



***A study report on
Factors affecting brand switching in
Telecom industry***

MARKETING RESEARCH IBM-306

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1. Abstract

The following research has been conducted in order to examine the factors influencing brand switching in the telecommunication industry of India and to access the problem generally faced by the service user and their satisfaction towards the different cell phone service provider. Qualitative and Quantitative methods have been used in this research. Primary data for the research have been collected through 10 questionnaire survey from a sample of 155 mobile subscribers. The results of the research have been presented in a systematic manner and the findings have been discussed descriptively and graphically.

2. INTRODUCTION

It is no doubt that telecommunication industry has become an extraordinary part of today's dynamic and modern world. As the market becomes more mature, mobile communication services become more homogeneous and the competition for acquiring new customers and retaining the existing customers becomes more intense, and as a consequence customer satisfaction is a critical factor for mobile service providers to maintain and to improve their market share and profitability. In order to remain competitive, companies have to study and analyse various factors that affect consumer loyalty and satisfaction towards them and to come up with best possible solutions time to time. Brand switching regarding cellular companies is becoming very important because it has both aspects that

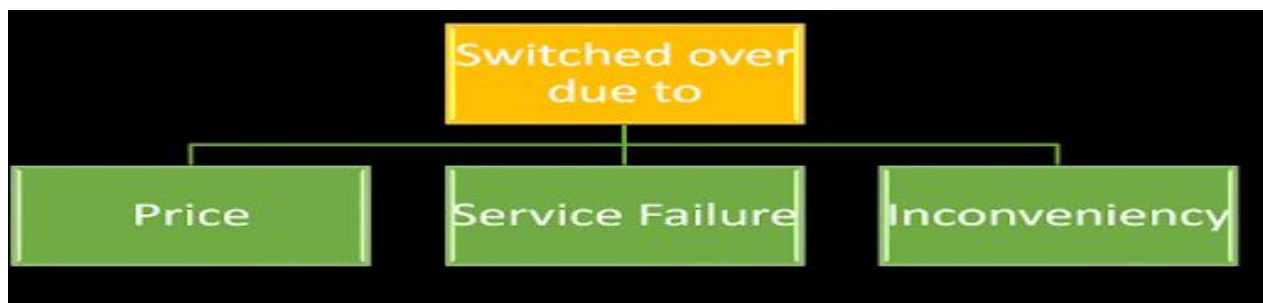
one company is losing their customers while other company is getting customer at same time.

In telecommunication industry, switching behavior is increasing dramatically due to factors like price, trust, customer satisfaction, customer services, inconvenience, perceived expectations, perceived quality (friends and family reviews), service quality, brand image and price perception. It is, therefore, important to understand the needs of the customer and provide solutions in the form of products and services that actually meet those needs.

3. LITERATURE REVIEW

Determinants of brand switching in mobile service providers are important factors that influence switching behaviors and preferences of customers in telecom industry regarding mobile service providers. So, it sounds as a major problem for the telecommunication service providers, especially for the mobile telecommunication service providers to deliver quality service consistently as changes in market compositions and competing characteristics have been surfacing incessantly. Brand switching behaviors of customers are increasing dramatically day by day due to service failure, customer satisfaction, price, inconvenience and customer services and companies are facing many issues in results like customer churn, loss of market share, low profitability among some of the problems.

CONCEPTUAL FRAMEWORK



Price

Price means the amount of money needed to acquire goods or services or both in combination. Price plays an important role in marketing. The price of product or service directly affects its sale. In telecommunication sector subscriber always prefer to low pricing in internet(for 4G LTE,3G services) packages, message packages, call charges, and in Value added services etc. Variation in call or message packages at various times regarding tariff provide a clear distinctive edge for cellular companies.

Inconvenience

Inconvenience means feel dissonance for un-prompt response regarding associated services or facilitations. These are Unethical issues with various conditions like , Subscription of your SMS, MMS and call packages are not on time, Packages are activated automatically without intimation or intentions to customer, charged an extra amount against subscription of packages, balance is usually happen etc. It's different with customer services as customer services are supporting to customer but systematic issues resist. Issues should be sort out at time, Package subscription, deactivations on demand by subscriber, tariff elaborations with hidden charges not addressed clearly by mobile service providers and customer considered it as extra deduction of balance or balance lost. Un-ethical issues are also included in inconvenience factors.

Service Failure

Service failure factor related to many symptoms like network busy, less coverage, call drop, Signal strength, service coverage, voice quality mean distortion in voice or interruption during calls and customer density

impacted a lot in that sense. Here Customer density means that you have low slot for subscribers but customer traffic is greater than your capacity, which results connection errors, disconnections (Call drop) of calls message failures etc. Due to that issues subscriber explore for better option and that intrigue switching behavior of customer. At that position competitors can positioned their distinctiveness in the minds of subscriber through promotions and advertisements etc.

4. Aim and Objective of Research

The main aim of the research is to examine the factors influencing brand switching behaviour in telecom industry.

The aim of the research have been expanded through following objective:-

- To examine the factors that influence the brand switching in telecom industry.
- To examine the factor that prevent brand switching in telecom industry.
- To propose recommendations to the mobile service providers for increasing customer loyalty.

5. Methodology

The main objective of the research is to identify the factors influencing brand switching in telecom industry of India. Here analysis of various factors is done and evaluated using various statistical measures.

5.1. Research Design:- A research design is basically a study that links the factual and empirical findings of the research to the research question and its objectives and also to the conclusion that is arrived at the end of the research. Survey research methods have been chosen for collecting the information for conducting the quantitative analysis.

5.2. Sampling:- Sampling method that is used in the research to collect the data is random sampling technique. In random sampling approach every unit or element from the sample population has equal likely chances to be selected as subject of consideration.

