BRAND LOYALTY FOR CELLULAR NETWORK

Aunkita Pandey¹, Arindam Satpati², Somnath Sardar³

¹Assistant Professor, ²Student, ³Student
B.K School of Professional and Management Studies (DPPG), Gujarat University, Ahmedabad Gujarat (India)
Email: ¹aunkitasharma@gmail.com, ²arindam25aru@gmail.com, ³somnath6188@gmail.com

ABSTRACT
The Indian telecom industry is a very dynamic industry with very stiff competition amongst existing service providers in the telecom markets. But the brand loyalty among the customers gets difficult because of this competition. So, it gets necessary what consumers want and what can satisfy them. In that context the present papers are the research of 201 consumers as well as respondents of finding the attributes and factors forming the consumers loyal and stay connected to one brand only. The research was done by Google form in Gujarat state with the relevant literature review of the research doing presently.

Keywords: Brand loyalty, telecom markets, factors study

INTRODUCTION
Nowadays every single person in this world is using mobile phones regularly. In mobile phones there is a need of cellular network without which one cannot call anyone and even use internet (mobile data). In this competitive world there are approximately more than 30 various cellular networks all over the world. But our survey and study are limited about the brand loyalty of Indian customers towards the companies of cellular network available in India currently.

Telecom Market
Right now, in India there are 4 cellular network companies. According to TRAI (Telecom Regulatory Authority of India), Jio has 36% market share, Airtel has 30.81%, Vi has 23% and BSNL has 10.19% market share for telecom market in India.
Earlier there used to be more companies in telecom industry but some got closed because of merger with other company, some because of license cancellation, some got bankrupt.

Brand Loyalty for Customers

The customers used to choose the cellular network depending on various factors or attributes they want like calling network, internet speed, rates, extra offers and customer services. The customers change their telecom company once they get dissatisfied or face any problem with their existing company. The efforts of the company also play an important factor in maintaining their customers. All these together can justify for the brand loyalty of customers for cellular network.

NEED OF STUDY
We are trying to find the loyalty for the brand from this research project in reference to cellular network present currently in India but we are limiting our research to Gujarat only.
The population is changing their cellular networks frequently or says timely because they face many issues from their network and get dissatisfied and on the other side there are population who are sticking to same network only for many years because of great satisfaction of services and many more factors.
We are doing research on all those factors that have made the population to stick to same cellular network v/s to change the cellular network.

OBJECTIVES
Primary Objective:
• The main objective of our research is to study the factors that play an important role in purchasing the
telecom card or cellular network.

Secondary Objective:
- To study for customers satisfied with their cellular network
- To know that whether customers recommend their cellular network to others or not.
- To find is there any specific factor for the selecting the cellular network according to age group.

RESEARCH METHODOLOGY

Research Design
Descriptive research design has been carried out for our survey.

Sources
The survey was based on the primary data collection that was done by us on our selected sample area and size.

Sample Size
We had surveyed 201 respondents.

Sample Area
The location we have selected for survey was Gujarat State, India.

Sampling Technique
Structured Questionnaire was made and sent to respondents with the use of google form.

LITERATURE REVIEW

Mudanganyi, M. A. R. V. E. L. O. U. S. (2017) south African mobile seller communication landscape has become increasingly competitive developing brand equity is a critical need for gaining pleasing and retaining loyal clients in order to expedite repeat purchase patronage. Ek primary goal of the study was to investigate the brand loyalty in South Africa's consumer Pran equity of cellular services using a quantitative research methodology. This research hypotheses were to create a positive relationship between various factors that directly proportionate with the customer satisfaction, these factors mainly include, brand awareness, perceived brand quality, association of brand image and brand loyalty. Thus, all the hypotheses created were supported and accepted.

Ikramuddin, I., Adam, M., Sofyan, H., & Faisal, F. (2018) it was carried out in Indonesia in 2018 by Ikramuddin, Muhammad Adam, Hizir Sofyan, Faisal. The research was done to check the growth in the subscribers and reason of its factors. Even they tried to found out relationship between service quality and brand loyalty, customer satisfaction and brand loyalty, brand trust and brand loyalty. The whole research was qualitative in nature with total 44 research papers they have studied.

