



A COMPARATIVE STUDY ON SATISFACTION LEVEL TOWARDS MOBILE SERVICES PROVIDED BY DIFFERENT NETWORK OPERATORS WITH RURAL & URBAN CONSUMERS OF WEST BENGAL

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*Abstract*

*Indian rural telecom market is one of the fastest growing market compare to the urban India. For this reason so many private companies are also entering into this segment. But till date very few researches have been done in this field. The success of any brand in the Indian rural market is very unpredictable. It has always been difficult to judge the rural market of India due to the huge diversified customer base. Many brands have failed miserably due to lack of understanding on rural consumer behavior. More often, people think that the success of rural market depends on luck. Therefore marketers have to understand the proper needs and attitudes of rural consumers to penetrate the rural telecom market. The comparative study has been conducted to find out the satisfaction level of rural and urban consumers on mobile services in West Bengal. The researcher has used Chi-square method to conduct the survey. 200 responses have been collected with the help of well structured questionnaire & Convenience Sampling Method has also been used to identify the samples.*

*Index Terms— Comparative study, Rural v/s Urban, Convenience sampling, Network Quality, Coverage*

## I. INTRODUCTION

The Indian market structure has been divided in two parts, rural market and urban markets. The companies who have worked before in the market has mainly concentrated on educated urban customers but due to saturation of markets in the urban sector, now many companies are focusing their attention towards the fast growing rural sector of India. The rural markets in India are still developing but in a very fast pace and the sector poses a variety of challenges too. This rural consumer differs on urban consumer in terms of its consumption pattern, purchase decisions, purchase behaviour, attitudes and perceptions towards products or services. Rural India constitutes “the heart of India”, generating more than half of the national income. Indian rural market is doing really well in the last 10-15 years & the growth rate is skyrocketing compare to urban market. After the introduction of private companies in telecom sector, the competition among the marketers in both rural & urban areas has exceeded all the expectations



to penetrate the untapped rural market specially, because the urban market is already captured by companies.

**Table-1**  
**Overall Subscriber Base (2014-15)**

Particulars	Wireless	Wireline	Total Wireless + Wireline
<b>Total Subscribers (Million)</b>	<b>969.89</b>	<b>26.59</b>	<b>996.49</b>
<b>Urban Subscribers (Million)</b>	<b>555.71</b>	<b>21.47</b>	<b>577.18</b>
<b>Rural Subscribers (Million)</b>	<b>414.18</b>	<b>5.12</b>	<b>419.31</b>
<b>Overall Teledensity</b>	<b>77.27</b>	<b>2.12</b>	<b>79.38</b>
Urban Teledensity	143.08	5.53	148.61
Rural Teledensity	47.78	0.59	48.37
Share of Urban Subscribers	57.30%	80.73%	57.92%
Share of Rural Subscribers	42.70%	19.27%	42.08%
<b>No. of Broadband Subscribers(Million)</b>	<b>83.68</b>	<b>15.52</b>	<b>99.20</b>

According to the TRAI report, there are 996.49 million subscribers are in India where 969.89 million subscribers are using mobile services & 26.59 million only are using wireline services. In the urban areas total 577.18 million subscribers are using the various services whereas 555.71 million subscribers are using wireless services & 21.47 million are using wireline services. In context of rural areas drastic improvement has been seen in last few year in the wireless market with 419.31 million in total are subscribers of different service providers whereas 414.18 million are from wireless category & 5.12 million are from wireline category. Overall tele-density has also improved a lot with 79.38 whereas wireless has been dominated again with 77.27 and rest is from wireline category. Urban tele-density has reached the highest level with 148.61 whereas wireless is 143.08 & wireline is 5.53. Rural tele-density has also improved a lot compare to other years with 48.37 whereas wireless is 47.78. Urban customers are sharing 57.92% of total subscriber base in India where wireless is sharing 57.30% & wireline has sharing 80.73%. 42.08% of rural subscribers are there in India where 42.70% is wireless & 19.27% is wireline.

## II. REVIEW OF LITERATURE

**Mittal et al. (2007)** in their research article illustrated that various companies are providing services to the customers in accordance to maintain service quality & the new players are also following the path of existing players in the market. The study reveals that if the gap between customer expectation & satisfaction is big then the customers will not be satisfied & that effects the switching from one brand to another brand. Call rate is also an important criterion on this regard where quality of the service is not the only key criteria.

**Butt et al. (2008)** in their research article explored the customer satisfaction level on Pakistani mobile telephony services provided by the telecom companies of Pakistan. A well structured questionnaire has been framed & 150 respondents have provided their information to conduct the analysis. Service quality, prices, support services & ease of use these four groups has been created for the analysis purpose & responses has been taken with the help of 5 point likert scale.



From the analysis they have also found out that network coverage & price are the most important factors which lead to customer satisfaction.

**Debnath et al. (2008)** found that with the help of technological advancement & day to day competition between telecom players has helped this industry to grow from every side. The main focus of any telecom company in the market is to perform at a highest level, set a benchmark, which will give them satisfied customer & they can create a loyal customer base. The company's who are doing good in the market can show the path to non performing companies for improvement in future.

