

# Study of Customers Expectations Toward Cellular Service Providers in Rural Area

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## Abstract

The Cellular Mobile Industry is a vital sector contributing to the country's socio - economic Development and the contribution to the enhancement of the common man's quality of life, is Immense. As per the subscriber data released by TRAI, the wireless industry has more than 95% of the telephone subscribers in the country i.e. of the 806.13 Million subs as of 31st January 2011; the wireless industry has contributed more than 771.18 million. Indian .India has many number of players for cellular service provision .so the tariff are all the times low ,this allows service providers to target the low income population to increase market share. Due to mobile number portability consumer can switch easily from one to another without change in Number. The objective of the study is find out the requirements of customer which they expect from Cellular service providers. As the time changes the requirement get changed. today only voice communication is not only sufficient add on services are required as per need .So to know the upcoming requirement of customers and services can be delivered accordingly which makes customer happy. In this study the quality of network, Coverage, service provision, tariff, customer care and service offering are the considered. Tariff and quality of network are the key parameters for the network The covered area under this study was Baramati due to availability of well mixed rural population base in Pune district.

Structured questionnaire was designed to collect primary data, secondary data taken from the official websites of service providers and regulatory websites. Stratified sampling is used for collection of data .The sample size was 200 and the variable considered are Tariff, customer care, quality, Billing and Value added services. It help the cellular service provider (CSP) to understand the customer psychology in choosing the services that can be positioned .This study help us to know the consumers perception toward cellular service provider. And to educate the customers for the services availability. The result of business is a satisfied customer; in present era of competition it is no longer to satisfy the customer, he must be delighted.

## Keywords:

Attitude, Awareness, CSP, VAS, Value added services, SMS, GPRS, MMS, IVRS -Interactive Voice Response system, Call centre, PRBT - personalized ring back tone, caller tone SMS -short messaging services, MMS multimedia messaging, Customer, Subscriber, Operator, cellular, Mobile

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## Introduction

Invention of cellular technologies and its evolution is the biggest boon to mankind. Telecommunication industry is growing at a rapid rate. There

are 512.26 Million Urban 258.93 million mobile subscribers rural subscriber according to TRAI. Ever since cellular world came into existence, there has been continuous innovation around cellular services. Today, mobile phones have moved beyond their primary role of voice communications and have graduated to become an essential entertaining device for mobile users. We are in an era where users purchase mobile phones not just to be in touch with people, but use it to express their thoughts, for social networking, to show their interests, send photos, download images, play games, read news, surf on the Internet, listen to music, chat instantly with friends & families and even check their bank balances. As the Mobile provides benefit to improve quality of life. Life is getting faster and world is getting smaller. Its has its advantages to individuals and society.

1. Making connection, communication and accessibility
2. Care of safety
3. Effective handling of business
4. People come close together forming by groups

Such commutation benefit and change in requirement, information flood, Growth in various fields Shortage of time creating greater expectations of customer. Every day customer is getting Awareness of his Service qualities. Various shortcomings in services generate new demands or new service request.

Mobile interconnected industries are every day coming up with fresh and ground - breaking mobile technologies. Mobile VAS accounts to 10 - 12% of the total telecom revenues. 806.13 Million Wireless subscribers in India, out of which 8 - 10% of the total mobile subscribers are expected to be GPRS (General Packet Radio Services) subscribers as well. At present CRBT (caller Ring back tone) download and SMS (A2P) mobile VAS seems most popular amongst mobile users. As the launch of 3G services (faster data speed) in India, games download, video streaming, mCommerce, mobile blogs and mobile chat is expected to grow in future. As per TRAI predictions, mobile VAS revenue growth contributing to

telecommunication industry is expected to grow to 30% in next 5 - 7 years, which is way beyond the current contribution of 10 - 12%.

**Scope of the Study**

The scope of study covers Mobile Service(Global system for Mobile Communication) provided by cellular service providers, in Baramati Town. As its Small Town where the All types of users are available like employee, Farmers, Industrial with Urban and Rural communities i.e. The Mixed population.