5.3.Data Collection Procedure:- There are two major techniques to collect data, when gathering data to tackle and approach the underlying objectives of the study. Data that is collected from any source which is already been published in some form is known as secondary data. Secondary data is the data that is already exists; it is gathered with prior set objective. Primary data is the first hand collection of data that is usually undertaken after some insights are gained in the area of research. In this project report, Primary data is collected through a questionnaire. A self-administered questionnaire was used to collect the relevant data. The questionnaire was then posted on social networking sites like facebook and whatsapp to collect the data.

QUESTIONNAIRE:

A close ended questionnaire was circulated through google forms, link of which is given below:

https://docs.google.com/forms/d/e/1FAIpQLSeNuYirMdIFTeK8cv1Bd1I-5wIU6FmaRr460cEJz_t1gJoYYg/viewform?usp=sf_link

6. Data Analysis:-

In this part various statistical methods were applied to study following things:-

- a) To know that satisfaction of particular customer depends on which factors and knowing which factor plays an important role
- b) To know how two factors are related to each other positively or negatively.
- c) To know how would the dependent variable changes on changing the one of the independent variable and to what extent.

Statistical Method used are chi-squared test, ANOVA, Weighted Sum Average. Software used were python, spss, tabuleu for analysing data graphically and statistically.

Chi- squared test was used to find the dependency of various factor on the customer preference for brand switching.

Anova test was performed to find the relationship between various factors taken into consideration.

To know the most motivating factors weighted sum average was used.

7. Results

7.1. Factors influencing brand change in Telecom Industry:-

- Following table shows how much money customer spends on phone and what customer feels about his/her spending and whether customer is willing to change their brand on the basis of price.

	Customer Preference for brand change	No	Yes	Total
Money Spend	Pricing			
100 to 250	cheap	4	10	14
	expensive	5	10	15
	moderate pricing	20	42	62
	very expensive	0	5	5
250 to 400	cheap	1	1	2
	expensive	5	7	12
	moderate pricing	2	7	9
	very expensive	2	1	3
400 to 600	expensive	0	4	4
	moderate pricing	3	1	4
< 100	cheap	1	4	5
	expensive	1	5	6
	moderate pricing	2	6	8
	very expensive	0	2	2
>600	cheap	1	2	3
	expensive	0	1	1
Total		47	108	155

Factors affecting brand switching behaviour (on the basis of price)

Most of the customer (42) spend around 100-250 Rs monthly on mobile phone and this customer find price to be moderate and they prefer to change their brand.

- Following table shows impact of Age on the brand switching behaviour in Telecom Industry:-

Customer Preference for brand change	No	Yes	Total
Age			
15 - 21 years	28	85	113
22 - 25 years	12	11	23
26- 30 years	5	1	6
<15 years	0	1	1
>30 years	2	10	12
Total	47	108	155

Factors affecting brand switching behaviour (on the basis of Age)

- Following table shows impact of occupation on the brand switching behaviour in Telecom Industry:-

Customer Preference for brand change	No	Yes	Total
Occupation			
Business	5	8	13
Doctor	0	1	1
Housewife	1	3	4
Service	9	8	17
Student	32	88	120
Total	47	108	155

Factors affecting brand switching behaviour (on the basis of Occupation)

- Following table shows impact of consumer preference of mobile phone usage on the brand switching behaviour in Telecom Industry:-

Customer Preference for brand change		No	Yes	Total
Main Use of phone according to customer				
Entertainment		11	16	27
Internet		33	79	112
SMS		3	13	16
Total		47	108	155

Factors affecting brand switching behaviour (on the basis of customer preference)

- Following table shows impact of Frequency of mobile phone usage on the brand switching behaviour in Telecom Industry:-

Customer Preference for brand change		No	Yes	Total
Frequency				
1 to 2 hours		8	19	27
2 to 5 hours		22	57	79
5 to 10 hours		14	27	41
more than 10 hours		3	5	8
Total		47	108	155

Factors affecting brand switching behaviour (on the basis of frequency of mobile usage)

- Following table shows impact of satisfaction of customer with mobile network with 1 being least satisfied and 5 being most satisfied on the brand switching behaviour in Telecom Industry:-

Customer Preference for brand change	No	Yes	Total
Satisfaction			
1	0	2	2
2	3	11	14
3	14	37	51
4	23	50	73
5	7	8	15
Total	47	108	155

Factors affecting brand switching behaviour (on the basis of frequency of mobile usage)

- Following table shows impact of awareness of portability plan to customers on the brand switching behaviour in Telecom Industry:-

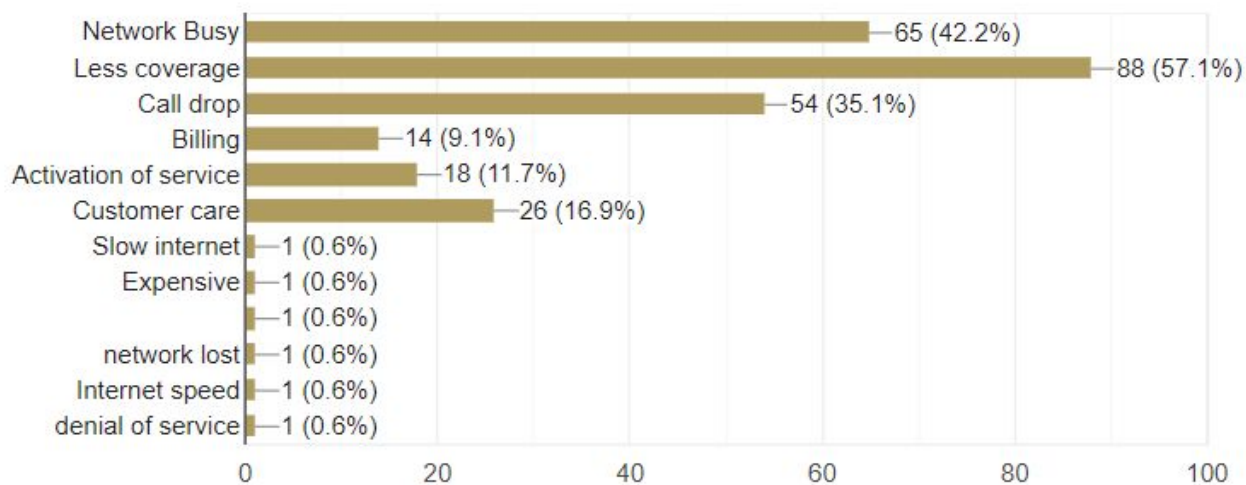
Customer Preference for brand change	No	Yes	Total
Awareness of mobile number Portability			
No	13	17	30
Yes	34	91	125
Total	47	108	155

