



# Level of Customer Satisfaction Among The Users Of Aircel In Sivagangai District

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## **Abstract**

A luxury product of yesterday may be turned into an essential product of today. In this line, mobile phone is an essential product. An individual has more than one mobile phone for his communication purpose. The decrease in the price of mobile phone sets and the tariff has paved the way for the increased usage of mobile phones among Indians. Today, the mobile phone service is not only available in urban areas but also in rural areas. Moreover, mobile phone service providers are rendering their service under different types of schemes. The various schemes are introduced in order to attract different types of customers and cover all parts of the country. As the market stands in the saturation stage in the metro cities, the service providers are aiming at other cities and rural areas to extend their services. A field study was conducted in Sivagangai District to know the level of satisfaction derived by the Aircel subscribers. There are many mobile phone service providers. Like BSNL, Aircel, Airtel, Vodafone, Tata indicom, Reliance, Docomo and others. The present study concentrates only on Aircel subscribers. Two hundred subscribers using both prepaid and post paid schemes of Aircel network in Sivagangai District were selected for this study. The level of satisfaction of subscribers is divided into three i.e. low, medium and high. The present study finds the significant relationship between the personal factors and the level of satisfaction.

## **INTRODUCTION**

"Customer satisfaction is a continuous process which covers the process of ownership experience right from the selection of a product, purchase through after care to repeat purchase". In these days of intense competition, a company's success in the market place will ultimately depend on how it creates and delivers better value through customer satisfaction to its target market vis-à-vis its competitors. Combined value of the functional and emotional aspects will result in customer satisfaction leading to create brand equity in the minds of the customer which is critical in achieving the market share objective of the firm. Customer satisfaction with a purchase depends on the product's performance relatives to a buyer's expectations. A customer might experience various degrees of satisfaction. If the product's performance falls short of expectations the customer is dissatisfied. If performance matches expectations, the customer is satisfied. If performance exceeds expectations the customer is highly satisfied or delighted.

But these value perceptions and value expectations vary from one customer to another customer (or customer group) based on their respective demographic and psychographic profile as well as competitors offering of the tangibles and intangibles vis-à-vis the firm's package. Thus, such constantly changing value expectations of customers and the predictive and unpredictable moves of the competitors are compelling the firms to search and identify specific fundamental characteristics which will help them to get new ideas on new ways to satisfy customers.

Today, mobile phone is an essential product for communication. An individual has more than one mobile phone for his / her communication purpose. The reason is that many mobile phone service providers offer many schemes for subscription. Therefore, many people are changing their service providers. Aircel is one among the leading mobile phone service provider. A field study was conducted to know the level of satisfaction derived by the Aircel subscribers in Sivagangai District. Tariff is one of the main factors that influence the level of satisfaction. The decreases in the price of mobile phone sets and the tariff have paved the way for the increased usage of mobile phones among Indians. Today, the market share of mobile phone service users in urban areas is more than the rural areas. Hence, the researchers selected Sivagangai District as the study area. The culture, lifestyle, approaches, attitudes, behaviour of Sivagangai District people differs from other area people. These variables have an impact on the findings of the present field study.

## **STATEMENT OF THE PROBLEM**

Customer satisfaction is the most crucial factor leading to the success of any modern day industry. With increasing competition, customer satisfaction has become one of the major concerns of business establishments. In every industry stuffed with a number of tough companies, customers always have a handful of products to make a choice. So, it becomes necessary for each company to keep its customers satisfied by all means to stay in the industry. With cut-throat competition in the cellular industry, the companies have to maintain a high degree of customer satisfaction. To achieve this, the company must understand the pulse of their customers and the issues their clients are facing from time to time. For this purpose a profile updation and customer issue survey is required to be done. Aircel cellular service plays a prominent role with 900 towers covering 11,000 villages and 800 towns. It faces tough competition from various major rivals like BSNL, Reliance, Hutch, Airtel and the like. At this juncture there is a need to know how far the existing customers are satisfied, on what basis a customer selects a cellular service provider, what induced them to take up Aircel, and what are the aspects that bring their satisfaction.

## **OBJECTIVES OF THE STUDY**

The following are the specific objectives of the study.

1. To find out the relationship between various demographic factors and satisfaction levels of the users of Aircel.
2. To find out the factors most influencing the decision in the selection of the mobile service.
3. To find out the satisfaction level for various factors leading to the overall satisfaction.
4. To find out the satisfaction level for various value added services.
5. To find out the percentage of post paid and prepaid card holders in the study.
6. To find out which category of card holders (post paid / pre paid) are more satisfied with Aircel Cellular Services and



7. To identify the common problems in the usage of Aircel Cellular Service.

### SCOPE OF THE STUDY

This study provides a broad framework of the Aircel users and their satisfaction level. This can be used as a guideline in future business plans and making changes in the current activities. It gives an idea of the areas which need emphasis and development. This study has been conducted in Sivagangai District covering all the areas. There is much scope to include more than one district and to conduct the study taking more than one cellular service.

