variate) and taking mean of z-values for each item.

Method of equal appearing interval:

This method was proposed by L. L. Thurstone and E. J. Chave in 1926. In this method subjects are asked to sort the statements on the cards into a number of predefined intervals. This interval is constructed into the form of a scale whose extreme left point is denoted as the highly unfavorable to highly favorable (or according to choice of researcher) and the mid-point denoting neutral point. These intervals should be in odd numbers like 5, 7, 9, etc. This scale is of the following form:

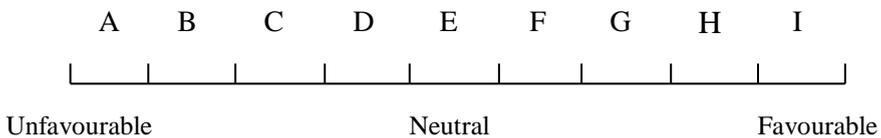


Fig1. The Interval Scale Continuum

The points mentioned on the cards are assumed to be equally spaced i.e. the distance between any two successive characters is assumed to be equal i.e. if we consider three successive cards say, A, B, and C then the distance of A to B will assumed to be equal to distance between B and C. The scale values are calculated using formula:

$$S_j = l + \left(\frac{0.5 + c}{p_w} \right) d$$

- Here, S_j = scale value of the jth statement;
- l = the lower limit of the interval in which median falls;
- c = sum of the proportions below the interval in which median falls;
- p_w = the proportion within the interval in which median falls;
- d = assumed width of the interval.

Method of Successive Interval:

In method of equal appearing interval, it is assumed that the width of all the intervals are same. But it is not fare to make a prior assumption about the width of intervals while Constructing scales on the basis of the responses. To overcome this drawback Edwards A. L. and Thurstone L. L., in 1952, proposed a new technique called as method of successive interval. In this method the calculation of the scale value is same as the method of equal appearing interval while in addition the length of the interval (which is assumed to be of unit length in method of equal appearing interval) is also estimated. The width of the interval is calculated using:

$$W_{ij} = Z_{ij} - Z_{i(j-1)}$$

Where z_{ij} is the proportion of the subjects placing j^{th} statement on the i^{th} place of scale.

Reliability and Validity

The pilot test for the questionnaire is first conducted on a sample of 100 mobile telecom users. The reliability analysis is conducted on all the 100 responses. The reliability coefficient for the determinant of customer satisfaction turned out to be 0.679. The output indicates that the reliability of the scale of measurement is very high. For the complete study, 1000 responses are generated using the pilot tested questionnaires, only 844 completely filled questionnaire are retrieved after adopting an internal consistency analysis to proceed with the reliability test.

The reliability coefficient for the study on customer satisfaction is 0.734. The results obtained indicate that the scales used qualified to produce excellent reliability.

RESULTS AND DISCUSSION

Sample Profile

According to our study the customers' % configuration of various age groups are- 22.3% belong to age group 20-30yrs; 27.6% belong to age group 31-40yrs; 31.2% belong to the age group 41-50yrs; 19% are from the age group >50yrs. Gender configuration is: 66.9% are male and 33.1% are female. 6.3% have attained education level up to metric; 13.9% have attained 10+2; 45% have attained graduation; 26.2% have attained P.G. & 8.6% are from other academic backgrounds. On the basis of profession the configuration is 16.1% are students; 29% are govt. employee; 18.5% are businessman; 20.4% are private sector employees and 16% belongs to other profession.

It is clear from the analysis that 22.7% of our respondents are availing the services of BSNL and the rest of the respondents are subscribing private operators via. 17.1% of Reliance, 16.4% of Vodafone, 15.9% of Airtel, 12.9% of Tata Indicom and 15% of Idea. The major chunk of our sample is dominated by BSNL, Reliance and Vodafone. This reflects the share of these telecom operators in Lucknow. 16.4% of the respondents are having postpaid connections and 83.6% of the respondents are having prepaid connections. Our main interest is on the earning group as they are the most frequent users and also the decision makers with respect to switching. Therefore 72% of the respondents belong to the earning group (29% are government employees, 20.4% private sector employees, 18.5% are businessmen and 5.1% are professionals); students and housewives made remaining 28% of total sample. 70% of total sample size comprises of the respondents in the age group of 20-50. Majority of the respondents make expenditure on service provider in the range of Rs. 0-1000. Monthly billing comprises of prepaid and postpaid both. In prepaid billing is measured by the value of recharge coupon used by customer in one month.

In our survey we have taken sample of size 844, in which we have taken 192 customers of BSNL, 134 of Airtel, 144 of Reliance, 127 of Idea 109 of Tata and 138 of Vodafone. Our Objective is to find:

1. Preferences by customers when they take service provider.
2. Attributes which attracts customers towards service providers.

We have the scale values as follows:

1. Using **the method of paired comparisons**, we get table 1:

TABLE 1

<i>Statement</i>	<i>Network coverage</i>	<i>Tariff plans</i>	<i>Customer service</i>	<i>Brand image</i>	<i>Value added services</i>	<i>Good connectivity</i>	<i>Less disturbance</i>
<i>Scale value</i>	1.29	0.74	0.26	0	0.06	0.67	0.19

2. Using **the method of equal-appearing intervals**, we get table 2:

TABLE 2

<i>Statement</i>	<i>Network coverage</i>	<i>Tariff plans</i>	<i>Customer service</i>	<i>Brand image</i>	<i>Value added services</i>	<i>Good connectivity</i>	<i>Less disturbance</i>
<i>Scale value</i>	6.56	5.09	3.40	2.53	2.68	4.64	3.49

3. Using **the method of successive intervals**, we get table 3:

TABLE 3

<i>Statement</i>	<i>Network coverage</i>	<i>Tariff plans</i>	<i>Customer service</i>	<i>Brand image</i>	<i>Value added services</i>	<i>Good connectivity</i>	<i>Less disturbance</i>
<i>Scale value</i>	2.54	1.63	0.89	0.53	0.59	1.50	0.92

The correlation between the scale values by the method of paired comparisons and the method of equal-appearing intervals is 0.9949. The correlation between the scale values by the method of equal-appearing intervals and the method of successive intervals is 0.9962. The correlation between the scale values by the method of successive intervals and the method of paired comparisons is 0.9977. The correlation is perfect and positive as it tends to one. This implies that the method of successive intervals and the method of paired comparisons are highly linearly related. From the above result, we found out that the method of successive intervals tends to make a more comparable spacing of the statements along the psychological continuum. From our survey we conclude that 53.3% customers' first preference is network coverage, 26.4 % customer prefer tariff plans as their second choice, thirdly 19.5 % prefer good connectivity and then 19.3 % prefer less disturbance while calling as their fourth preference. 23.9 % of customers prefer good customer service as their fifth preference. Last but not the least, 25.1 % of customers prefer value added services and at last 22.2 % customers give preference to the brand image.

From our survey, we conclude that

PREFERENCES	SERVICES
FIRST	Network coverage
SECOND	Tariff plans
THIRD	Good connectivity
FOURTH	Less disturbance while calling
FIFTH	Good customer service
SIXTH	Value added services
SEVENTH	Brand image

CONCLUSION

From the above three methods of scaling, we conclude that the scale value is highest for the attributes good network coverage

and lower cost of tariff voucher, hence we can say that good network coverage and lower cost of tariff voucher are two important attributes which customer consider while taking connection. Good connectivity and less disturbance while calling, good customer service are considered next highest scale value, so it is the second choice by the customers in choosing any service providers. Lower cost of value added services and brand image are preferred at last.

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