Factors affecting brand switching behaviour (on the basis of awareness of mobile number portability plan)

- Following question was asked to know the problems faced by customers during their phone usage on daily basis:-

What kind of service failure problem you have faced? (you can select more than one)

154 responses



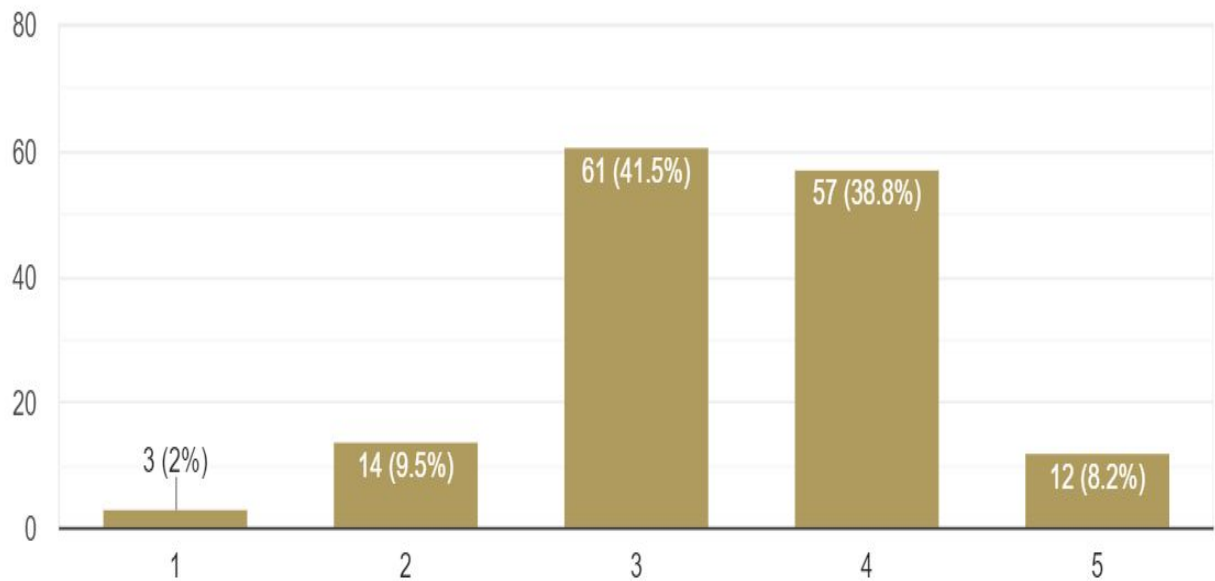
It is clear from the above graph that majority of the customers are facing Less Coverage problem(57.1%) following Network busy problem(42.2%), Call drop(35.1%), Customer care(16.9%), Activation of service(11.7%), Billing(9.1%).

- Following question was asked to know about satisfaction of customer with the after sale service of mobile network provider with 1 being the least satisfied and 5 being the most satisfied:-

Are you satisfied with the After Sales Service given by the company?



147 responses



It can be concluded from the above graph that maximum no. of people are neutral (41.5 %) for satisfaction with after sales service and 38.8% customers are satisfied and 9.5% of the customers are not satisfied.

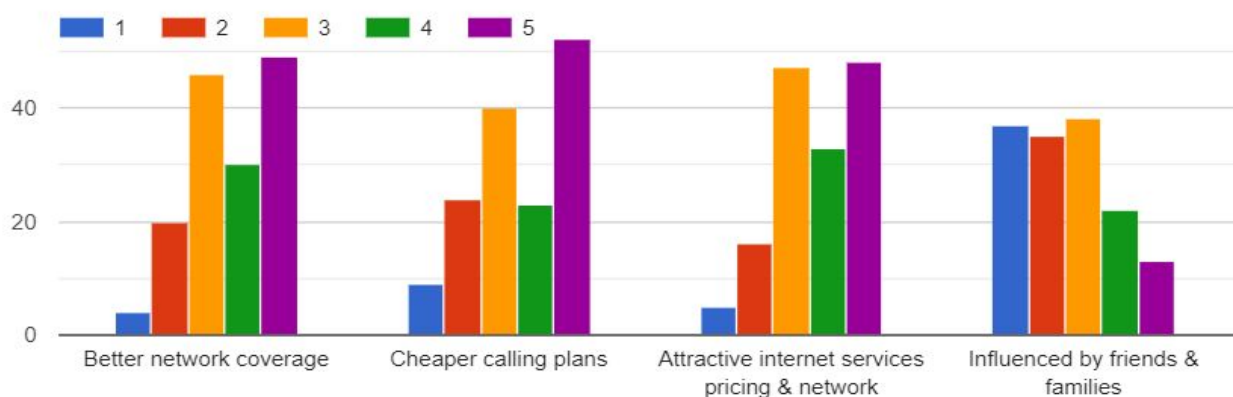
7.2. Estimation of most motivating factor for brand switching in telecom industry:-

- Following question using Likert scaling technique was asked in questionnaire in order to estimate the most motivating factor according to customer for brand switching in telecom industry

Here following factors motivating for the brand switching are taken into consideration from the literature review:-

- 1) Better network coverage.
- 2) Cheaper calling plans.
- 3) Attractive internet service pricing and network.
- 4) Influenced by friends and families.
- 5) Higher customer satisfactory service.

