CONSUMER PREFERENCES FOR MOBILE SERVICE PROVIDERS: AN EMPIRICAL STUDY IN BARDOLI

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ABSTRACT

Huge competitions, advancement in technology and reduced tariff have propelled the growth of mobile services in India. In the last five years, the industry has made tremendous growth in terms of subscriber base. Today, cell phones have become indispensable for people and moved beyond their fundamental role of communication. They have become a major source for gaming, getting information, shopping, banking, entertainment and much more. Since the Indian Mobile Service Provider (MSP) market is overcrowded, customers have many choices of MSPs. Nowadays; customers have become smarter and consider various factors before choosing an MSP. Therefore, it is really important and beneficial for the marketers of MSPs to understand and analyze the preferences of customers. By using factors analysis, this paper highlights the factor considered by the customers to shape their preference for MSP. Further, the study evaluates the impact of motivators on subscription decision for a particular service operator, and gives a guideline to the marketers of MSPs to increase their subscriber base.

Keywords: Subscriber, Mobile Service Provider (MSP), Indispensable, Motivators.

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INTRODUCTION

In today's complex business environment, it has become very crucial for companies to attract and retain customers for long-term sustainable growth. Just like companies of other business domains, Mobile Service Providers (MSPs) also consider their customers to be the most important asset. And this is not just a theory but an economic fact. In the past few years, the Indian mobile sector has witnessed a rapid and substantial growth. From a humble start in the mid-1990s, the growth in this sector has really picked up its pace in recent years due to lower tariff, continuous launching of new schemes and falling handset prices. The growth in mobile services can be easily proved when we look at the wireless teledensity of India (78.10% as of February 2012 end) (http://www.coai.com). As per the Telecom Regulatory Authority of India (TRAI), In fact, the cellular market is adding about 16-18 million new users every month.

Table 1:Beginning of the Mobile Phone Era in India With Customer Base (Wireless)

Year	**Subscriber Base (in millions)**
1995	0.03
2000	3.10
2005	76.00
March 2008	261.07
March 2009	391.76
March 2010	584.32
February 2011	791.38
February 2012	911.17

Source: http://www.coai.com & *http://www.trai.gov.in*

The growth in the sector picked up when the competitive regime was opened with the participation of global and private operators (Table 2). EtisalatDB, NTT Docomo, Telenor, Datacom and Loop mobile are among the new entrants in the Indian mobile service market. These players are continuously intensifying competition by innovative pricing strategy, new attractive schemes and innovative Value-Added Services (VAS). The Country is divided into 23 Service Areas consisting of 19 Telecom Circle Service Areas and 4 Metro Service Areas for providing Cellular Mobile Telephone Service (CMTS). (http://www.dot.gov.in/cmts/cmtsindex.htm) As per the new telecom policy 1999, MSP has to take separate license for each service area (circle) for an initial period of twenty years. The circles were classified as Metros: A, B and C circles, depending upon the revenue potential of the circles. Division of circles roughly corresponds to the state boundaries with a few exceptions. The study reveals the consumers' preferences for MSPs in the Bardoli region, which belong to Gujarat A'circle. And the degree of competition is really different from the All India level. On the Indian front, Bharti Airtel is the market leader with 27.22% of market share (Table 2), Bharti Airtel is the leader with 178.88 (Table 3) of No. of Subscriber (in millions) as on February 29, 2012.

Table 2: Market Share of Major Players at National Level (as on February 29, 2012)

Brand	**Market Share (in %)**
Airtel	27.22
Vodafone Essar	22.75
Idea	16.85
BSNL	14.22
Aircel	9.63

Source: http://www.trai.gov.in

Table 3: Market Share and No. of Subscriber of Major Operators in Gujarat Circle (as on February 29, 2012)

Players/Operators	**No. of Subscriber (in millions)**	**Market Share (in %)**
Airtel	178.88	27.22
Vodafone Essar	149.44	22.75
Idea	110.71	16.85
BSNL	93.43	14.22
Aircel	63.26	9.63

