

# Customer Perception in Selection of Prepaid Mobile Services

P.S.Rajeswari, K. Sadasivan

*Abstract: India, the rampant heading country in the telecommunication sector, shows predominant growth in mobile subscription through rigor rural penetration. Tangentially the rate of monthly customer churn is very high when compared with other countries across the globe. Mobile churn is very alarming particularly in prepaid segment against postpaid. This slowly triggers the mobile segment to endure the stage of saturation. Hence it is significantly emergent for the mobile operators to investigate the exact map of the customers' perception to select the mobile operators based on the attributes of prepaid mobile services. This study focuses on the causes for the customers to select specific service providers and to gauge their level of satisfaction on the corresponding mobile services. This research will affirm the mobile operators to slot in the essential strategies to increase the level of customer loyalty.*

*Index Terms: Customer satisfaction, Customer retention, Affiliate marketing, social media marketing*

## I. INTRODUCTION

Indian mobile services, one of the fastest proliferating telecommunication segments faces major challenge in the customer retention, mainly in prepaid segment. According to the statistical report of Telecom Regulatory Authority of India 2014, total prepaid subscription is 886 million with an average monthly prepaid churn of 14% in India. This clearly depicts that the prepaid subscription increases with increase in churn rate when compared with last year. To solve this issue, Marketers are playing different magical games in offering attractive service packs and tariff plans in different permutations and combinations to enhance customer retention. In real scene the customer churn happens at a higher rate due to various operational reasons. In this regard mobile operators have to do research to identify the factors influencing customers to select the specific service provider. By percolating the exact customer expectations and perception, marketers can design the operational strategies to improve the customer loyalty. Customer value is "the fundamental basis for all marketing activity" (Holbrook, 1994, p. 22). And high value is one primary motivation for customer patronage. In this regard, Sirdeshmukh, Singh, and Sabol (2002) argue that customer value is a super ordinate goal and customer loyalty is a subordinate goal, as it is a behavioral intention.

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According to goal and action identity theories, a super ordinate goal is likely to regulate subordinate goals. Thus, customer value regulates "behavioral intentions of loyalty toward the service provider as long as such relational exchanges provide superior value" (Sirdeshmukh et al., 2002, p. 21).

## II. PROBLEM FOCUS

Indian mobile services pitch tremendous growth substantially for the past one decade but failed to arrest churn rate. Irrespective of huge promotional offers and add on benefits tailored by the mobile operators, customer churn could not be kept under control. This proves that the mobile operators have not succeeded in understanding the customer value, motives and their needs for choosing the specific mobile operator for subscription out of long listed operators. First and foremost, the operators need to tap the exact expectations of the customers in selecting the operators and it would be easy for them to develop the corresponding strategies to be taken forward for building customer loyalty and customer Relationship management.

## III. RESEARCH OBJECTIVE

To determine the factors influencing the customers to select Indian prepaid mobile services.

## IV. RESEARCH METHODOLOGY

### Justification for study

Mobile operators have pooled the remarkable market growth of prepaid segment through rural Penetration in India. They are incarnating several market driven strategies by rendering varieties of service plans to increase the customer life time to their network but they could not able to realize through their return on investment as their customers are tender in toggling mobile operators in a very shorter span. This hauls the unpredictability of prepaid market. This clearly representing that the marketers have not gone through the mind map of the customers pertinently. They have to be fundamentally strengthen their approach, by thoroughly analyzing the reasons for the customers to select the specific operators and their expectation on mobile services.

### Research design:

Descriptive research method was undergone in this study.

### Data collection:

Primary data and secondary data were collected for conducting this study

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## Primary data:

Survey method using structured questionnaire was used for collecting the primary data.

## Secondary data:

The secondary data were taken from the literature reports and telecommunication reports.

## Sampling framework:

1Customer has been chosen from ten major cities of Tamilnadu such as Chennai, Madurai, Dindugul, Coimbatore, Trichy, Salem, erode, Vellore, Tirunelveli, Thanjavur based on prepaid subscription and churn rate of 2018.