Rank the parameters which would motivate you for switching to another telecom service provider with 1 being least motivating and 5 being most motivating



Here value deciding the rank of motivating factor for brand switching in telecom industry can be determined by calculating weighted average of each factor

$$\text{Weighted average} = \frac{W1*A1 + W2*A2 + W3*A3 + W4*A4 + W5*A5}{A1 + A2 + A3 + A4 + A5}$$

Here W1 = Weight for factor 1 given by customer

A1 = Frequency for weight for the weight

Here higher value of weighted average will be representing higher rank of motivating factor for brand switching in telecom industry.

7.2.1 Better Network Coverage:-

Weight	Frequency	Weight * Frequency
1	4	4
2	20	40
3	46	138
4	30	120
5	55	275
Total	155	577

$$\text{Weighted Average} = 594/155 = 3.72258$$

7.2.2 Cheaper call plans:-

Weight	Frequency	Weight * Frequency
1	9	9
2	22	44
3	40	120
4	23	92
5	59	295
Total	155	560

Weighted Average = $560/155 = 3.6129$

7.2.3 Attractive internet services pricing and network:-

Weight	Frequency	Weight * Frequency
1	5	5
2	16	32
3	47	141
4	33	132
5	54	270
Total	155	580

Weighted Average = $580/155 = 3.7419$

7.2.4 Influence by friends and families:-

Weight	Frequency	Weight * Frequency
1	37	37
2	32	64
3	48	144
4	22	88
5	13	65
Total	155	398

Weighted Average = $398/155 = 2.5677$

7.2.5 High Customer Satisfaction Service:-

Weight	Frequency	Weight * Frequency
1	11	11
2	30	60
3	53	159
4	36	144
5	25	125
Total	155	499

Weighted Average = $499/155 = 3.2193$

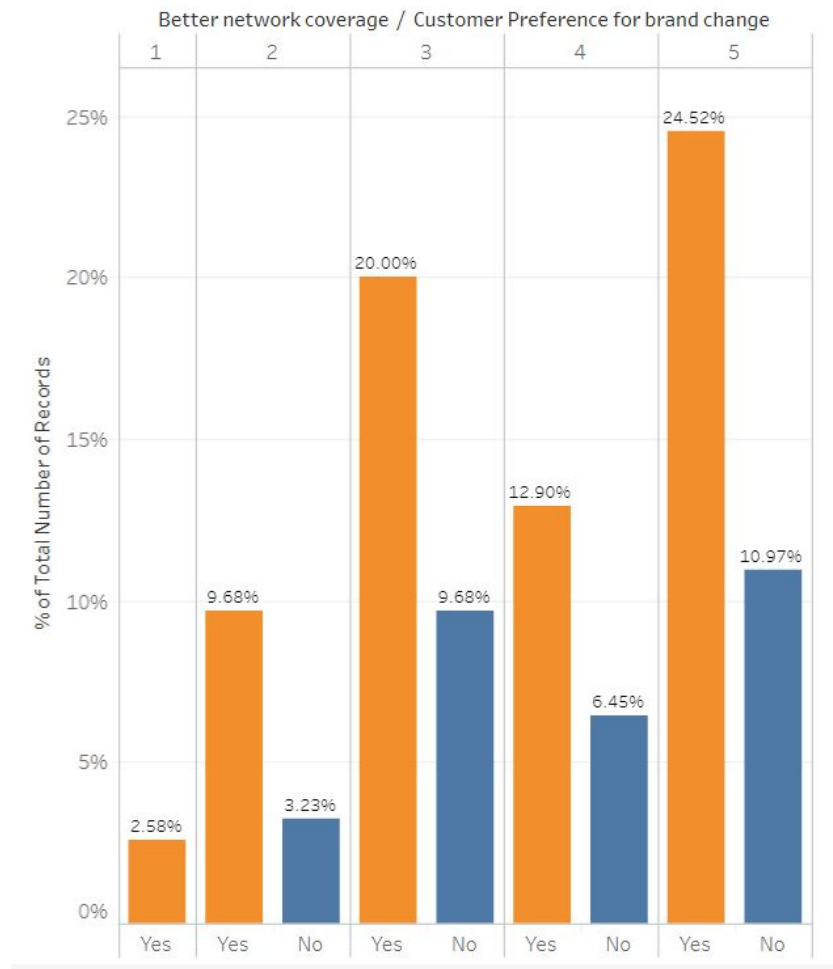
From the above analysis it can be observed that Attractive Internet Service Price is the most motivating factor for customers for brand switching in telecom industry with an score of 3.7419, followed by Better network coverage(3.72258), Cheaper call plans(3.6129), High Customer Satisfaction Service(3.2139), Influence by Friends and Family(2.567).

Following table summarizes ranking of motivating factor for customers for brand switching in telecom industry.