**Ganguli (2008)** described that the main aim of the study is to find out customer satisfaction from the services provided by different telecom companies. The study has been conducted in Delhi, Mumbai, Kolkata & Hyderabad & 238 respondents has been selected for the study. The convenience sampling method has been used to sampling purpose with five point likert scale respondents gave their feedback & factor & regression analysis has been used to find out the result. The study reveals that customer satisfaction which brings repeat purchase, provide positive word of mouth is not affected by the feature like promotions or facilities provided in office. The study reveals that mostly all the factors are affecting the customer satisfaction whereas competitiveness is the most important factor amongst reliability, relational quality etc.

**Jha (2008)** explained that the main aim of the study is to find out the college going students usage rate on various function of mobile phone named calling, SMS, STD calling, playing games etc. The study has been conducted in Hyderabad with 209 college students in the age group of 20-29 years & the analysis named 't-test' has been implemented to find out the result. The result elaborates that gender wise male students are very much interested in downloading various software, installing & playing mobile games compare to their female students. It also reveals that those who are using mobile phones for longer duration they will use mobile phones most of the time for different purposes compare to others.

**Mohapatra (2009)** in his article explained that due to the saturation in urban markets the Value Added Services (VAS) services will be no longer ignored by the untapped rural market. The main challenge is to adapt VAS to provide services which positively give an impact on the rural lives and 'base of the pyramid' (BOP) segments. The first hurdle that needs to be addressed in extending VAS to rural segments is access to mobile communications. Electronic recharge also opens the way for individuals to become entrepreneurs, or to supplement income from their existing profession. With Interactive Voice Response (IVR) technology the services can be accessed using common languages and dialects in different rural regions. The mobile can be used to listen to songs downloaded to the phone by following voice prompts, whether popular hindi movie songs, regional language songs, or folk music. The popularity of ring back tones among this segment shows that where a value is perceived, rural and low-income segments will pay for that service.

**Akbar et al. (2009)** explained in their article that how the service quality, trust & customer satisfaction, these three factors are having an impact on customer loyalty or not. To analyze this from 304 customers the data has been collected in Bangladesh & Structure Equation Model has been used to find out the analysis. The result reveals that the trust & customer satisfaction both are having significant correlation with customer loyalty. Customer satisfaction is working as a mediator between customer loyalty & service quality. If the company will improve their service



quality then automatically the customers will get satisfied. Satisfied customers will be the most loyal to the company as well as trustworthy.

### III. OBJECTIVE OF THE STUDY

To find out the satisfaction level of rural and urban consumers on mobile services in West Bengal & compare them accordingly.

### IV. HYPOTHESES OF THE STUDY

- Network quality is having influence on consumer satisfaction level on mobile services provided by various mobile service providers in rural and urban West Bengal
- Network coverage is having influence on consumer satisfaction level on mobile services provided by various mobile service providers in rural and urban West Bengal
- Call rate is having influence on consumer satisfaction level on mobile services provided by various mobile service providers in rural and urban West Bengal
- Internet charges is having influence on consumer satisfaction level on mobile services provided by various mobile service providers in rural and urban West Bengal
- Brand image is having influence on consumer satisfaction level on mobile services provided by various mobile service providers in rural and urban West Bengal
- Attractive plans are having influence on consumer satisfaction level on mobile services provided by various mobile service providers in rural and urban West Bengal
- Advertisements are having influence on consumer satisfaction level on mobile services provided by various mobile service providers in rural and urban West Bengal
- Customer care services are having influence on consumer satisfaction level on mobile services provided by various mobile service providers in rural and urban West Bengal

### V. RESEARCH METHODOLOGY

Descriptive Research has been used to conduct the study and the type of research design is Cross-sectional. The primary data has been collected for the study through a pre-tested questionnaire whereas all the secondary data has been collected from doctoral theses, magazines, research articles, credible sources etc. Researchers have collected information from different sources to conduct the study effectively. In this study researcher has collected the samples from the rural consumers of West Bengal from both the urban & rural areas. The area chosen for the study is urban West Bengal, which comprises most prominent urban areas namely Asansol, Malda, Siliguri, Kolkata and Kharagpur. Another five subdivisions has been selected in the context of rural prominence namely Rampurhat, Islampur, Mekhligunj, Tehatta and Egra. There are 200 respondents have been selected from all urban and rural areas of West Bengal. Two Stage Cluster Sampling method has been used to collect various perceptions of subscribers of different mobile service providers in Western part of West Bengal. Chi square method has been used to compare the study.



## VI. DATA ANALYSIS & INTERPRETATION

### RELIABILITY & VALIDITY TESTING

Cronbach's alpha has been used to measure internal consistency of questionnaires and found to be strong and reliable. The reliability score for questionnaire is 0.886. Though the value is well above 0.70 so the researcher can conclude that the Cronbach's Alpha result is acceptable & accordingly the researcher can proceed the further analysis. The construct validity contains convergent & discriminant validity. Here between the various variables of the factors is having the strong co-relation coefficient & most of the co-relation coefficients values are in higher ranges. So, here it proves that the convergent validity exists. Though there are high co-relation coefficients between the variables of a particular factor, there are very weak correlation also exists between the one factor's variable to another factor's variable. Here it also proves that the discriminant validity exists.