### METHODOLOGY

Research methodology is a scientific and systematic method of describing, analyzing interpreting and conceptualizing social life. It replaces intuitive decisions by more logical and scientific decisions. The researchers have adopted convenience sampling method to collect the data. The data have been collected from 200 respondents of Sivagangai district with the help of a well structured questionnaire. Questionnaire was the main tool used for collecting primary data. Questionnaire was designed in a systematic way covering adequate and relevant questions which covers all aspects of the study. Questionnaire was prepared with the help of the guide and experts in the research field. The first part of the questionnaire sought the general information about the respondents where as the remaining part was directed towards the main phase of the study. Pilot study was conducted with few samples and necessary modifications were incorporated. The data collected from the primary sources were arranged sequentially and tabulated in a systematic manner. Secondary data was also collected for the study from journals, newspapers, magazines, text books related studies and through internet. The data collected from the primary sources were arranged in the simple tabular statements by preparing a master table. Statistical tools like percentage analysis, chi-square, ranking analysis and factor analysis were used for the analysis of data. Chi-square test was employed to find the relationship among the variables. Ranking analysis was carried out to know the problems in the usage of Aircel. Factor analysis is a technique applicable when there is a systematic interdependence among a set of observed variables and it is used to find out something more fundamental or latent which creates this commonality. In this study we have taken some 15 variables affecting the level of satisfaction. In order to find out some factors which summarize the commonality of variables factor analysis have been used. The data was collected from the period of February 2010 to June 2010.

### LIMITATIONS OF THE STUDY

The following are the limitations of the study.

1. The study is confined to Sivagangai District only.
2. Findings are based only on the information given by the respondents.
3. Due to lack of time the researchers have studied with a sample of 200 respondents in Sivagangai District and
4. There may be errors due to the bias of the respondents.

### REVIEW OF LITERATURE

**Aydin Serkan, Ozer Gokhan and Arasil Omer (2005)** stated that, in the GSM mobile telephony sector, the main condition

for protecting the subscriber base is to win customer loyalty, a key necessity for the maintenance of a brand's life in the long term. To achieve this aim, customer satisfaction and trust must be measured and "switching costs" identified. The latter render subscribers' preference for rival operators more expansive. They found that the switching cost factor directly affects loyalty, and has a moderator effect on both customer satisfaction and trust. Therefore, it plays a crucial role in winning customer loyalty. In short, it is a quasi moderator. However, switching costs was measured as a uni-dimensional factor, but switching costs in fact contains psychological, financial and procedural sub-dimensions. Therefore, future research might measure the sub-dimensions of switching costs and examine their moderating effects. Originality / value – With respect to the findings, trust has more importance than customer satisfaction in engendering loyalty, since trust contains belief in the brand, which provides positive outcomes not only in the present but also in the future. But customer satisfaction does not contain this dimension. So, the effect of trust on loyalty becomes greater than the effect of customer satisfaction. Therefore, any operator who wishes to preserve its existing subscriber base should concentrate on winning its subscribers base should concentrate on winning its subscribers' trust.

**Heikki Karjaluoto, Matti Leppiiniemi, Craig Standing, Sami, Kajalo, Marko Merisavi, Ville Virtanen, Sami Salmenkivi (2006)** studied individual demographic differences in mobile service usage. Given the rapid technological development in mobile handsets and diffusion of new network technologies such as 3C and 4C technologies, consumers are increasingly using new mobile services. The results of the study revealed that there are significant demographic differences in relation to various dimensions of experience with mobile communications and mobile marketing.

**Jiyoung Kim (2006)** in his study developed an empirical framework to analyze consumer's dynamic switching decision in the cellular service industry. It first incorporates the sequential problem of quantity, plan and firm subscription choice in the presence of switching costs into a dynamic structural model, which allows for fully heterogeneous consumers and multiple switching possibilities across networks. The magnitude of switching costs is estimated and it turns out that switching costs vary across networks. Lower switching costs encourage consumers to switch relatively early. Change in the variety of optional plans and plan characteristics also play a great role in the consumers' switching decision.

**Keval J. Kumar and Amos O. Thomas (2006)** until the mid-1990s the ownership of a telephone in India was considered a luxury, not a consumer item. The waiting period for a landline could extend from five to 10 years. Even in 1996, for instance, people were waiting for a telephone after having paid a hefty amount as an application deposit for three to five years. Today in many states companies are competing to gain customers and there is no waiting list. Mobile telephone services have become so cheap now that subscriptions have outpaced fixed line connections. In 2005 and 2006 on average 4.5 million new mobile subscribers were added every month. The rapid spurt in tele-density has been exceeded only by China. This study offered a political economic analysis of the dramatic growth of the cellular telephone industry during the last decades in India and China, and the public policy on deregulation that has driven this growth. In India the liberalization of



telecommunications was ushered in the early 1990s by the Congress regime. The study also discussed the 'mobile divide' in the country, and between the urban and the rural sectors, and how this divide had an impact on economic development. Some experiments in taking cellular telephony to the rural poor were described. Finally, this study examined the uses and gratifications provided by cellular telephony, especially among the Indian youth.

**Abdolreza Eshaghi, Dominique Haughton and Heikki Topi (2007)** investigated the determinants of the propensity to switch wireless service providers. A model generated from the data rather than from a priori theory is presented, and it is found to uphold the strong relationship between customer satisfaction and customer loyalty exhibited in prior studies. In sharp contrast to the prevailing industry practice of 'locking in' customers by means of restrictive contracts, this research suggests that wireless service providers are better off improving customer satisfaction in order to minimize customer defection. This would imply shifting scarce resources to customer retention through improved service, saving costs of expensive customer acquisition campaigns.

**Anita Seth, Hari Mohan Gupta, Kirankumar Momaya (2007)** With the rapidly changing technologies, customer needs and increased customer awareness, it becomes imperative to review the Quality of Service (QoS) parameters for cellular mobile communication. An important objective of this study was to develop a model of service quality and a set of dimensions for comparative evaluation, which could provide useful directions to regulators and service providers.