Rank	Factor	Score
1	Attractive Internet Service Price	3.7419
2	Better network coverage	3.7225
3	Cheaper call plans	3.6129
4	High Customer Satisfaction Service	3.2193
5	Influence by Friends and Family	2.5677

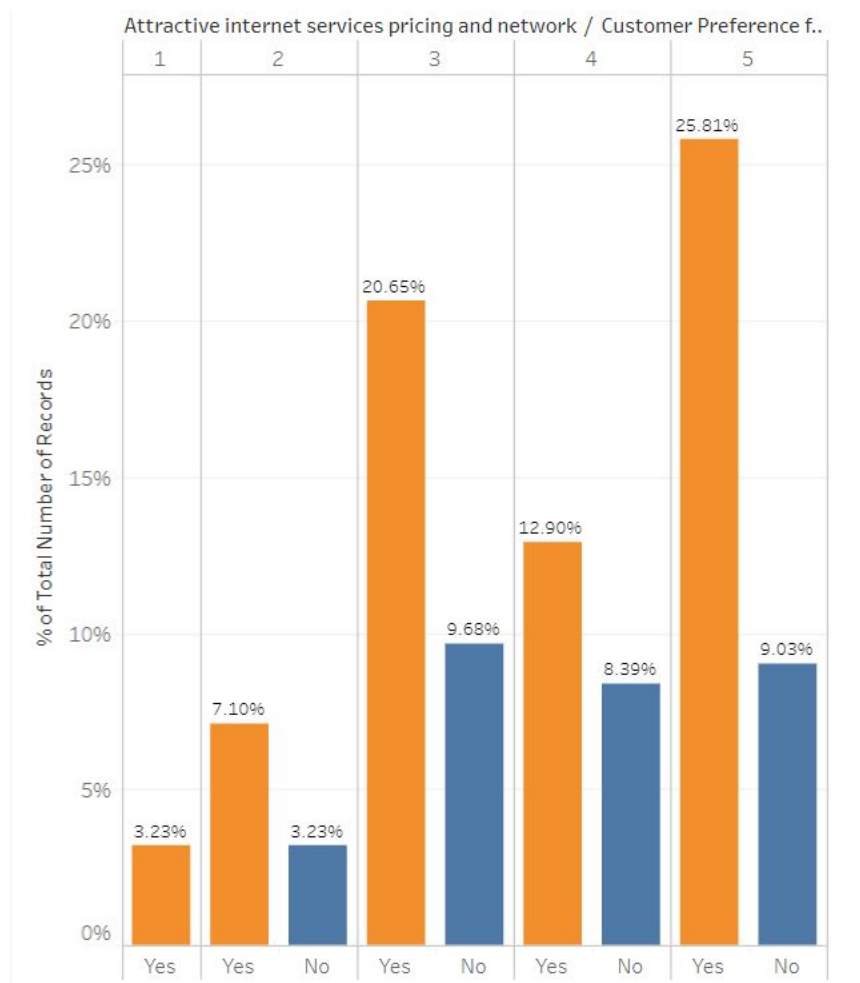
Each of the above factor is analysed using software including tabuleu and spss and following results were obtained. In each of the following table relationship between factors motivating for brand switching and customer preference for brand switching can be seen.

Better Network Coverage



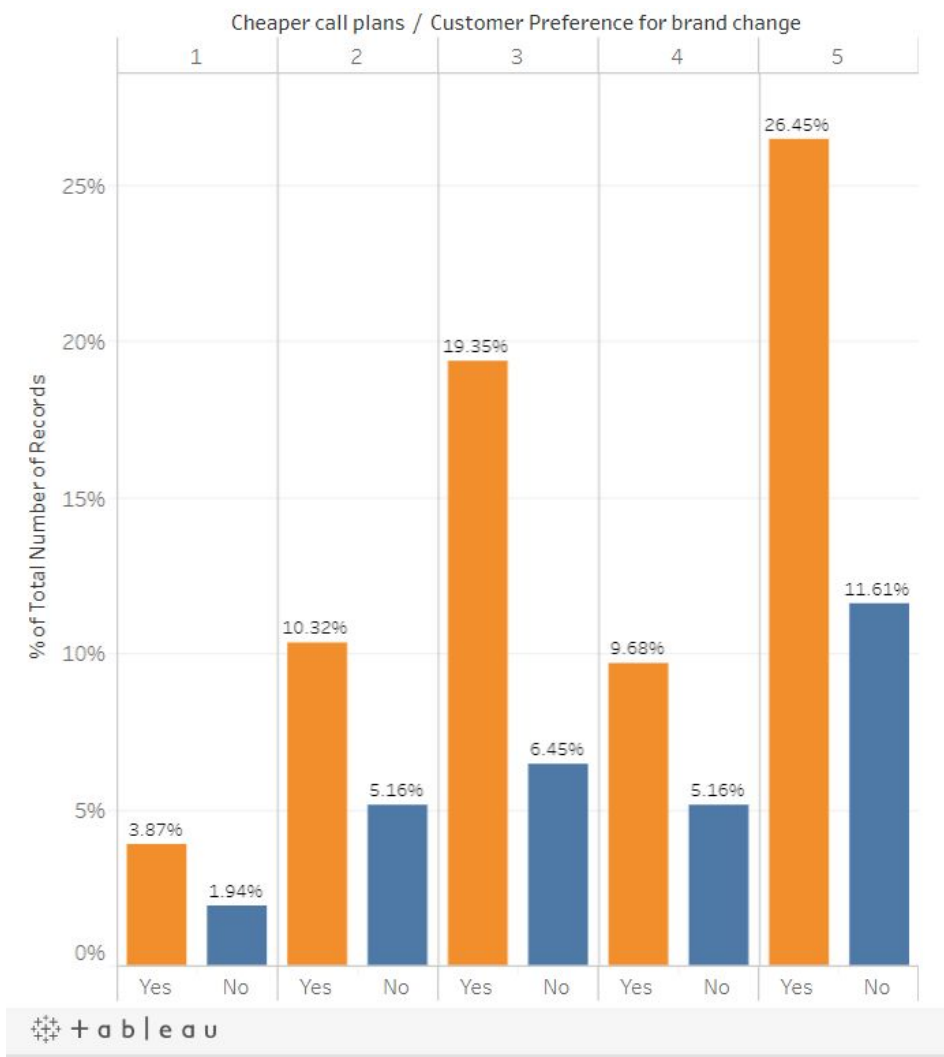
Here yellow colour represents customer is willing to change the brand while blue colour represents customer is not willing to change the brand. Here customer(24.52 %) find this factor to be most motivating for brand switching and they want to change their brand while customer(10.9 %) finds this factor to most motivating but do not want to change their brand. Similar inference can be obtained for each factor.