Source: http://www.trai.gov.in

Huge competition and fierce price war are mounting pressure on the MSPs to reduce the call tariff, which results in reduction of call tariff to Rs 0.50/- minute and 1 paise/s. However, the reduction of tariff has also brought down the Average Revenue Per Users (ARPUs) of the cellular operators. Indian Government has flagged during off the procedure of Mobile Number Portability (MNP) in the beginning of the year, which allows the customer to retain the same mobile number across the operators. It is expected that the industry will face the real price war once the MNP is rolled out. Mobile Number Portability requests increased from 32.79 million subscribers at the end of January 2012 to 37.11 million at the end of February 2012. In the month of February 2012 alone, 4.32 million requests have been made for MNP.As far as customers are concerned, they benefit from this intense competition in terms of low tariff, good service quality and frequent introduction of plan as per their requirements. But the dark side is that customers are in a dilemma over their choice of an MSP. Customers consider various factors before making a choice of service operators. They search and gather information on these factors evaluate these factors to choose the subscription. In this context, it is of growing concern to look at consumer buying decision process that casts light on the factors that finally determine consumer choices towards different service operators. This study aims to identify and analyze the factors responsible for consumer's preference towards MSP.

LITERATURE REVIEW

1. Customers from all age groups start developing their preferences at a very early stage. Since in every product/service category the consumers have more choices and more information, it is essential for marketers to understand the choice of an individual. From the marketing perspective, the consumer's choice can be studied by the classical five steps (Need - Information - Search - Evolution of alternative - Purchase - Post-Purchase evaluation) (Kotler and keller, 2006). The model is usually suitable for consumer decision making.
2. Howard and Sheth (loudon and Dellabitta, 2002) analyzed the buyer's decision making by Howard and Sheth model taking six factor (Psychological influencer – Input – Inhabiting factors – Social and Culture influence – Processing determinants - Outputs), which play a vital role in consumer decision making.
3. A study conducted by Kim et.al. (2004) for Korean mobile communication services, revealed that the customer satisfaction towards MSP is strongly supported by call quality, value-added services and customer support. It shows that these factors re very important while choosing a service operator.
4. Sandhir (2004) conducted a research in Ludhiana and identified that customers make their choice of an MSP by considering five factors: Connectivity, Coverage, Tariff, VAS and Customer Care. It shows that industry cannot neglect these factors.
5. Neeraj and Girish (2007) have deducted those factors that consumers perceive to be identified four factors – Customer Care Services, Call rates, Promotion and availabilities, which are the most important factors considered by customers before utilizing the services of an MSP.
6. In order to know about customer's choice of MSP, Mohammed (2009) revealed that in Makkah, Saudi Arabia, financial factor is the most important in the selection of an MSP. Moreover, he added that there is no strong tendency among the customers to subscribe to the same service provider among family members and friends.
7. Karjalnoto et al. (2010) identified that customers' choice in the context of mobile phone in Finland have been influenced by seven factors, namely – Innovative services, Multimedia, Design, Brand, and Basic properties, Outside influence, Price and Reliability. All these studies mainly explore the various factors that the customers consider before making their choice.

RESEARCH OBJECTIVES & HYPOTHESIS

- To Study the prominent factors which influence the choice of mobile service provider
- To know the influence of motivators on the choice of mobile service provider

The Null Hypothesis (H_0) for the study is:

H_0 : Attributes are unrelated with the population.

The Alternative Hypothesis (H_1) for the study is:

H_1 : Attributes are related with the population.

RESEARCH METHODOLOGY

This carried out using exploratory research design (Krishnaswamy et al., 2006).In order to study the consumers' preference for MSP, both primary and secondary data were collected. The secondary data was collected from internet, marketing journal, books. After collecting the data it was found that there are many factors influencing the choice of consumers for MSP.

The primary data was collected by using the survey method with the help of structured questionnaire.(Appendix-1). For this purpose, a sample size of 150 mobile users of Bardoli city and its outskirts was drawn at random for a period of 2 month from March 2012 to April 2012. The data was collected via one-to-one interaction with the respondents from different occupation, income, and age group (Appendix-2).