**ANALYSIS AND INTERPRETATION OF DATA**

The data collected through the well structured questionnaire is analyzed and interpretation is made on the basis of such analysis are represented as below:

**AGE AND SATISFACTION LEVEL**

Customer wants and needs always change with age. Age is an important factor in decision making. For the purpose of study age has been classified into four categories below 20 years, 20-35 years, 35-50 years and above 50 years.

**TABLE 1  
AGE WISE CLASSIFICATION OF THE RESPONDENTS**

Sl. No.	AGE GROUP	NUMBER OF RESPONDENTS	PERCENTAGE
1	Below 20 years	64	32.0
2	20-35 years	107	53.5
3	35-50 years	27	13.5
4	Above 50 years	2	1.0
	Total	200	100

Source: Primary Data

It has been observed from the above table that 32% of the respondents belong to the category of below 20 years. 53.5% of the respondents belong to the age group of 20-35 years, 13.5% of the respondents are from the age group of 35-50 years. And only 1% belong to the age group of above 50 years.

**GENDER AND LEVEL OF SATISFACTION OF THE RESPONDENTS**

Gender is another demographic variable which may influence the satisfaction level. For the purpose of study the respondents

have been categorized as male and female and their satisfaction level with the usage of Aircel cellular services was analyzed.

**TABLE 2  
GENDER WISE CLASSIFICATION OF THE RESPONDENTS**

Sl. No.	GENDER	NUMBER OF RESPONDENTS	PERCENTAGE
1	Male	110	55.0
2	Female	90	45.0
	Total	200	100

Source: Primary Data

It is found from the table that 55% of the respondents of the study are male and 45% of the respondents are female users. So the study covers both male and female users in more or less equal manner.

**EDUCATIONAL QUALIFICATION AND LEVEL OF SATISFACTION OF THE RESPONDENTS**

Education is one of the demographic variables which have its own influence on the level of satisfaction. For the purpose of study, the respondents have been classified on the basis of their educational qualification as illiterate, school, graduate, post graduate and professional and their level of satisfaction was analyzed.

**TABLE 3  
EDUCATION WISE CLASSIFICATION OF THE RESPONDENTS**

Sl. No.	EDUCATIONAL QUALIFICATION	NUMBER OF RESPONDENTS	PERCENTAGE
1	Illiterate	7	3.5
2	School	107	53.5
3	Graduate	27	13.5
4	Post Graduate	2	1.0
5	Professional	12	6.0
	Total	200	100

Source: Primary Data

It is inferred from the table that only 3.5% of the respondents are illiterate, 6% belong to the category of professional. 54.5% and 16.5% of the respondents are graduates and post graduates respectively and 19.5% of the respondents belong to the category of school.

**OCCUPATION AND LEVEL OF SATISFACTION OF THE RESPONDENTS**

Occupation is one of the demographic variables that play is significant role in determining the level of satisfaction. For the purpose of study the occupations of the respondents were classified into 5 categories as student, professional, employee, businessman and agriculturist and their level of satisfaction was analyzed.

**TABLE 4  
OCCUPATIONAL CLASSIFICATION OF THE RESPONDENTS**



Sl. No.	OCCUPATION	NUMBER OF RESPONDENTS	PERCENTAGE
1	Students	98	49.0
2	Professionals	14	7.0
3	Employees	41	20.0
4	Businessmen	18	9.0
5	Agriculturists	29	14.5
	Total	200	100.0

Source: Primary Data

It is observed from the above table that 49% of the respondents are students, 7% of the respondents are professional, 20.5% are employees, 9% belong to the category of businessman and 14.5% are agriculturists.

**MONTHLY INCOME AND LEVEL OF SATISFACTION OF THE RESPONDENTS** Income is one of the demographic variables which are very influential in determining the satisfaction level. For the purpose of study the income of the respondents have been classified into 4 categories like below Rs.5,000, Rs.5,000-10,000, Rs.10,000-15,000 and above Rs.15,000 and shown in the table below.

**TABLE 5**  
**INCOME WISE CLASSIFICATION OF THE RESPONDENTS**

Sl. No.	MONTHLY INCOME	NUMBER OF RESPONDENTS	PERCENTAGE
1	Below Rs.5,000	58	29.0
2	Rs.5,000-10,000	109	54.5
3	Rs.10,000-15,000	26	13.0
4	Above Rs.15,000	7	3.5
	Total	200	100.0

Source: Primary Data

It has been observed from the above table that 29% of the respondents belong to the category of below Rs.5,000 income group, 54.5% of the respondents belong to the income group of Rs.5,000-10,000, and 13% of the respondents belong to the third category of Rs.10,000-15,000 and only 3.5% of the respondents belong to the income group of Above Rs.15,000.

**PERIOD OF USAGE AND LEVEL OF SATISFACTION OF THE RESPONDENTS** It is the most important demographic variable which influences the level of satisfaction of the respondents because, satisfied customers will continue their dealings with the same company. For the purpose of study, the period of usage was classified into 5 categories, like 1 month, 1-6 months, 1 year, 2 years and above 2 years.

**TABLE 6**  
**RESPONDENTS CLASSIFICATION ON THE BASIS OF PERIOD OF USAGE**

Sl. No.	PERIOD OF USAGE	NUMBER OF RESPONDENTS	PERCENTAGE
1	1 month	12	6.0
2	1 – 6 months	67	33.5
3	1 year	53	26.5
4	2 years	26	13.0
5	Above 2 years	42	21.0
	Total	200	100.0

Source: Primary Data

It is inferred from the above table that only 6% of the respondents belong to the category 1 month, 33.5% and 26.5% of the respondents belong to the category of 1-6 months and 1 year respectively. 13% of the respondents are using the Aircel for 2 years and 21% belong to the category of above 2 years.