## Period of the study:

Primary data were collected during August-December 2018 and secondary data were taken from 2010 onwards.

## Sample method and size:

Purposive sampling method was adopted for sampling and totally 1102 was the sample size.

## Data processing:

Data were subjected to process of data cleaning by checking the missing values, measures of dispersion using descriptive statistics.

## V. RELIABILITY & VALIDITY

### Reliability

Inter item and split half reliability were checked by using SPSS 20 package and cronbach alpha value was found to be 0.94.

### Validity

Content, construct and face validity were checked and evaluated through respective experts and supported by literatures.

## VI. VARIABLES OVERVIEW

### 1. List of predictors-

Construct-Consumer Buying Factors

Items-Coverage, Roaming Facility, Call Charges, GPRS, MMS, Offers, Accessibility, customer care, Technology, e Recharge vouchers, Internet facility, convenience in subscription, Ring tone

### 2. List of criterions-

Construct-Service Providers

Items- Airtel, Aircel, BSNL, Vodafone, Reliance, Idea Cellular, Tata Docomo, Virgin, MTS, Videocon, Loop, Uninor.

## VII. DATA ANALYSIS AND INTERPRETATION

### Research objective:

To identify the factors influencing the selection of prepaid mobile service providers.

**Statistical Tools:** 1. Correspondence Analysis

2. Log Linear Logit Analysis

Correspondence Analysis:

Principle: Correspondence Analysis CA also called perceptual mapping and social space analysis, this technique aims at explaining the inertia (variance) in a cross tabulation with number of rows and columns. CA provides output as inertia of each attribute and object. In this analysis as per the research objective, the factors influencing customers to select the prepaid service providers have to be analyzed. Since these

two variables are nominal they are taken for analysis. Hence the list of service providers has been taken as objects in the rows and the consumer buying factors as attributes in columns.

**Table: 1.1 Summary of dimensions**

Dimension	Singular Value	Inertia	Chi Square	Sig.	Proportion of Inertia	
					Accounted for	Cumulative
1	.304	.093			.507	.507
2	.204	.042			.227	.734
3	.154	.024			.130	.864
4	.136	.018			.101	.964
5	.066	.004			.024	.989
6	.046	.002			.011	1.000
Total		.183	201.022	.001**	1.000	1.000

\*\*-.99% confidence level

From the table 1.1, the Correspondence Analysis [CA] exhibits a total number of 6 dimensions accounting for 100 percent variance explained. However, the objective of CA is to reduce the set of data in to 2 dimensional map, it was proposed to find out the amount of variance explained by these 2 dimensions. As shown in Table 1.3, the cumulative percentage of variance explained amounts to 73.4 percent for the first 2 dimensions, leaving only 26.6 percent for remaining dimensions. Therefore, these other dimensions were dropped from analysis. Moreover, the inertia for these dimensions was also found to be not significant.

**Table 1.2 Contribution of Each Attribute to the inertia of dimensions**

Attributes	Dimension 1	Dimension 2
Coverage	.781	.022
Call Charges	.756	.000
Roaming charges	.852	.020
GPRS	.207	.246
MMS	.082	.699
Offers	.016	.424
Accessibility	.150	.825
Customer care	.003	.892
Technology	.077	.165
E-recharge vouchers	.279	.019
Internet facility	.247	.244
Convenience in subscription	.031	.001
Ring tone	.357	.133

The values of contribution made by attributes to each of the dimension indicate that, attribute such as Roaming Charges, coverage, Call Charges, -recharge vouchers, internet facilities, convenience in subscription and ring tones are heavily loaded on dimension 1.



These values are given in bold face. Similarly, attributes such as GPRS, MMS, Offers, Accessibility, customer care, technology are loaded on dimension 2.