Afzal, S., Chandio, A. K., Shaikh, S., Bhand, M., & Ghumro, B. A. (2013) this study aims to reveal the brand loyalty of customers towards cellular network in Pakistan. This study is applicable to all the cellular networks in Pakistan done by Sarwat Afzal, Aamir Khan Chandio, Sania Shaikh, Muskan Bhand, Bais Ali Ghumro and Anum Kanwal Khuhr. The research study includes survey of 1048 respondents and convenient sampling method is used. This study reveals that service quality is Negatively associated but price is positively associated with brand loyalty.

Christian, M., & Rajan, M. (2015) this research was done by Dr. Christiana M Beulah Viji and Er. Rajan M Joseph Sasi in 2015 with 388 respondents. The main objective of this research paper is so explore the factors that influence customer loyalty so that it will be helpful for the mobile service providers to concentrate more on such attributes. The results identified call rate/quality, network coverage and sales promotion as having significant positive relationship to customer loyalty. In addition, brand image and prompt customer service were seen to have less effect on customer loyalty.

ANALYSIS

Demographic Details of the respondents

| Age of Respondents | Frequency | Percent |
|-------------------|-----------|---------|
| Below 20          | 20        | 10.0    |
| 21-30             | 164       | 81.6    |
| 31-40             | 5         | 2.5     |
| 41-50             | 6         | 3.0     |
| More than 50      | 6         | 3.0     |

| Gender of Respondents | Frequency | Percent |
|-----------------------|-----------|---------|
| Male                  | 86        | 42.8    |
From the above table, it has been clearly stated that 10% respondents are below 20, 81.6% respondents belong to 21-30 age group, 2.5% to 31-40, 3% to 41-50 and rest 3% to more than 50 years of age category. In our sample population 57.2% respondents are female while 42.8% populations are male. In our research majority of population are 58.2% graduated while 31.3% are post graduated, 6% are school pass out population and 4% have professional qualification. Looking at the profession of the respondents it is seen that 82.1% are student, 10.4% are service going person, 4.5% are businessman and 1.5% population belong to other professions. 73.1% respondents have annual income of less than 5 lacs, 19.4% have income of 5 lacs to 10 lacs, 6% have 10 lacs to 20 lacs while 1.5% respondents have more than 30 lacs of income.

Reliability Statistics

| Reliability Statistics                      |
|---------------------------------------------|
| Cronbach’s Alpha                           |
| 0.725                                       |

Source: SPSS Output

The Cronbach’s Alpha value is greater than 0.7 that it is 0.725 so the scales and data are highly reliable to go.

Normality Test

| Tests of Normality                      |
|-----------------------------------------|
| Kolmogorov-Smirnov² and Shapiro-Wilk    |
| Statistic, df, Sig., Statistic, df, Sig.|
| Will you recommend your present cellular network to others for use? 0.509, 201, 0.000, 0.439, 201, 0.000 |

a. Lilliefors Significance Correction

Source: SPSS Output

Normality test passes as the value of Kolmogorov-Smirnov is more than 0.5 that is 0.509.

Kruskal-Wallis Test

H0: There is no significance difference of choosing cellular network on the basis of various factors of cellular network according to various age group.

H1: There is significance difference of choosing cellular network on the basis of various factors of cellular network according to various age group.
Test Statistics\textsuperscript{a,b}