### CHI-SQUARE ANALYSIS

In the tables below Chi-square test for consumer's satisfaction level in West Bengal has been recorded and the responses from both the rural and urban consumers have been analyzed.

Table - 2

Chi-Square Test for Consumer Satisfaction on Mobile Services in Rural West Bengal

TEST STATISTICS								
	Network quality	Network coverage	Call rate	Internet charges	Brand image	Attractive plans	Advertisements	Customer Care Services
Chi-square	141.560	136.236	136.453	138.214	141.423	142.578	137.845	139.257
DF	134	128	128	132	137	132	131	134
Asymp Sig.	0.002	0.011	0.000	0.000	0.314	0.000	0.003	0.234

\*5% significance level



Table- 3

Chi-Square Test for Consumer Satisfaction on Mobile Services in Urban West Bengal

TEST STATISTICS								
	Network quality	Network coverage	Call rate	Internet charges	Brand image	Attractive plans	Advertisements	Customer Care Services
Chi-square	144.280	146.325	142.351	149.237	141.389	148.956	149.389	151.248
DF	132	137	129	135	134	141	140	143
Asymp Sig.	0.000	0.021	0.000	0.000	0.001	0.000	0.000	0.000

\*5% significance level

Table no. 2 & 3 explains that in the rural West Bengal the network quality is having a significant impact on rural consumers as well as in the urban West Bengal the network quality is also having a significant impact. So in the study for both the areas the network quality is an important determinant for satisfaction. In network coverage category, there is an impact on rural customers as well as in urban consumers on satisfaction level. In the third category which is named as call rate both the rural & urban consumers are finding significant on satisfaction level. So, it can be found from the study that both network coverage & call rate are important parameters to satisfy both the consumers. Internet charges are having significant impact on satisfaction level in rural market & in urban market also it is having a huge impact on satisfaction level. Brand image is not having an impact on satisfaction level on rural consumers but urban consumers value this & brand image is having a significant impact on satisfaction level. Attractive plans and Advertisements are having significant impact on satisfaction level in both urban and rural areas. Customer care services is not having an impact on satisfaction level on rural consumers but urban consumers value this & brand image is having a significant impact on satisfaction level.

## VII. RESULT OF HYPOTHESES

- Network quality is having influence on consumer satisfaction level on mobile services in both rural and urban West Bengal. So, it accepts alternate hypothesis.
- Network coverage is having influence on consumer satisfaction level on mobile services in both rural and urban West Bengal. So, it accepts alternate hypothesis.



- Call rate is having influence on consumer satisfaction level on mobile services in both rural and urban West Bengal. So, it accepts alternate hypothesis.
- Internet charges are having influence on consumer satisfaction level on mobile services in both rural and urban West Bengal. So, it accepts alternate hypothesis.
- Brand image is having influence on consumer satisfaction level on mobile services in urban West Bengal. So, it accepts alternate hypothesis. Whereas, brand image is having no influence on consumer satisfaction level on mobile services in rural West Bengal. So, it rejects alternate hypothesis.
- Attractive plans are having influence on consumer satisfaction level on mobile services in both rural and urban West Bengal. So, it accepts alternate hypothesis.
- Advertisements are having influence on consumer satisfaction level on mobile services in both rural and urban West Bengal. So, it accepts alternate hypothesis.
- Customer care services are having influence on consumer satisfaction level on mobile services in urban West Bengal. So, it accepts alternate hypothesis. Whereas, customer care services is having no influence on consumer satisfaction level on mobile services in rural West Bengal. So, it rejects alternate hypothesis.

#### **VIII. LIMITATIONS**

- The survey has been done only on the West Bengal. The study can be done on other parts of India to understand the behavior of rural & urban consumers.
- Sample size of 200 is small; increasing the sample size can give other results also.

#### **IX. FINDINGS & CONCLUSION**

In rural West Bengal the network quality, network coverage, call rate, internet charges, attractive plans and advertisements is having a significant impact on satisfaction level. In the urban areas all the factors which are the primary determinants of satisfaction level is having an impact. All the factors namely network quality, network coverage, call rate, internet charges, attractive plans advertisements, customer care services and brand image is having strong impact on urban consumers. But in the case of rural consumers brand image & customers care services is not having influence on satisfaction level. Because rural consumers wanting the good services in affordable or cheap prices. So the brand image really does not matter to them. Customer care services are also critical for few rural people and they are also reporting that it is not having an impact on satisfaction level. The study here reveals about the rural people behavior about the mobile network operators services. It also expressed that what are the



perceptions or attitudes the rural people are carrying at the time of buying a particular SIM card. Researcher is hoping that it will be easy for the marketers and the Government to understand the need and want of the rural customer.

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