**TYPE OF SCHEME AND LEVEL OF SATISFACTION OF THE RESPONDENTS**

Type of scheme is the most important variable affecting the level of satisfaction considerably. For the purpose of study the schemes held by the respondents have been classified into their two general categories of postpaid and prepaid.

**TABLE 7**  
**SCHEME WISE CLASSIFICATION OF THE RESPONDENTS**

Sl. No.	TYPE OF SCHEME	NUMBER OF RESPONDENTS	PERCENTAGE
1	Prepaid	133	66.5
2	Postpaid	67	33.5
	Total	200	100.0

Source: Primary Data

It is inferred from the above table that 66.5% of the respondents are prepaid card holders and 33.5% of the respondents are using post paid schemes in Aircel cellular services.

**AGE GROUP OF THE RESPONDENTS AND LEVEL OF SATISFACTION**

It is highlighted from the table 8 that percentage of high satisfaction in usage of Aircel cellular services was the highest (65.8) among the respondents belonging to the age group of below 20 years. And percentage of low satisfaction was the highest (73.3) and lowest (3.3) among the respondents belonging to the age group of 20-35 and above 50 respectively and percentage of medium satisfaction was highest (59.8) and lowest (0.8) among the respondents belonging to the age group of 20-35 and above 50 respectively. In order to find out the relationship between the age group of the respondents and the level of satisfaction towards Aircel cellular services, the chi-square test was used.

**TABLE 8**  
**AGE GROUP OF THE RESPONDENTS AND LEVEL OF SATISFACTION**

Sl. No.	AGE GROUP	LEVEL OF SATISFACTION			TOTAL
		high	medium	low	
1	Below 20 years	25 (12.16)	34 (42.24)	5 (9.6)	64
2	20-35 years	6 (20.33)	79 (70.62)	22 (16.05)	107
3	35-50 years	7 (5.13)	18 (17.82)	2 (4.05)	27
4	Above 50 years	0 (0.38)	1 (1.32)	1 (0.3)	2
	Total	38	132	30	200

Source: Calculated from Primary Data

(Figures given in the brackets represent the Expected Frequency)

**Null hypothesis:** The association between the age group of the respondents and their level of satisfaction towards the Aircel cellular services is not significant. As the calculated chi-square value (34.483) is greater than the table value (12.592) at 5% level of significance for 6 degrees of freedom,



the null hypothesis is rejected and it could be concluded that the association between the age group of the respondents and their level of satisfaction towards the Aircel cellular services is significant. Therefore, it is inferred that the age group of the respondents and their satisfaction level are closely related.

**GENDER AND LEVEL OF SATISFACTION OF THE RESPONDENTS**

It is inferred from table 9 that percentage of high satisfaction in the usage of Aircel cellular services was the highest (52.6) among the female respondents and it was lowest (47.4) among the male respondents. Percentage of low level of satisfaction was highest (73.3) among the male respondents and it was lowest (26.7) among the female respondents. And percentage of medium level of satisfaction was the highest (53) among the male respondents and it was lowest (47) among the female respondents. In order to find out the relationship between the gender of the respondents and the level of satisfaction chi-square test was used.

**TABLE 9  
GENDER AND LEVEL OF SATISFACTION OF THE RESPONDENTS**

Sl. No.	GENDER	LEVEL OF SATISFACTION			TOTAL
		high	medium	low	
1	Male	18(20.9)	70 (72.6)	22 (16.5)	110
2	Female	20 (17.1)	62 (59.4)	8 (13.5)	90
	Total	38	132	30	200

Source: Calculated from Primary Data

(Figures given in the brackets represent the Expected Frequency)

**Null hypothesis:** The association between the gender of the respondents and their level of satisfaction towards the Aircel cellular services is not significant. As the calculated chi-square value (5.175) is less than the table value (5.991) at 5% level of significance for 2 degrees of freedom, the null hypothesis is accepted and it could be concluded that the association between the gender of the respondents and their level of satisfaction towards the Aircel cellular services is not significant. Therefore, it is inferred that the gender of the respondents and their satisfaction level are not closely related.

**EDUCATIONAL QUALIFICATION Vs LEVEL OF SATISFACTION OF THE RESPONDENTS**

It was observed from the table 10 that percentage of high level of satisfaction was the highest (63.2) among the graduates and lowest (2.6) among the post graduates. Percentage of low level of satisfaction was the highest (66.7) among the graduates and it was the lowest (6.7) among the respondents belonging to the category of school. In order to find out the relationship between the educational qualification and the level of satisfaction of the respondents chi-square test was used

**TABLE 10  
EDUCATIONAL QUALIFICATION AND LEVEL OF SATISFACTION OF THE RESPONDENTS**

Sl. No.	EDUCATIONAL QUALIFICATION	LEVEL OF SATISFACTION			TOTAL
		high	medium	low	
1	Illiterate	4 (1.33)	3 (4.62)	0 (1.05)	7
2	School	9 (7.41)	25 (25.74)	5 (5.85)	39
3	Graduate	24 (20.71)	65 (71.94)	20 (16.35)	109
4	Post Graduate	1 (6.27)	28 (21.78)	4 (4.95)	33

5	Professional	0 (2.28)	11 (7.92)	1 (1.8)	12
	Total	38	132	30	200

Source: Calculated from Primary Data

(Figures given in the brackets represent the Expected Frequency)

**Null hypothesis:** The association between the educational qualification of the respondents and their level of satisfaction towards the Aircel cellular services is not significant. As the calculated chi-square value (19.689) is greater than the table value (15.507) at 5% level of significance for 8 degrees of freedom, the null hypothesis is rejected and it could be concluded that the association between the educational qualification of the respondents and their level of satisfaction towards the Aircel cellular services is significant. Therefore, it is inferred that the educational qualification of the respondents and their satisfaction level are closely related.