|                      | What are attributes of the Cellular Network that matter you for buying new sim or changing the old one? [Calling Network] | What are attributes of the Cellular Network that matter you for buying new sim or changing the old one? [InternetSpeed] | What are attributes of the Cellular Network that matter you for buying new sim or changing the old one? [Rates] | What are attributes of the Cellular Network that matter you for buying new sim or changing the old one? [Extra Offers] | What are attributes of the Cellular Network that matter you for buying new sim or changing the old one? [CustomerService] |
|----------------------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Kruskal-Wallis H     | 2.143                                                                                                         | 4.616                                                                                                         | 3.746                                                                                                         | 4.854                                                                                                         | 4.811                                                                                                         |
| Df                   | 4                                                                                                             | 4                                                                                                             | 4                                                                                                             | 4                                                                                                             | 4                                                                                                             |
| Asymp. Sig.          | 0.709                                                                                                         | 0.329                                                                                                         | 0.442                                                                                                         | 0.303                                                                                                         | 0.307                                                                                                         |
| a. Kruskal Wallis Test | b. Grouping Variable: Age Of Respondents                                                                                           | b. Grouping Variable: Age Of Respondents                           | b. Grouping Variable: Age Of Respondents                           | b. Grouping Variable: Age Of Respondents                           | b. Grouping Variable: Age Of Respondents                           |

\textit{Source: SPSS Output}

Every value here is more than 0.05 that means nothing creates significant difference in choosing the cellular network as per age category.
Hence H0 is proved. That is H0: There is no significance difference of choosing cellular network on the basis of various factors of cellular network according to various age group.

One Way Anova
H0: There is no significance difference on recommending cellular network on the basis of various factors of cellular network.
H1: There is significance difference on recommending cellular network on the basis of various factors of cellular network.

\textbf{ANOVA}

|                      | F          | Sig.        |
|----------------------|------------|-------------|
| What are attributes of the Cellular Network that matter you for buying new sim or changing the old one? [Calling Network] | 3.357      | 0.068       |
| What are attributes of the Cellular Network that matter you for buying new sim or changing the old one? [InternetSpeed] | 0.031      | 0.861       |
| What are attributes of the Cellular Network that matter you for buying new sim or changing the old one? [Rates] | 3.017      | 0.084       |
| What are attributes of the Cellular Network that matter you for buying new sim or changing the old one? [Extra Offers] | 2.808      | 0.095       |
| What are attributes of the Cellular Network that matter you for buying new sim or changing the old one? [CustomerService] | 8.107      | 0.005       |

\textit{Source: SPSS Output}

Here p value is less than 0.05 in Customer Service that means the respondent doesn’t wish to recommend cellular network to others because of customer service.
Hence H1 is proved. There is significance difference on recommending cellular network on the basis of various factors of cellular network.

\textbf{Chi - Square Test}
H01: There is no significance association between Vodafone Idea, Airtel, Jio, BSNL and the factor/attribute (Calling Network) the respondents look while choosing cellular network.
H11: There is a significance association between Vodafone Idea, Airtel, Jio, BSNL and the factor/attribute (Calling Network) the respondents look while choosing cellular network.
H02: There is no significance association between Vodafone Idea, Airtel, Jio, BSNL and the factor/attribute (Internet Speed) the respondents look while choosing cellular network.
H12: There is a significance association between Vodafone Idea, Airtel, Jio, BSNL and the factor/attribute (Internet Speed) the respondents look while choosing cellular network.
Speed) the respondents look while choosing cellular network.
H03: There is no significance association between Vodafone Idea, Airtel, Jio, BSNL and the factor/attribute (Rates) the respondents look while choosing cellular network.
H13: There is a significance association between Vodafone Idea, Airtel, Jio, BSNL and the factor/attribute (Rates) the respondents look while choosing cellular network.
H04: There is no significance association between Vodafone Idea, Airtel, Jio, BSNL and the factor/attribute (Extra Offers) the respondents look while choosing cellular network.
H14: There is a significance association between Vodafone Idea, Airtel, Jio, BSNL and the factor/attribute (Extra Offers) the respondents look while choosing cellular network.
H05: There is no significance association between Vodafone Idea, Airtel, Jio, BSNL and the factor/attribute (Customer Service) the respondents look while choosing cellular network.
H15: There is a significance association between Vodafone Idea, Airtel, Jio, BSNL and the factor/attribute (Customer Service) the respondents look while choosing cellular network.