STATISTICAL TOOLS USED

1. **Factor Analysis in SPSS**

In the first part of the study, factor analysis (Beri, 2009) was done to find out the important factors that affect the customer purchase decision. For deducting the important attribute a set of attributes were listed (Exhibit 1), and each respondent was asked to rate them according to their importance in their buying decision on a scale of 1 to 5 (1 being the least and 5 being the most important).

Exhibit 1 : Attribute Affecting Customer Choice
1. Tariff 2. [Charge/Call Charge/s or Min.]

3.	Initial Subscription Cost
4.	Connectivity / Coverage
5.	Voice Clarity
6.	VAS [Value Added Services]
7.	Response to Customer's Suggestion/Complicity/Feedback
8.	Availability of Plans as per Requirement
9.	Advertisement
10.	Corporate Reputation

Factor analysis was used here to understand the interdependence amongst the attributes. 'Bartlett's test of sphericity' was used to test the hypothesis. KMO statistic was also used to measure the appropriateness of the factor analysis.

2. In the second part of the study, various motivators were studied by using percentage analysis. The respondents were asked to name the motivator from the given list which motivates them to make their subscription decision.

DATA ANALYSIS

The captured data was run in SPSS 16.0 window which shows that the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy was 0.615 which is greater than 0.05 (Table 3). This suggests that the data is adequate for factor analysis.

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.615
Bartlett's Test of Sphericity	Approx. Chi-Square	241.597
	df	36
	Sig.	.000

The ‘Bartlett’s Test of Sphericity’ also suggests that there were very low chances of obtaining the result if the null hypothesis was true. Hence, we reject the null hypothesis and accept the alternative hypothesis, i.e. Attributes are correlated with the population. The significance value of 0.000 also tells us that there is a correlation of variables with each other.

The total variance explained by Principle Component Analysis (PCA) is shown in Table 4. It shows that there was a significant drop in the eigenvalues from 4th component onwards. Hence, the first three components were considered, which together explain 60.411 of the total variance.

Table 4 : Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.286	25.396	25.396	2.286	25.396	25.396
2	1.757	19.518	44.914	1.757	19.518	44.914
3	1.395	15.497	60.411	1.395	15.497	60.411
4	.855	9.500	69.911	-	-	-
5	.767	8.526	78.437	-	-	-
6	.606	6.731	85.168	-	-	-
7	.536	5.950	91.118	-	-	-
8	.430	4.774	95.892	-	-	-
9	.370	4.108	100.000		-	-

Extraction Method: Principal Component Analysis.

After extracting the eigenvalues, varimax rotation was applied for the sleeted variables (Table 5). The factor loading of the 9 variable was then observed, and the variables were clubbed into 3 factors.

Component Matrix[a]

	Component		
	1	2	3
Corporate Reputation	.808		
Availability of Plans as per Requirement	.634		
Advertisement	.576		
Initial Subscription Cost	.565		
Response to Customer's Suggestion/Complicity/Feedback	.529		
Tariff		.705	
Connectivity / Coverage		.611	.575
VAS [Value Added Services]		-.515	
Voice Clarity			.832
Extraction Method: Principal Component Analysis.			
a. 3 components extracted.			

Table 5: Rotated Component Matrix[a]

	Component		
	1	2	3
Corporate Reputation	.748		
Advertisement	.734		
Response to Customer's Suggestion/Complicity/Feedback	.637		
VAS [Value Added Services]	.630		
Initial Subscription Cost		.756	
Availability of Plans as per Requirement		.747	
Tariff		.695	

Voice Clarity			.839
Connectivity / Coverage			.831
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 5 iterations.			

After extracting the eigenvalues, varimax rotation was applied for the selected variables (Table 5). The factor loading of 9 variables was then observed, and the variables were clubbed into three factors.

Factor 1 combined the following attributes

- Corporate Reputation
- Advertisement
- Response to Customer's Suggestion/Complicity/Feedback
- VAS [Value Added Services]

Factor 2 combined the following attributes

- Initial Subscription Cost
- Availability of Plans as per Requirement
- Tariff

Factor 3 combined the following attributes

- Voice Clarity
- Connectivity / Coverage

Thus looking at the complexion of the above factors, they can be named as:

Factor 1 : Service Quality & Brand Image

Factor 2 : Service Charges and Plan

Factor 3 : Network Quality

INTERPRETATION

A careful scrutiny of the above tables indicates that of the three deduced factors, the important factor that played a vital role in customers' choice towards MSP is service quality. It could be boosted by controlling the internal operation of the firm, increasing manpower, proper training of employee and relationship with customers and offering better and innovative VAS at minimum cost.