**OCCUPATION AND LEVEL OF SATISFACTION OF THE RESPONDENTS**

It is observed from the table 11 that percentage of high level of satisfaction was the highest (76.3) and the lowest (5.3) among the students and businessmen respectively. And percentage of low level of satisfaction was the highest (56.7) among the students and lowest (6.7) among the professionals and businessman. Percentage of medium level of satisfaction was the highest (39.4) among the respondents belonging to the category of student and it was the lowest (9.1) among the professional. In order to find out the relationship between occupation and the level of satisfaction chi-square test was employed

**TABLE 11  
OCCUPATION AND LEVEL OF SATISFACTION OF THE RESPONDENTS**

Sl. No.	OCCUPATION	LEVEL OF SATISFACTION			TOTAL
		high	medium	low	
1	Students	29 (18.62)	52 (64.68)	17 (14.7)	98
2	Professionals	0 (2.66)	12 (9.24)	2 (2.1)	14
3	Employees	0 (7.79)	37 (27.06)	4 (6.15)	41
4	Businessmen	2 (3.42)	14 (11.88)	2 (2.7)	18
5	Agriculturists	7 (5.51)	17 (19.14)	5 (4.35)	29
	Total	38	132	30	200

Source: Calculated from Primary Data

(Figures given in the brackets represent the Expected Frequency)

**Null hypothesis:** The association between the occupation of the respondents and their level of satisfaction towards the Aircel cellular services is not significant.

As the calculated chi-square value (26.203) is greater than the table value (15.507) at 5% level of significance for 8 degrees of freedom, the null hypothesis is rejected and it could be concluded that the association between the occupation of the respondents and their level of satisfaction towards the Aircel cellular services is significant. Therefore, it is inferred that the occupation of the respondents and their satisfaction level are closely related.

**MONTHLY INCOME AND LEVEL OF SATISFACTION OF THE RESPONDENTS**

It is inferred from the table 12 that percentage of high level of satisfaction in the usage of Aircel cellular services was the



highest (57.9) among the respondents belonging to the income group of Rs.5,000-10,000 and it was the lowest (10.5) among the respondents belonging to the income group of Rs.10,000-15,000. And percentage of low level of satisfaction was the highest (43.3) and lowest (3.3) among the respondents belonging to the category of Rs.5,000-10,000 and above Rs.15,000 respectively. In order to find out the relationship between the monthly income of the respondents and their level of satisfaction chi-square test was used

TABLE 12

#### MONTHLY INCOME AND LEVEL OF SATISFACTION OF THE RESPONDENTS

Sl. No.	MONTHLY INCOME	LEVEL OF SATISFACTION			TOTAL
		high	medium	low	
1	Below Rs.5,000	12 (11.02)	35 (38.28)	11 (8.7)	58
2	Rs.5,000-10,000	22 (20.71)	74 (71.94)	13 (16.35)	109
3	Rs.10,000-15,000	4 (4.94)	17 (17.16)	5 (3.9)	26
4	Above Rs.15,000	0 (1.33)	6 (4.62)	1 (1.05)	7
	Total	38	132	30	200

Source: Calculated from Primary Data

(Figures given in the brackets represent the Expected Frequency)

**Null hypothesis:** The association between the monthly income of the respondents and their level of satisfaction towards the Aircel cellular services is not significant. As the calculated chi-square value (4.037) is less than the table value (12.592) at 5% level of significance for 6 degrees of freedom, the null hypothesis is accepted and it could be concluded that the association between the monthly income of the respondents and their level of satisfaction towards the Aircel cellular services is not significant. Therefore, it is inferred that the monthly income of the respondents and their satisfaction level are not closely related.

#### PERIOD OF USAGE AND LEVEL OF SATISFACTION OF THE RESPONDENTS

It is observed from the table 13 that percentage of high level of satisfaction in the usage of Aircel cellular services was the highest (34.2) among the respondents belonging to the category of 1 year, and it was the lowest (7.9) among the respondents belonging to the category of 1 month and 2 years. And percentage of the low level of satisfaction was the highest (36.7) among the respondents belonging to the category of 1-6 months and it was the lowest (6.7) among the respondents belonging to the category of 1 month and above 2 years. In order to find out the relationship between the period of usage and level of satisfaction of the respondents, chi-square test was employed.

TABLE 13

#### PERIOD OF USAGE AND LEVEL OF SATISFACTION OF THE RESPONDENTS

Sl. No.	PERIOD OF USAGE	LEVEL OF SATISFACTION			TOTAL
		high	medium	low	
1	1 month	3 (2.28)	7 (7.92)	2 (1.8)	12
2	1 - 6 months	9 (12.73)	47 (44.22)	11 (10.05)	67
3	1 year	13 (10.07)	31 (34.98)	9 (7.95)	53
4	2 years	3 (4.94)	17 (17.16)	6 (3.9)	26

5	Above 2 years	10 (7.98)	30 (27.72)	2 (6.3)	42
	Total	38	132	30	200

Source: Calculated from Primary Data

(Figures given in the brackets represent the Expected Frequency)

**Null hypothesis:** The association between the period of usage of the respondents and their level of satisfaction towards the Aircel cellular services is not significant.

As the calculated chi-square value (8.686) is less than the table value (15.507) at 5% level of significance for 8 degrees of freedom, the null hypothesis is accepted and it could be concluded that the association between the period of usage of the respondents and their level of satisfaction towards the Aircel cellular services is not significant. Therefore, it is inferred that the period of usage of the respondents and their satisfaction level are not closely related.