**Chi-Square Tests**

| Vodafone Idea (CallingNetwork) | Value | df | Asymptotic Significance (2-sided) |
|-------------------------------|-------|----|----------------------------------|
| Pearson Chi-Square            | 4.037 | 3  | 0.257                            |

| Vodafone Idea (InternetSpeed) | Value | df | Asymptotic Significance (2-sided) |
|-------------------------------|-------|----|----------------------------------|
| Pearson Chi-Square            | 4.203 | 3  | 0.240                            |

| Vodafone Idea (Rates)         | Value | df | Asymptotic Significance (2-sided) |
|-------------------------------|-------|----|----------------------------------|
| Pearson Chi-Square            | 3.59  | 4  | 0.986                            |

| Vodafone Idea (ExtraOffers)   | Value | df | Asymptotic Significance (2-sided) |
|-------------------------------|-------|----|----------------------------------|
| Pearson Chi-Square            | 4.567 | 4  | 0.335                            |

| Vodafone Idea (CustomerService) | Value | df | Asymptotic Significance (2-sided) |
|--------------------------------|-------|----|----------------------------------|
| Pearson Chi-Square             | 3.967 | 4  | 0.410                            |

**Source: SPSS Output**
Here all the p-values are more than 0.05 hence H01, H02, H03, H04, H05 is rejected and there is significance association between Vodafone Idea and all the factors/attributes the respondents look while choosing cellular network.

**Chi-Square Tests**

| Airtel (CallingNetwork) | Value | df | Asymptotic Significance (2-sided) |
|--------------------------|-------|----|----------------------------------|
| Pearson Chi-Square       | 908   | 3  | 0.823                            |

| Airtel (Internet Speed)  | Value | df | Asymptotic Significance (2-sided) |
|--------------------------|-------|----|----------------------------------|
| Pearson Chi-Square       | 2.979 | 3  | 0.395                            |

| Airtel (Rates)           | Value | df | Asymptotic Significance (2-sided) |
|--------------------------|-------|----|----------------------------------|
| Pearson Chi-Square       | 1.51  | 4  | 0.997                            |
### Chi-Square Tests

| Company                | Value | df | Asymptotic Significance (2-sided) |
|------------------------|-------|----|----------------------------------|
| **Airtel (Extra Offers)** |       |    |                                  |
| Pearson Chi-Square     | 1.648a| 4  | 0.800                            |
| **Airtel (CustomerService)** |       |    |                                  |
| Pearson Chi-Square     | 3.823a| 4  | 0.431                            |

*Source: SPSS Output*

Here all the p-values are more than 0.05 hence H01, H02, H03, H04, H05 is rejected and there is significance association between Airtel and all the factors/attributes the respondents look while choosing cellular network.

| Company                | Value | df | Asymptotic Significance (2-sided) |
|------------------------|-------|----|----------------------------------|
| **Jio (Calling Network)** |       |    |                                  |
| Pearson Chi-Square     | 1.761a| 3  | 0.623                            |
| **Jio (Internet Speed)** |       |    |                                  |
| Pearson Chi-Square     | 1.807a| 3  | 0.613                            |
| **Jio (Rates)**        |       |    |                                  |
| Pearson Chi-Square     | 1.791a| 4  | 0.774                            |
| **Jio (Extra Offers)** |       |    |                                  |
| Pearson Chi-Square     | 1.886a| 4  | 0.757                            |
| **Jio (CustomerService)** |       |    |                                  |
| Pearson Chi-Square     | 3.303a| 4  | 0.509                            |

*Source: SPSS Output*

Here all the p-values are more than 0.05 hence H01, H02, H03, H04, H05 is rejected and there is significance association between Jio and all the factors/attributes the respondents look while choosing cellular network.

| Company                | Value | df | Asymptotic Significance (2-sided) |
|------------------------|-------|----|----------------------------------|
| **BSNL (Calling Network)** |       |    |                                  |
| Pearson Chi-Square     | 2.499a| 3  | 0.475                            |
| **BSNL (Internet Speed)** |       |    |                                  |
| Pearson Chi-Square     | 16.472a| 3 | 0.001                           |
| **BSNL (Rates)**       |       |    |                                  |
| Pearson Chi-Square     | 2.833a| 4  | 0.586                            |
| **BSNL (Extra Offers)** |       |    |                                  |
| Pearson Chi-Square     | 3.758a| 4  | 0.440                            |
| **BSNL (CustomerService)** |       |    |                                  |
| Pearson Chi-Square     | 9.166a| 4  | 0.057                            |
**Source: SPSS Output**