The Brand Image which depends upon the company's communication and positioning strategies and perception of the customers. Looking at the importance of these factors, services providers should concentrate on them as they are indirect components of brand buildings and strongly influence a customer's choice.

'Service Charge and Plan' is the second important factor. This factor is mainly influenced by the external environment of the firm. Despite this, the company should take care of charges by offering new and better schemes at lesser cost.

Network quality emerges as the third important factor and could be improved by proper investment and fortification of the infrastructure.

In the second part of the study, percentage analysis was used to find the most important motivator which motivates a customer to choose an MSP. An individual customer not only keeps in mind the above three factors. Table 6 indicates the response of respondents towards motivators. It clearly shows that a majority (53%) of the respondents have preferred recommended by Family Members, Friends and Peers who motivate respondents to choose Mobile Service Provider. It is because they are already aware about the MSP and its services so that they go with Family member, friends and peers are the motivators. The next category accounts for 23% respondents have preferred service operators only because their family members, relatives and close friends are using same operator.

Approximately 21% of the respondents are motivated by retailer's recommendation. Table 6 reveals that 3% of the respondents use the services of particular service operator because of corporate connection.

Table :6 Respondent's Response for Motivators		
Motivators	Number of Respondents	% of Respondents
Recommended by family members, friends and peers	80	53
Recommended by retailers	31	21
Same operator with family/relatives/close friends	34	23
Corporate Connection	5	3
Total	150	100

FINDINGS

The results reveal:

- Using factor analysis, it was found that customers are very keen on Service Quality & Brand Image.
- Service Charge and Plan is the next most important factor in choice making toward service provider.
- It was observed that Network Quality is the important factor which have been consider by the customers before choosing an MSP.
- It was find that a large proportion of the respondents have chosen an MSP because the operators recommended by family members, friends and peers.

CONCLUSION

The present study clearly points to the fact that the three factors, viz.., service quality & brand image, service charges and plan and network quality, play a vital role in the choice of an MSP. The second part of the study reveals the role of word-of-mouth in the marketing of a service provider. Due to competitive pressure, the Indian MSP market is flooded with verity of plans, service quality should be enhance by the mobile operators to increasing the level of the customer and service providers need to develop such more good image in the mind of the customer. Network related problems such as poor connectivity, low coverage force the customer to choose according to his preference. Mobile service provider market is on booming stage and come out with the different pan and scheme with low service charges, which forced customer to thing about iinitial subscription cost, availability of plans as per requirement and tariff.

From the above discussion, it can be conclude that service operators should create an emotional relationship with the customer through innovative plans and enhance their services quality & brand image, better connectivity and goodwill with the customer because the customer always want more from their operators. And ultimate, this emotional relationship influences a customer's choice over an MSP.

SUGGESTION

As the MSP market becomes more complex and more competitive, it is essential that services providers know what their customers are experiencing. Customers still want more from their operators. In this context, marketers of services providers should adopt the following strategies to improve their base.

- Because of stiff competition and fierce price war, every operator offers a virtually similar plan to their customers. So operators should adopt service-centric approach to increase the loyalty and customer base.
- Operators should focus on VAS because in India with lunching of 3g spectrum, VAS can reduce the dependency of ARPUs on voice.
- 'Rural value assed services' like mandi rates, soil information and weather forecasts help operators in the revival of revenues.
- Operators should focus on investment to expand their network coverage and connectivity.
- Individual service quality can be improved by immediate of customer complaints feedback and registration of Do Not Disturb (DND).
- Operators should have specific and suitable plans for each segment of customer.
- Data mining and CRM should be implemented to know the specific requirement of the customers.
- Operators should measure customer loyalty regularly.