**Research Objectives:**

1. To know satisfaction level for various services offered by cellular services provider in Rural area
2. To know perception of customers toward Service providers to improve their quality of service and introduction of new services as per requirements
3. To Study Attitude toward VAS service provision and offerings by CSP

**Hypotheses**

1. Communication need increased in Rural areas like other basic needs for life
2. Awareness of Rural mobile customer is increasing day by day for new value added services in Mobile telephony provided by CSP

**Research Methodology and Data Collection**

Primary Data: collected through structured questionnaire from 200 customers with making four regions of Baramati town East area, west area, south area and north area 50 respondents from each area

In this research study, Primary data was collected using survey method Structured Questionnaire was prepared with appeal that purpose of the Researcher and use of collection data

This questionnaire was divided in four sections. Details of section are as follows.

**Table 1.1**

Sr No	Description	Parameters
Section A	General Information	AGE, SEX, INCOME, Marital status, Occupation
Section B	Service Information	Type, complaint handling, pay mode, Quality and Staff
Section C	Value added Services information	SMS BASED, MMS, GPRS, IVRS BASEB, WEB BASEB services
Attribute table	Five point scale for Services from Most to Least satisfied	Tariff and charges, Billing, Customer care, Add on facility, Value added services, Quality related

**Data Analysis**

1. The data has been entered in MS Excel before it was transferred to SPSS for the further data analysis. Codes using Likert scale having 5 points starting from strong satisfaction to the strong dissatisfaction. The composite scores were calculated for the individual sub categories of these attributes by using weighted average method.

The weights being the number of subcategories for the respective categorical variable.

2. To assess the statistical significance of difference between the scores of attributes regarding the satisfaction levels of pre - paid and post - paid mobile customers we used Mann - Whitney U test, a non - parametric test for comparing the two groups.

## Testing of Hypothesis:

### Hypothesis -1

**H0:** Awareness of Rural customer is increasing day by day for new services in Mobile telephony.

**H1:** Awareness of Rural customer is not increasing day by day for new services in Mobile telephony.

Table (1.2) the distribution of awareness of pre - paid and post - paid mobile customers towards new services in mobile telephony.

Table1.2

Factors	Pre-paid customer (n=126)	Post-paid customer (n=74)	All customers (n=200)	P-value
Awareness related to New services (composite score)	5.0 (3.5-5.0)	4.0 (3.0-5.0)	4.5 (3.0-5.0)	0.024
SMS/ Group SMS	5.0 (4.0-5.0)	5.0 (4.0-5.0)	5.0 (4.0-5.0)	0.915
GPRS/MMS/Browsing/Downloads	5.0 (4.0-5.0)	4.0 (3.0-5.0)	4.0 (3.0-5.0)	0.043
Missed call alert facility	5.0 (2.0-5.0)	5.0 (2.0-5.0)	5.0 (2.0-5.0)	0.421
PRBT/Caller Tune/CRBT	5.0 (1.0-5.0)	5.0 (1.0-5.0)	5.0 (1.0-5.0)	0.405

Values are Median (Minimum-Maximum).

P-values by Mann Whitney U test (A non parametric procedure to test the statistical significance of difference between two groups).

**Comment:** There is a statistically significant difference between the awareness level of pre-paid and post-paid customers. Overall the awareness regarding the news services is significantly higher among pre-paid customers compared to the post-paid customers. However the satisfaction level seems to be lower for customer care. In particular, the awareness regarding the GPRS/MMS/Browsing /Downloads are higher among pre-paid customers compared to post-paid customers.

**Decision:** We accept H0 for the composite score and GPRS /MMS / Browsing /Downloads factors except the factors such as SMS/ Group SMS, Missed call alert facility and PRBT/Caller Tune.