Attractive Internet Service Price



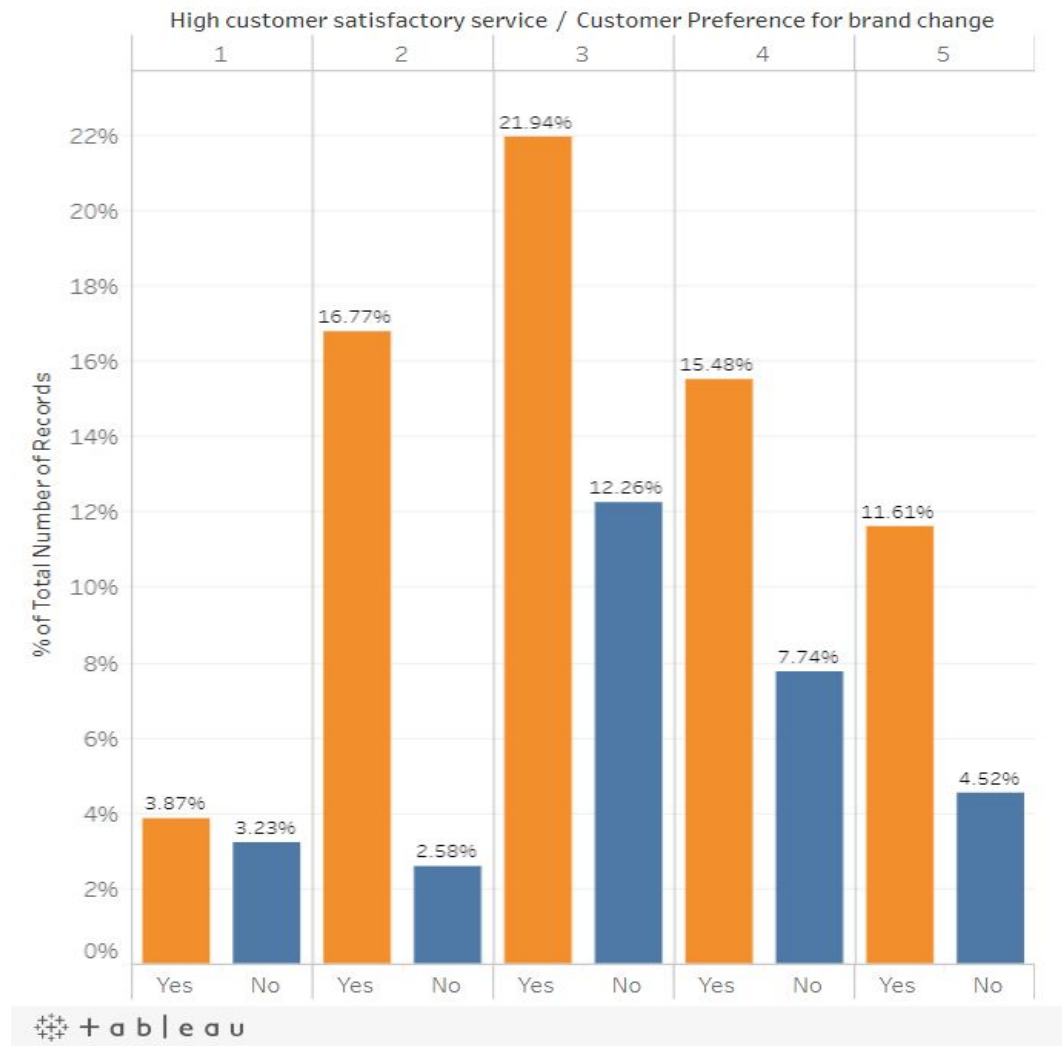
Here yellow colour represents customer is willing to change the brand while blue colour represents customer is not willing to change the brand. Here customer(25.81%) find this factor to be most motivating for brand switching and they want to change their brand while customer(9.03 %) finds this factor to most motivating but do not want to change their brand.