#### TYPE OF SCHEME AND LEVEL OF SATISFACTION OF THE RESPONDENTS

It is highlighted from the table 14 that percentage of high level of satisfaction in the usage of Aircel cellular services was the highest (76.3) among the prepaid card holders and it was the lowest (23.7) among the postpaid connection holders. Percentage of low level of satisfaction was the highest (80.0) among the prepaid card holders and it was the lowest (20.0) among the respondents using post paid schemes. In order to find out the relationship between the type of schemes used by the respondents and their level of satisfaction chi-square test was employed.

TABLE 14

#### TYPE OF SCHEME AND LEVEL OF SATISFACTION OF THE RESPONDENTS

Sl. No.	TYPE OF SCHEME	LEVEL OF SATISFACTION			TOTAL
		high	medium	low	
1	Prepaid	29 (25.27)	80 (87.78)	24 (19.95)	133
2	Postpaid	9 (12.73)	52 (44.22)	6 (10.05)	67
	Total	38	132	30	200

Source: Calculated from Primary Data

(Figures given in the brackets represent the Expected Frequency)

**Null hypothesis:** The association between the type of scheme of the respondents and their level of satisfaction towards the Aircel cellular services is not significant.

As the calculated chi-square value (6.156) is greater than the table value (5.991) at 5% level of significance for 2 degrees of freedom, the null hypothesis is rejected and it could be concluded that the association between the type of scheme of the respondents and their level of satisfaction towards the Aircel cellular services is significant. Therefore, it is inferred that the type of scheme of the respondents and their satisfaction level are closely related.

#### PRINCIPAL COMPONENT METHOD

There are several methods of factor analysis, but they do not necessarily give same results. For the purpose of study the researchers have used principal components method developed by hotelling. This method seeks to maximize the sum of squared loadings of each factor extracted in turn. For the purpose of study, the respondents were asked to indicate



their level of satisfaction upon various factors leading to the overall satisfaction using five point scales. The factors taken for this purpose include customer care, incoming calls, outgoing call cost, changes in tariffs, staff & services, complaint resolution, responsiveness to enquiries, company image, entry cost, monthly fixed cost, coverage, voice clarity, roaming facility, SMS, Recharge period & facilities. The factor analysis was made on the basis of the response given by the respondents upon the five point scale classified as highly satisfied, satisfied, neutral, dissatisfied and highly dissatisfied. The results of the factor analysis are given below.

**TABLE 15**  
**ROTATED COMPONENT MATRIX**

FACTORS	COMPONENTS			
	1	2	3	4
Customer care	0.778	0.048	0.236	-0.075
Incoming Calls	0.149	0.145	0.540	0.122
Outgoing Call Cost	0.150	0.736	0.247	0.197
Changes in Tariffs	0.003	0.109	-0.152	0.746
Staff & Services	0.846	0.179	0.071	0.057
Complaint Resolution	0.876	0.138	0.015	0.078
Responsiveness to Enquiries	0.849	0.181	0.049	0.022
Company Image	0.570	0.326	0.250	-0.325
Entry Cost	0.221	0.794	0.012	0.087
Monthly Fixed Cost	0.156	0.777	0.179	-0.004
Coverage	-0.096	0.261	0.302	0.604
Voice Clarity	0.211	0.287	0.479	0.254
Roaming Facility	0.036	-0.03	0.254	0.722
SMS	-0.007	0.04	0.841	-0.07
Recharge Period & Facilities	0.213	0.125	0.707	0.182

Extraction Method : Principal Component Analysis

Rotation Method : Varimax with Kaiser Normalization

Rotation converged in 6 iterations

Source: Calculated from Primary Data

The factors for which the Eigen values are more than 1 were selected as the principal component factors. The variables for which the values are more than 0.6 were extracted from each principal component.

#### FACTOR DEFINITION

On the basis of the above analysis four factors have been extracted and named and their component variables affecting the level of satisfaction of the respondents are given with their corresponding values in the following factor definition table 16.

**TABLE 16**  
**FACTOR DEFINITION**

Factor One (Customer Service)	Customer Care	0.778
	Staff & Service	0.846
	Complaint Resolution	0.876
	Responsiveness to Enquiries	0.849
Factor Two (Cost Factor)	Outgoing Call Cost	0.736
	Entry Cost	0.794
	Monthly Fixed Cost	0.777
Factor Three (SMS & Other Facilities)	SMS	0.841
	Recharge Period of Facilities	0.707

Factor Four (Tariff, Coverage & Roaming)	Charges in Tariffs	0.746
	Coverage	0.604
	Roaming	0.722

Source: Calculated from Primary Data

It has been observed from the above table that factor one named as customer service summarizes the commonality of the variables customer care, staff and service, complaint resolution and responsiveness to enquiries. Factor two named as cost factor summarizes the commonality of the variables outgoing call cost, entry cost and monthly fixed cost. Factor three named as SMS and other facilities summarizes the commonality of the variables SMS, Recharge period and facilities. Factor four named as tariff, coverage and roaming summarizes the commonality of the variables changes in tariffs, coverage and roaming.