### Hypothesis -2

**H0:** Facilitation and Reach for the services is easy in Rural Area

**H1:** Facilitation and Reach for the services may not be easy in Rural Area

Table 1.3) the distribution of problems faced by mobile customers in rural areas

Table 1.3

Problem of Mobile services	Pre-paid customer (n=126)	Post-paid customer (n=74)	All customers (n=200)	P-value
Poor coverage	9 (7.1)	3 (4.1)	12 (6.0)	0.375
Quality of speech not good	16 (12.7)	5 (6.8)	21 (10.5)	0.186
Network congestion	12 (9.5)	5 (6.8)	17 (8.5)	0.498
Billing problems	0	10 (13.5)	13 (6.5)	0.027
SMS not delivered on time	8 (6.3)	1 (1.4)	9 (4.5)	0.100
Poor customer support	30 (23.8)	15 (20.3)	45 (22.5)	0.410
Complaint handling not satisfactory	35 (27.8)	22 (29.7)	57 (28.5)	0.786

Values are n (%).

P-values by Chi-square test for testing independence of attributes.

**Comment:** There is no statistically significant difference between the problems faced for mobile services of pre - paid and post - paid customers, except regarding billing problem, where the problem is significantly higher among post - paid customers compared to pre - paid customers. Overall relatively higher proportions of customers face the problem of unsatisfactory complaint handling by CSP (27.8 % and 29.7%

respectively).

**Decision:** We reject H0

### Objectives

Level of Satisfaction for various services

Table 1.4) the distribution of level of satisfaction among pre - paid and post - paid mobile customers for Mobile services

Table 1.4

Satisfaction regarding	Pre-paid customer (n=126)	Post-paid customer (n=74)	All customers (n=200)	P-value
Tariff and charges	4.0 (1.5-5.0)	4.0 (2.0-5.0)	4.0 (1.5-5.0)	0.829
Quality aspects	5.0 (1.0-5.0)	5.0 (1.0-5.0)	5.0 (1.0-5.0)	0.389
Billing aspects	3.7 (1.7-4.7)	3.7 (2.0-4.7)	3.7 (1.7-4.7)	0.498
Call center services	4.0 (1.0-5.0)	4.0 (1.0-5.0)	4.0 (1.0-5.0)	0.978
Add on facility	4.6 (1.0-5.0)	5.0 (4.0-5.0)	4.7 (1.0-5.0)	0.075
Value added services	5.0 (3.5-5.0)	4.0 (3.0-5.0)	4.5 (3.0-5.0)	0.024

Values are Median (Minimum-Maximum).

P-values by Mann-Whitney U test (A non-parametric procedure to test the statistical significance of difference between two groups).

**Comment:** There is no statistically significant difference between the satisfaction level of pre - paid and post - paid customers except for value added services, where the satisfaction level is significantly higher among pre - paid customers compared to post - paid customers. Overall the satisfaction level is significantly higher regarding the factors such as tariff and charges, Quality aspects, call center services, add on facility and

value added services. However the satisfaction level seems to be lower for billing services among paid customers and post - paid customers.

Table 1.5 the distribution of level of satisfaction among pre - paid and post - paid mobile customers for other Mobile services

Table 1.5

Other Service Factors	Pre-paid customer (n=126)	Post-paid customer (n=74)	All customers (n=200)	P-value
<b>Customer service</b>				
Prompt	111 (88.1)	70 (94.6)	181 (90.5)	0.130
Delayed	15 (11.9)	4 (5.4)	19 (9.5)	
<b>Complaint handling</b>				
Satisfactory	91 (72.2)	52 (70.3)	143 (71.5)	0.786
Unsatisfactory	35 (27.8)	22 (29.7)	57 (28.5)	

The values are n (%). The p-values are obtained using Chi-square test for testing independence of attributes.

#### To Study Attitude towards various new services offered by CSP

Table 1.6) the distribution of attitude of pre-paid and post-paid mobile customers towards various services.