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Appendix 1

Consumer Preferences for Mobile Service Providers

An Empirical Study in Bardoli

Please mark [ ] your responses to following:

Demographic Profile

1. **Name**: Mr./Mrs./Ms.
2. **Age**: [in year]

a. Below 25	[ ]	b. 26-35	[ ]
c. 36-45	[ ]	d. Above 45	[ ]

3. **Sex**:

a. Male	[ ]	b. Female	[ ]

4. **Educational Qualification**:

a. Up to 10th	[ ]	b. Intermediate	[ ]
c. Graduate	[ ]	d. Post graduation & others	[ ]

5. **Marital status**:

a. Married	[ ]	b. unmarried	[ ]

6. **Monthly Income** [Rs.]:

a. Below 5,000	[ ]	b. 5,001-10,000	[ ]
c. 10,001-15,000	[ ]	d. Above 15,001	[ ]

7. **Occupation**:

a. Business	[ ]	b. Govt. Employee	[ ]
c. Professional	[ ]	d. Students	[ ]
e. Others	[ ]		

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1. **Which mobile connection are you currently using?**

a. BSNL	[ ]	b. Tata Teleservices	[ ]
c. Airtel	[ ]	d. Aircel	[ ]
e. Vodafone	[ ]	f. Idea	[ ]
g. Reliance	[ ]	h. Uninor	[ ]

2. **Which types of service are you using?**

a. Prepaid	[ ]	b. Postpaid	[ ]

3. **For how long are you availing the services of the particular services provider?**

   a. Below 6 months [ ] b. ≥ 6months to < 1year [ ]

   c. ≥ 1year to < 2 years [ ] d. ≥ 2 years [ ]

4. **How much on an average do you spend on mobile per month (Rs.)?**

   a. Below 200 [ ] b. 201 - 500 [ ]

   c. 501 – 1,000 [ ] d. Above 1001 [ ]

5. **How important are the following factors for choosing a Mobile Services provider [MSP]? Rate these factors on a scale of 1 to 5 on the basis of your preference.**

   1 - Least Important, **2 -** Unimportant, **3** - Neutral, **4** - Important, **5** - Most Important

Factors	**1**	**2**	**3**	**4**	**5**
Tariff [Charge/Call Charge/s or Min.]					
Initial Subscription Cost					
Connectivity / Coverage					
Voice Clarity					
VAS [Value Added Services]					
Response to Customer's Suggestion/Complicity/Feedback					
Availability of Plans as per Requirement					
Advertisement					
Corporate Reputation					

6. **There are several motivators who motivate you to choose Mobile Services Provider. Select one from the following list of motivators.**

   a. Recommended by family members, friends and peers [ ]

   b. Recommended by retailers [ ]

   c. Same operator with family/relatives/close friends [ ]

   d. Corporate connection [ ]

7. **Are you satisfied with the services of current services provider?**

   a. Yes [ ] b. No [ ]

8. **If No, would you like to change your current service provider?**

   a. Yes [ ] b. No [ ]

9. **If you want to change your service provider, whom of the following would you prefer to opt?**

   a. BSNL [ ] b. Tata Teleservices [ ]

   c. Airtel [ ] d. Aircel [ ]

   e. Vodafone [ ] f. Idea [ ]

   g. Reliance [ ] h. Uninor [ ]

10. **Do you agree that sales and promotional calls made by sales and marketing firm or your MSP irritates you?**

    a. Yes [ ] b. No [ ]

Appendix 2

Demographic Profile of Respondents		
Variables		**Number**
Age	Below 25	69
	26-35	47
	36-45	25
	Above 45	09
	Total	**150**
Sex	Male	85
	Female	65
	Total	**150**
Educational Qualification	Up to 10^{th}	18
	Intermediate	19
	Graduate	72
	PG and other	41
	Total	**150**

Marital Status	Married	71
	Unmarried	79
	Total	**150**
Monthly Income (Rs.)	Below 5,000	48
	5,001 – 10,000	40
	10,001-15,000	33
	Above 15,001	29
	Total	**150**
Occupation	Business People	27
	Government Employee	20
	Professional	28
	Students	40
	Others	35
	Total	**150**