**TABLE 17**  
**PRINCIPAL COMPONENTS**

	1	2	3	4
Eigen value i.e. Common Variance	3.351	2.322	2.126	1.728
% of Variance	22.348	15.477	14.176	11.518
Cumulative % of Variance	22.348	37.825	52.002	63.519

Source: Calculated from Primary Data

This table gives us further information about the usefulness of the 4 components in explaining the relations among the 15 variables. Eigen value give the numerical value of that portion of the variance attributed to the factor in the concerning column. Total variance (V) in the analysis is taken as equal to the number of variables involved so  $V=15$ . Thus the total value of 15 is partitioned into 3.352 as Eigen value for factor one, 2.322 as Eigen value for factor two, 2.126 as Eigen value for factor three and 1.728 as Eigen value for factor four and the total 11.528 as the sum of Eigen values for these four factors.

It is identified that 63.519% of the total variance is related to these four principal components i.e. 63.519% of the total variance is common variance where as remaining 36.481% of it is made up portions unique to individual variables and the techniques used to measure them.

#### RANK ORDER OF THE FACTORS INFLUENCING SELECTION OF AIRCEL

In order to find out the most influencing factor in the selection Aircel, some seven factors like entry cost, incoming calls, outgoing call cost, coverage, voice clarity, roaming facility and SMS were given to the respondents and they were asked to rank those factor in order in which they influence their decision in the selection of Aircel. Ranking analysis was made on the data and the result is given in the following table 18.

**TABLE 18**  
**RANK ORDER OF THE FACTORS INFLUENCING SELECTION OF AIRCEL**

Sl. No.	OPINION	TOTAL SCORE	MEAN SCORE	RANK
1.	Entry Cost	10351	51.8	V
2.	Incoming Calls	11801	59.0	II
3.	Outgoing Call Cost	10854	54.3	IV



4.	Coverage	11279	56.4	III
5.	Voice Clarity	9454	47.3	VI
6.	Roaming Facility	8933	44.7	VII
7.	SMS	12127	60.6	I
8.	Others	5824	29.1	VIII

Source: Calculated from Primary Data

It is observed from the above table that SMS and incoming calls are the most influencing factors in the selection of Aircel cellular services which were ranked first and second with total scores of 12127 and 11801 respectively. Coverage had been ranked III with total scores 11279 and outgoing call cost had been ranked IV with total scores of 10854. Entry cost and voice clarity had been ranked V and VI with total scores of 10351 and 9454 respectively. Roaming facility had been ranked as the VII factor with total score of 8933. Others were coming as the VIII factor with total scores of 5824.

#### SATISFACTION LEVEL OF THE RESPONDENTS WITH VARIOUS VALUE ADDED SERVICES RENDERED BY AIRCEL

Various value added services are provided by the cellular services as switching inducements in order to increase their subscriber base. Purchase decisions are taken by the consumers mainly tempted by these value added services in most of the cases. To identify the level of satisfaction upon these value added services rendered by Aircel, some 11 of them were given to the respondents and they were asked to indicate their level of satisfaction using five point scale ranging from highly satisfied to highly dissatisfied. Percentage analysis was made over the responses and result is given in the following table 19.

TABLE 19

#### SATISFACTION LEVEL WITH THE VALUE ADDED SERVICE OF THE RESPONDENTS

Sl. No.	Value Added Services	Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly Dissatisfied
1	Add On	79 (39.5)	83 (41.5)	31 (15.5)	7 (3.5)	0 (0.0)
2.	Double Validity	79 (39.5)	86 (43)	34 (17)	0 (0.0)	1 (0.5)
3.	Missed Call Alerts	60 (30)	103 (51.5)	25 (12.5)	8 (4)	4 (2)
4.	Dial A Song	61 (30.5)	77 (38.5)	35 (17.5)	20 (10)	7 (3.5)
5.	Free One Year Incoming Call	68 (34)	81 (40.5)	44 (22)	4 (2)	3 (1.5)
6.	Call Divert	48 (24)	88 (44)	54 (27)	6 (3)	4 (2)
7.	Call Waiting Alerts	64 (32)	95 (47.5)	34 (17)	6 (3)	1 (0.5)
8.	Free Unlimited Local SMS	91 (45.5)	80 (40)	23 (11.5)	5 (2.5)	1 (0.5)
9.	Group Card Facility (CUG)	51 (25.5)	52 (26)	87 (43.5)	3 (1.5)	7 (3.5)
10.	Call Conference	57 (28.5)	76 (38)	61 (30.5)	5 (2.5)	1 (0.5)
11.	Talking SMS	40 (20)	83 (41.5)	56 (28)	16 (8)	5 (2.5)

Source: Calculated from Primary Data

It is observed from the above table that percentage of satisfied respondents are much more than the percentage of dissatisfied and no opinion respondents. 39.5% and 41.5% of the respondents are highly satisfied and satisfied respectively with add on services. 43% of the respondents are satisfied with

double validity, and 51.5% are satisfied with missed call alerts. 30.5% and 38.5% of respondents are highly satisfied and satisfied respectively, with dial a song. 40.5% are satisfied with free 1 year incoming call, 44% are satisfied with call divert. 47.5% are satisfied with call waiting alerts. 49.5% and 40% of the respondents are highly satisfied and satisfied with free unlimited local SMS. As far as CUG is concerned, 43.5% of the respondents are of no opinion, only 26% are satisfied with CUG. 39% are satisfied with call conference and 41.5% of the respondents are satisfied with talking SMS.

#### PROBLEMS FACED BY THE RESPONDENTS WHILE USING AIRCEL CELLULAR SERVICE

To identify the problems in the usage of the Aircel, the respondents were given some 6 problems like network busy, tariff problem, SMS problem, tower, roaming and delay in bill sending, and they were asked to indicate the existence of the problems. Percentage analysis was made to know the intensity of the problems and result is shown in the following table 20.