Table 1.6

Attitude towards	Pre-paid customer (n=126)	Post-paid customer (n=74)	All customers (n=200)	P-value
Awareness related to New services (composite score)	5.0 (3.5-5.0)	4.0 (3.0-5.0)	4.5 (3.0-5.0)	0.024
SMS/ Group SMS	5.0 (4.0-5.0)	5.0 (4.0-5.0)	5.0 (4.0-5.0)	0.915
GPRS/MMS/Browsing/Downloads	5.0 (4.0-5.0)	4.0 (3.0-5.0)	4.0 (3.0-5.0)	0.043
Missed call alert facility	5.0 (2.0-5.0)	5.0 (2.0-5.0)	5.0 (2.0-5.0)	0.421
PRBT/Caller Tune	5.0 (1.0-5.0)	5.0 (1.0-5.0)	5.0 (1.0-5.0)	0.405

Values are Median (Minimum-Maximum).

P-values by Mann-Whitney U test (A non-parametric procedure to test the statistical significance of difference between two groups).

**Comment:** There is a statistically significant difference between the awareness level of pre - paid and post - paid customers. Overall the awareness regarding the news services is significantly higher among pre - pad customers compared to the post - paid customers. However the satisfaction level seems to be lower for customer care. In particular, the awareness

regarding the GPRS/MMS/Browsing /Downloads are higher among pre - paid customers compared to post - paid customers.

Table 1.7) the distribution of attitude of pre - paid and post - paid mobile customers towards VAS value added services (SMS based) and IVRS services.

Table 1.7

Attitude towards	Pre-paid customer (n=126)	Post-paid customer (n=74)	All customers (n=200)	P-value
SMS based services	115 (91.3)	62 (83.8)	177 (88.5)	0.109
News	9 (7.1)	9 (12.2)	18 (9.0)	0.231
Directory info	10 (7.9)	6 (8.1)	16 (8.0)	0.454
Entertainment	60 (47.6)	30 (40.5)	90 (45.0)	0.254
TV schedule	45 (35.7)	22 (30.0)	67 (33.5)	0.417
Travel	4 (3.2)	0	4 (2.0)	0.122
Astrology	11 (8.7)	6 (8.1)	17 (8.5)	0.879
Cricket	50 (39.7)	26 (35.1)	76 (38.0)	0.544
Commodity rates	1 (0.8)	0	1 (0.5)	0.442
Stock info	13 (10.3)	8 (10.8)	21 (10.5)	0.913
IVRS (Interactive Voice Response system) services	23 (18.3)	9 (12.2)	32 (16.0)	0.257

Values are n (%).  
P-values by Chi-square test for testing independence of attributes.

**Comment:** There is no statistically significant difference between the awareness level of pre paid and post-paid customers regarding SMS based services except about matrimony services, where the awareness level is

significantly higher among pre-paid customers compared to post paid customers. Overall the awareness regarding the SMS based services is significantly higher among both pre-paid and post-paid customers (91.3% and 83.8% respectively).

Fig-1.1) The distribution of pre-paid and pos-paid mobile customers selected in the study

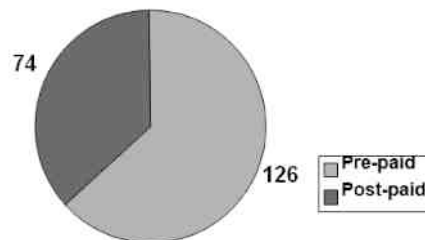
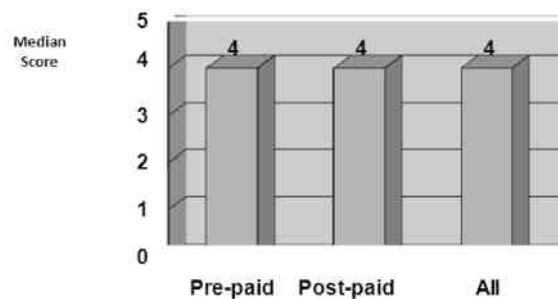


Fig - 1.8) The Distribution of satisfaction level regarding tariff and charges among pre - paid and post - paid mobile customers



**Findings**

Based on the response of the data collected from the customers some of findings are as follows

1. Tariffs and Customer care are the Key parameters for customer
2. From the response against problem faced it is seen that very few customers face problem in the area coverage, quality and SMS delivery.
3. 11% people having problem for complaint handling mechanism, either system or the people who are handling it.
4. 16 % people are not aware about call centre support from response.