**Table 1.3 Contribution of Each Service Provider to the inertia of dimensions**

Service Providers	Dimension 1	Dimension 2
Airtel	<b>.679</b>	.113
Aircel	.023	<b>.133</b>
Bsnl	<b>.421</b>	.217
Vodafone	.024	.024
Reliance	<b>.811</b>	.182
Idea Cellular	.157	<b>.450</b>
Tata Docomo	.471	<b>.492</b>

The contributions made by different columns for the variable “Service provider indicate that Reliance infocom is heavily attached to dimension 1 with loading of 0.811 and Bharti Airtel is heavily loaded on Dimension 1 with loading of 0.679 followed by Tata Docomo with loading of 0.492 and Idea Cellular is closely loaded with Tata Docomo of 0.450. Aircel has meager loading in Dimension 2 with 0.133 when compared with other operators. It is quite surprising that there is no place for Vodafone and other operators in any dimensions because of poor loading.”

A comparison of contribution to dimensions by various points in Table 1.2 and 1.3 depicts that’s much of the service attributes identified under Dimension 1 are related to Reliance Info, Bharti Airtel and BSNL. While most of the attributes identified in dimension 2 are related to Tata DoCoMo, Idea and Aircel. Hence the association of the attributes selected in Dimension 1 & 2 corresponds to the respective service providers as mentioned above. Therefore, to bring down churn, service providers Reliance, Bharti Airtel and BSNL have to concentrate on Coverage, Call Charges inclusive of Roaming, Schemes on Recharges Vouchers and attributes associated with Internet Facilities. Since the major portion of this market has been tapped by Youth segment it is essential for these service players to bring novelty in Ring tones and services related to the online subscription and to design more add-on facilities.

Service Providers, Tata DoCoMo, Idea and Aircel have to fine tune their strategies on Multi –media services by giving options like Point of Parity Purchase, Menu driven Services and offers on various Add-on Packages. They can devise robust networking pattern for enhancing CRM to build loyalty through effective customer care. GPRS, MMS, Offers, Accessibility, customer care, technology

### Log Linear Logit Analysis

#### Principle:

1. Log linear analysis is applied for performing confirmatory test; it enables to test dependencies, inclusion of variables (or their interactions) into the model and fit of the model
2. From the above analysis, the important attributes with respect to each service provider or their Business strengths are inferred but this pattern can be statistically tested only through parametric test involving nominal variables as predictors. Hence hypothesis of above mentioned relationship was tested by Log Linear Logit Analysis.

**Criteria:** Service providers

**Predictors:** Consumer buying factors

**Table 1.4 -Analysis of Dispersion**

	Entropy	Concentration	df
Model	672.506	239.374	282
Residual	753.379	419.950	9627
Total	1425.885	659.324	9909

Entropy is the measure on the space of probability distribution of observed and expected frequencies. The highest value of entropy favors the result. Hence the assigned model fits the data.

### Conclusions and recommendations:

Mobile operators have to revamp their operational strategies in the following areas:

- 1. Hybrid channelization of customer care services:** -Robust networking of customer care services is highly vital to troubleshoot complaints and to manage time taken for complaint resolution.
- 2. Event management:** -Marketing campaigns inviting focusing the targeted customer base is pivotal for establishing brand value in the mindset of the customers.
- 3. Market basket analytics:** -Needs, wants and motives of the customers are to be analyzed in all parameters to design marketing plans.
- 4. e mobile systems:** High resolution, e mobile system to be developed to enhance net speed, connectivity with swift downloading and uploading videos, songs and other multimedia files.
- 5. Differentiation strategies:** Voice and data tariff plans to be redesigned with differentiated pricing schemes to attract the targeted segment.
- 6. Affinity marketing:** Developing community centers as per the marketing segments and offering services based on each segment.
- 7. Youth marketing strategies** are needed to attract this segment by providing companionable services for smart phones, tablets, dongles, offers and tariff discounts for parity purchase, Tariff offers for MMS, SMS etc

### Summary:

The major emerging factors of customer perception in selecting the prepaid mobile services. The basic grounds for selection were observed to be the attributes on technology based services, network coverage, net speed, complaint resolution system. The strategies were suggested and recommended based on this.

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