TABLE 20

#### PROBLEMS FACED BY THE RESPONDENTS WHILE USING AIRCEL CELLULAR SERVICE

Sl. No.	OPINION	YES	NO
1.	Network Busy	190 (95.0)	10 (5.0)
2.	Tariff Problem	134 (67.0)	66 (33.0)
3.	SMS Problem	101 (50.5)	99 (49.5)
4.	Tower	121 (60.5)	79 (39.5)
5.	Roaming	124 (62.0)	76 (38.0)
6.	Delay in Bill Sending	106 (53.0)	94 (47.0)
7.	Others if any	40 (20.0)	160 (80.0)

Source: Primary Data

It is inferred from the above table that 95% of the respondents are suffering from network busy problems which should be considered by the company. 67% of the respondents are having tariff problem, 50.5% and 60.5% of the respondents are having SMS and tower problems respectively. 62% are having roaming problems and 53% of the respondents are having the problems of delay in bill sending.

#### SUGGESTIONS

1. Proportion of prepaid cardholders far exceeds the post paid connection holders among the respondents of the study. The company can take essential steps to increase their subscriber base in the postpaid market also
2. Most of the customers have been influenced by their friends to take up the Aircel mobile service. So new schemes like "bring a customer and take a discount / gift" can be introduced which will help to increase the customer base.
3. The customers seem to be satisfied with various factors leading to the overall satisfaction and with various value added services. So, the company must try to maintain and improve its part in serving the customers on these aspects.
4. The dealers should be kept updated on what is actually happening in the organizations, so as to facilitate them to provide the same to the customers who approach them.
5. The number of customer care centers can be increased in



order to face the severe competition from other players in the mobile market.

6. Adequate steps have to taken to improve the roaming and coverage of the Aircel mobile service.

7. The organization can keep their customers updated with the changes in the product and plans by calling them or through written communication.

8. Majority of the respondents suffer from the problem of busy networks and connectivity to the other cellular service providers was not properly established. Adequate measures should be taken to remove this problem and improve the level of satisfaction.

9. The manuals given to the customers can be provided in their own regional language to enhance the customer understanding and to increase the customer base.

10. Majority of the respondents are suffering from the problem of delay in bill sending. Surely the billing system needs a restructuring which has to incorporate the provisions that are required by the clients.

11. The dissatisfaction caused due to the wrong commitments can be eradicated by providing information which has been implemented, rather than giving them commitment.

**CONCLUSION**

There has been a boom in the Indian telecom sector. Telecom in India infact will grow big enough to support voice free. Customer satisfaction is the most essential factor for the survival and growth of any business concern, particularly in the service sector. Whole hearted commitment to continuous product / service improvement is necessary for achieving high degree of customer satisfaction. So far as value added services and other factors leading to the overall satisfaction with respect to the usage of Aircel, majority of the respondents have high degree of satisfaction. But majority of the respondents are suffering from most of the problems. Aircel should concentrate their efforts in removing these problems so that, the level of satisfaction among the users will increase automatically. Customer satisfaction research is a snapshot at a point of time. People's views change continuously and the performance of companies in delivering customer satisfaction also changes. Measuring satisfaction must be a continuous process. Tracking surveys provides benchmarks of one's own company's performance and the current level of satisfaction.

**REFERENCES:**

Abdolreza Eshghi, Dominique Haughton and Heikki Topi (2007), "Determinants of Customer Loyalty in the Wireless Telecommunications Industry", *Pergamon Press, Inc.* Vol. 31, Issue 2, pp. 93-106.

Anita Seth, Hari Mohan Gupta and Kirankumar Momaya, "Quality of Service Parameters in Cellular Mobile Communication", *International Journal of Mobile Communications (IJMC)*, Vol. 5, No. 1, 2007.

Aydin Serkan, Ozer Gokhan and Arasil Omer (2005), "Customer Loyalty and the Effect of Switching Costs as a Moderator Variable: A Case in the Turkish Mobile Phone Market", *Marketing Intelligence & Planning*, Emerald Group Publishing Limited, Vol. 23, No. 1, pp. 89-103(15).

Banumathy S. and Kalaivani S, "Customers' Attitude Towards Cellphone Services in Communication System", *Indian Journal of Marketing*, Vol. XXXVI, No.3, March 2006, pp.31-36.

Heikki Karjaluoto, Matti Leppiiniemi, Craig Standing, Sami, Kajalo, Marko Merisavo, Ville Virtanen and Sami Salmenkivi (2006), "Individual Differences in the Use of Mobile Services Among Finnish Consumers", *Indian Journal of Mobile Marketing*, Vol. 1 No. 2, p. 4.

Kim, Jiyoung, "Consumers' Dynamic Switching Decisions in the Cellular Service Industry" (November 2006), *NET Institute Working Paper*, No. 06-24.

Keval J. Kumar and Amos O. Thomas, "Telecommunication and Development", *Journal of Creative Communications*, Sage Publications, Vol. 1, No. 3, 297-309 (2006).

Sinha P. K. and Sahoo S. C, "*Services Marketing*", Himalaya Publishing House, New Delhi, 2004.

Vasanti Venugopal and Raghu. V. N. , "*Services Marketing*", Himalaya Publishing House, New Delhi, 2004.

Veenapani A, "Using Information Technology to Enhance Customer Service", *Indian Journal of Marketing*, New Delhi, Vol. XXXVI, No.6, June 2006, pp.36-38.

Vijayakumar R. and Ruthra Priya P, "Satisfaction Derived by the Airtel Subscribers in Coimbatore", *Indian Journal of Marketing*, New Delhi, Vol. XXXVI, No.1, January 2006, pp.3-7.