5. As the bill pay / recharge mode response shows dependency more on CSC than Post office, Retailer and other means.
6. As it is seen that overall average satisfaction level of customer is 67.8%.
7. Information about IVRS is very less very few users of it, as the response shows.
8. From New service requirement, there is wide scope for VAS services in Future to grow in rural areas.
9. Almost all the customers are using the value added services and its other dependent services.
10. TV, Newspaper and friends are the Channels for reaching to customers



- All the people knows the SMS services and many of the customers of using as per there requirements as result shows SMS is becoming powerful written communication.

#### Suggestions

- By giving more prepaid facilities people can easily access the schemes rather than postpaid as there is more time required for provision the services
- As present Average satisfaction level is 68% which can increased to get maximum subscribers as, satisfied customers bring more customers. So CSP can be saved from future threat of leaving customers.
- Requirement in Value added services shows the additional revenue for cellular service provider and fulfillment of need of the customers ,which will the benefit to improve ARPU (Average revenue per user)
- Problems for the network and tariff plan are the key factors for deciding to retain the services so Increasing coverage and improving quality by taking technical tests and feedback from customers through call centre and customer service centre .
- There are some of the customers are unhappy for the mechanism for complaint handling, displaying transparent procedures with required time and responsible officers list may improve the Satisfactions for the handing complaints .Also in addition to this Staff must be well known aware and educated about services and procedures can guide at right time for the customers .
- The call centre having all the systematic procedure to give information for the product, services and procedure .But it's too lengthy to listen and get the require information .Quick response to selected option may attract subscribers to get information or usage of call center SMS code Response system should be there to know Usage for Prepaid and postpaid users for Voice and data
- Easy payment, more prepayment facilities s can given for the better satisfaction to customer, as cash counters may take long time, Drop box, Auto cheque acceptance, cash cards can give relief to customers. Avilability for the recharge coupons is problem.
- There is tremendous growth in mobile technology as figure speaks how 1995 to 2011 customer base increased, more and more micro bushiness are invented and use of mobile is increased ,small businesses are dependents on mobile, auto, farmers, many special services are getting invented to get more and more penetration of mobile to rural India .Instead of cards ,letter; SMS are used by people to get near ,and near due to mobile . As the new services are getting invented its opportunity to operator to get added advantage to increase revenue.
- Different services are not so much popular in rural ,by using local language using banners hording ,updating it with new innovative advertisement and it will add added advantage to Cellular Service Provider
- As SMS is very popular value added service, for GPRS customer awareness should be increased so that people can use, also different classes of tariff plan are not understandable.
- Customer's wants Micro recharge i.e. from small amounts Rs 10 onwards and the availability should be at every Point.
- Procedures for providing connection, SIM (subscriber Identity Module) replacement, provision services are still requires more improvements to high level of satisfaction.
- Trustworthy in billing, is Added advantage may be taken for satisfying Customers
- As these are the results of the Subscribers from Urban, Rural and Industrial locality it may results common to other places also.
- CSP (Cellular Service Providers) has to improve quality, Staff response so it can increase satisfaction and as the customer expects.

#### Summary and Conclusion

Thus the According to all respondent it is seen that the coverage ,quality and tariff key issues for the customers satisfaction, Continuous improvement in service delivery and minimum time for Service provision are the key aspects to make customer pleasure.

As day by day customers are getting aware for their rights, Customers are expecting more and more benefits for what they are paying, so keeping uninterrupted service and quality in network, competitive tariff plans and faster service may attract the customer. As MNP has been launched in India Customers have option to port out to other cellular service provider. To retain customers Quality and competitive tariff with continues new VAS services are required to be introduced.

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