Cheaper Call Plans



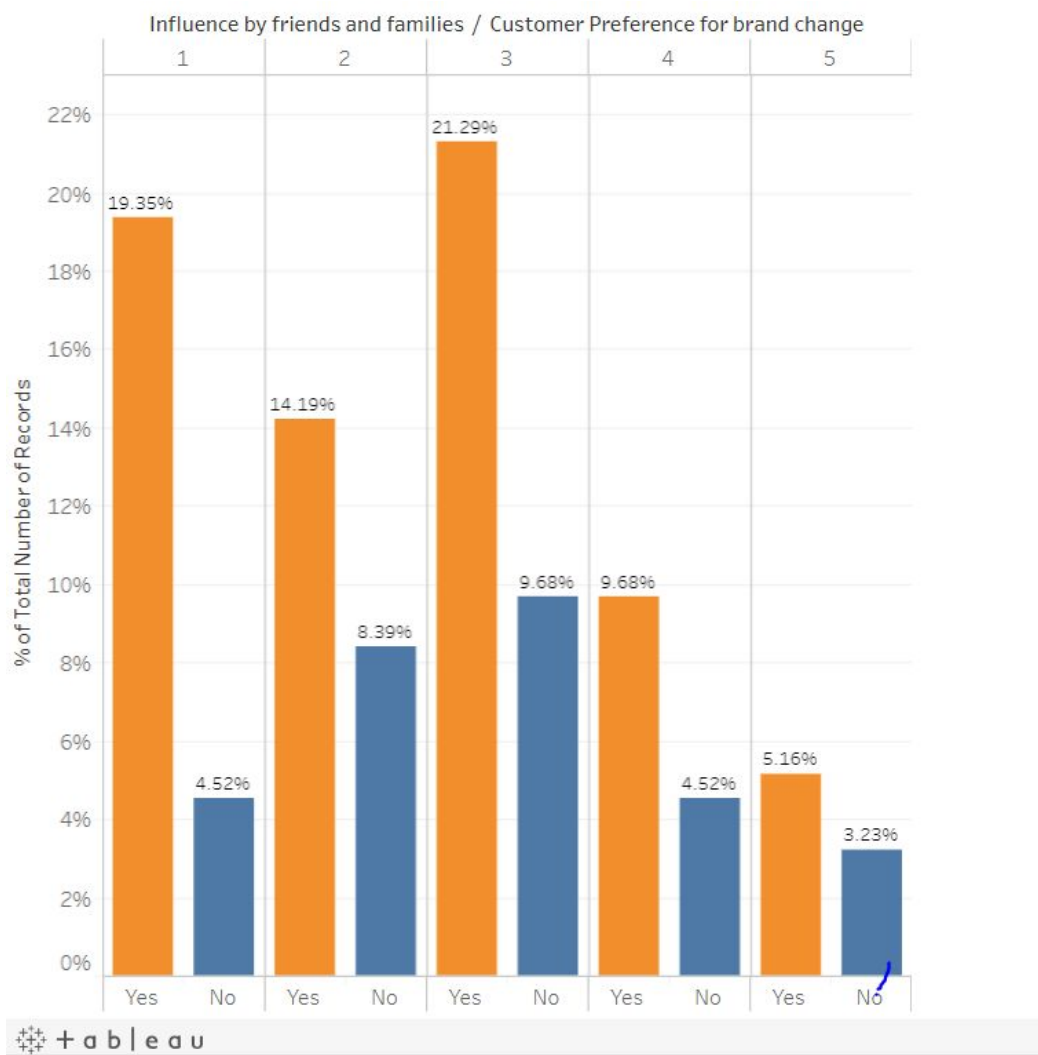
Here yellow colour represents customer is willing to change the brand while blue colour represents customer is not willing to change the brand. Here customer(26.45%) find this factor to be most motivating for brand switching and they want to change their brand while customer(11.61 %) finds this factor to most motivating but do not want to change their brand.

High Customer Satisfaction Service



Here yellow colour represents customer is willing to change the brand while blue colour represents customer is not willing to change the brand. Here customer(11.61%) find this factor to be most motivating for brand switching and they want to change their brand while customer (4.52%) finds this factor to most motivating but do not want to change their brand.

Influence by friends and family



Here yellow colour represents customer is willing to change the brand while blue colour represents customer is not willing to change the brand. Here customer(11.61%) find this factor to be most motivating for brand switching and they want to change their brand while customer (4.52%) finds this factor to most motivating but do not want to change their brand.

Chi-Square test was performed to know the dependency of each factor on the customer preference for brand switching using spss software. Following null hypothesis were taken and following result were obtained.

H1:- Better Network coverage has significant effect on customer preference for brand switching.

H2:- Attractive Internet Service Pricing has significant effect on customer preference for brand switching.

H3:- Cheaper Call Plans has significant effect on customer preference for brand switching.

H4:- High Customer Satisfaction Service has significant effect on customer preference for brand switching.

H5:- Influence by friend and family has significant effect on customer preference for brand switching.

This hypothesis are tested using chi-squared test in spss software with 5% level of significance with critical value for 4 degrees of freedom equal to 9.488 and following results were obtained for each factors:-

Better Network Coverage

Better network coverage * Customer Preference for brand change

Crosstab					
			Customer Preference for brand change		
			No	Yes	Total
Better network coverage	1	Count	0	4	4
		Expected Count	1.2	2.8	4.0
		Residual	-1.2	1.2	
	2	Count	5	15	20
		Expected Count	6.1	13.9	20.0
		Residual	-1.1	1.1	
	3	Count	15	31	46
		Expected Count	13.9	32.1	46.0
		Residual	1.1	-1.1	
	4	Count	10	20	30
		Expected Count	9.1	20.9	30.0
		Residual	.9	-.9	
	5	Count	17	38	55
		Expected Count	16.7	38.3	55.0
		Residual	.3	-.3	
Total		Count	47	108	155
		Expected Count	47.0	108.0	155.0

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.260 ^a	4	.688
Likelihood Ratio	3.416	4	.491
Linear-by-Linear Association	.582	1	.445
N of Valid Cases	155		

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.21.

Chi-squared critical = 9.488 (for 5% significance level with df = 4)

Chi-squared calculated < Chi-square critical.

Here we fail to reject null hypothesis. Therefore we can conclude that Better network coverage has significant effect on customer preference for brand switching

Attractive Internet Service Price:-

Attractive internet services pricing and network * Customer Preference for brand change

Crosstab

			Customer Preference for brand change		
			No	Yes	Total
Attractive internet services pricing and network	1	Count	0	5	5
		Expected Count	1.5	3.5	5.0
		Residual	-1.5	1.5	
	2	Count	5	11	16
		Expected Count	4.9	11.1	16.0
		Residual	.1	-.1	
	3	Count	15	32	47
		Expected Count	14.3	32.7	47.0
		Residual	.7	-.7	
	4	Count	13	20	33
		Expected Count	10.0	23.0	33.0
		Residual	3.0	-3.0	
	5	Count	14	40	54
		Expected Count	16.4	37.6	54.0
		Residual	-2.4	2.4	
Total		Count	47	108	155
		Expected Count	47.0	108.0	155.0

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.018 ^a	4	.404
Likelihood Ratio	5.410	4	.248
Linear-by-Linear Association	.030	1	.862
N of Valid Cases	155		

Chi-squared critical = 9.488 (for 5% significance level with df = 4)

Chi-squared calculated < Chi-square critical.

Here we fail to reject null hypothesis. Therefore we can conclude that Attractive Internet Service Price has significant effect on customer preference for brand switching

Cheaper Call Plans:-

Cheaper call plans * Customer Preference for brand change

Crosstab

			Customer Preference for brand change		
			No	Yes	Total
Cheaper call plans	1	Count	3	6	9
		Expected Count	2.7	6.3	9.0
		Residual	.3	-.3	
	2	Count	8	16	24
		Expected Count	7.3	16.7	24.0
		Residual	.7	-.7	
	3	Count	10	30	40
		Expected Count	12.1	27.9	40.0
		Residual	-2.1	2.1	
	4	Count	8	15	23
		Expected Count	7.0	16.0	23.0
		Residual	1.0	-1.0	
	5	Count	18	41	59
		Expected Count	17.9	41.1	59.0
		Residual	.1	-.1	
Total		Count	47	108	155
		Expected Count	47.0	108.0	155.0

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	.895 ^a	4	.925
Likelihood Ratio	.908	4	.923
Linear-by-Linear Association	.000	1	.998
N of Valid Cases	155		

Chi-squared critical = 9.488 (for 5% significance level with df = 4)

Chi-squared calculated < Chi-square critical.

Here we fail to reject null hypothesis. Therefore we can conclude that Cheaper Call Plans has significant effect on customer preference for brand switching

High Customer Satisfaction Service

Crosstab					
			Customer Preference for brand change		
			No	Yes	Total
High customer satisfactory service	1	Count	5	6	11
		Expected Count	3.3	7.7	11.0
		Residual	1.7	-1.7	
	2	Count	4	26	30
		Expected Count	9.1	20.9	30.0
		Residual	-5.1	5.1	
	3	Count	19	34	53
		Expected Count	16.1	36.9	53.0
		Residual	2.9	-2.9	
	4	Count	12	24	36
		Expected Count	10.9	25.1	36.0
		Residual	1.1	-1.1	
	5	Count	7	18	25
		Expected Count	7.6	17.4	25.0
		Residual	-.6	.6	
Total	Count	47	108	155	
	Expected Count	47.0	108.0	155.0	

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.275 ^a	4	.180
Likelihood Ratio	6.842	4	.144
Linear-by-Linear Association	.066	1	.797
N of Valid Cases	155		

Chi-squared critical = 9.488 (for 5% significance level with df = 4)

Chi-squared calculated < Chi-square critical.

Here we fail to reject null hypothesis. Therefore we can conclude that High Customer Satisfaction Service has significant effect on customer preference for brand switching

Influence by friends and family

Crosstab					
			Customer Preference for brand change		
			No	Yes	Total
Influence by friends and families	1	Count	7	30	37
		Expected Count	11.2	25.8	37.0
		Residual	-4.2	4.2	
	2	Count	13	22	35
		Expected Count	10.6	24.4	35.0
		Residual	2.4	-2.4	
	3	Count	15	33	48
		Expected Count	14.6	33.4	48.0
		Residual	.4	-.4	
	4	Count	7	15	22
		Expected Count	6.7	15.3	22.0
		Residual	.3	-.3	
	5	Count	5	8	13
		Expected Count	3.9	9.1	13.0
		Residual	1.1	-1.1	
Total		Count	47	108	155
		Expected Count	47.0	108.0	155.0

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.498 ^a	4	.478
Likelihood Ratio	3.665	4	.453
Linear-by-Linear Association	1.457	1	.227
N of Valid Cases	155		

Chi-squared critical = 9.488 (for 5% significance level with df = 4)

Chi-squared calculated < Chi-square critical.

Here we fail to reject null hypothesis. Therefore we can conclude that Influence by friends and family has significant effect on customer preference for brand switching

Anova was performed to obtain the relationship between the factors affecting brand switching in telecom industry and following results were obtained

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Better network coverage	Between Groups	3.187	1	3.187	2.415	.122
	Within Groups	201.884	153	1.320		
	Total	205.071	154			
Cheaper call plans	Between Groups	4.840	1	4.840	2.951	.088
	Within Groups	250.927	153	1.640		
	Total	255.768	154			
Attractive internet services pricing and network	Between Groups	.473	1	.473	.363	.548
	Within Groups	199.204	153	1.302		
	Total	199.677	154			
Influence by friends and families	Between Groups	1.523	1	1.523	1.006	.317
	Within Groups	231.471	153	1.513		
	Total	232.994	154			
High customer satisfactory service	Between Groups	.015	1	.015	.011	.917
	Within Groups	202.527	153	1.324		
	Total	202.542	154			
Customer Preference for brand change	Between Groups	.287	1	.287	1.352	.247
	Within Groups	32.462	153	.212		
	Total	32.748	154			

8. Conclusion:-

Based on the data obtained following finding can be observed:-

- Attractive Internet service is the most influencing factor for brand switching in current Indian Market .
- Major service failure experienced by customer is network less coverage (57.1 %) followed by network busy problem(42.2 %), call drop problem(35.1 %).
- Most of the customer (42) spend around 100-250 Rs monthly on mobile phone and this customer find price to be moderate and they prefer to change their brand.

Based on the outcomes it can be seen that major factors which influence brand switching are Attractive Internet Service Pricing, Better network coverage, Cheaper call plans, High customer satisfaction service, Influence by friends and family. This study provides some valuable recommendation to practitioners to develop policies to ensure that there is enhanced quality of service, affordable and attractive packages for family and friends. They should be given more importance to suit different people and offer continuous sale-promotion to its customers. Operators should provide proper and steady network and data service in most of the circles where they operate, should provide with humble and caring customer care services.

9. Limitations :-

- The respondents may be hesitant to give exact information.
- The sample size was 155 which cannot represent a large population.
- The expectations of the customers in responses collected may vary from those of the rest of India.