Here p-value of Internet Speed in relation to BSNL is less than 0.05 which means H02 is accepted and rest p-values is greater than 0.05 which means H01, H03, H04, H05 is rejected. Thus, there is significance association of BSNL with all the factors or attributes of choosing the cellular network except Internet Speed.

**K INDEPENDENT TEST**

H0: p-value is more than 0.05 and respondents get the required attributes from the cellular network.

H1: p-value is less than 0.05 and respondents don’t get the required attributes from the cellular network.

| Test Statistics | What are attributes of the Cellular Network that matter you for buying new sim or changing the old one? | What are attributes of the Cellular Network that matter you for buying new sim or changing the old one? | What are attributes of the Cellular Network that matter you for buying new sim or changing the old one? | What are attributes of the Cellular Network that matter you for buying new sim or changing the old one? |
|-----------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Kruskal-Wallis H | 22.907                                                                                           | 18.467                                                                                           | 13.898                                                                                           | 5.170                                                                                           |
| Df              | 2                                                                                               | 2                                                                                               | 2                                                                                               | 2                                                                                               |
| Asymp.Sig.      | 0.000                                                                                           | 0.000                                                                                           | 0.001                                                                                           | 0.075                                                                                           |
| Decision        | Reject the nullhypothesis                                                                       | Reject the nullhypothesis                                                                       | Reject the nullhypothesis                                                                       | Retain the nullhypothesis                                                                       |
| a. Kruskal Wallis Test |                                                                                                   |                                                                                                   |                                                                                                   |                                                                                                   |
| b. Grouping Variable: Did you get your required attributes from your present cellular network? |                                                                                                   |                                                                                                   |                                                                                                   |                                                                                                   |

**Source: SPSS Output**

**FINDINGS**

It was found in our research that there is no significance difference in choosing the cellular network from various factors or attributes in different age groups. It was also found that while recommending the cellular network to others, customer service affects the decision. By studying consumer loyalty many factors that affect their part of loyalty to stay with specific cellular network.

The BSNL users seem to be unsatisfied with the usage of the company’s Internet Speed. There is no significance difference of choosing cellular network on the basis of various factors of cellular network according to various age groups.

**CONCLUSIONS**

Our research helped to conclude that most of the cellular network users are satisfied with their telecom companies with various factors and the attributes they think while buying or changing the network. While considering loyalty of customer based on various factor and also as per age groups, the age or any other demographic profile also doesn’t show any special effect on the attributes of the network, which show everyone, requires all the factors from their network.

**REFERENCE**

[1] Mudanganyi, M.A.R.V.E.L.O.U.S., 2017. The Influence of Consumer Based Brand Equity on Customer Satisfaction and Brand Loyalty in Mobile Cellular Services. *Master of Technologiae: Marketing in the Department of Marketing and Sport Management Faculty of Management Sciences Vaal University of Technology Vanderbijlpark.*

[2] Panchal Nilam (2019), AN ANALYSIS OF PERCEPTION OF CUSTOMERS TOWARDS MOBILE BANKING SERVICES, *Research Guru: Online Journal of Multidisciplinary Subjects, June, 2019, 2349-.*
266X, International, Main, Paper in Journal, Journal, Article, 4.081, 12, Both

[3] Ikramuddin, I., Adam, M., Sofyan, H. and Faisal, F., 2018. Determination of Brand Loyalty in Telecommunication Industry: a Literatur Review. International Journal of Engineering & Technology, 7(3.30), pp.59-62.

[4] Panchal Nilam (2019), Attitude of working women towards innovations in mobile technology: A review of literature, Journal of Management Research and Analysis, Feb, 2019, 2394-2770, International, Co-Author, Paper in Journal, Journal, Article, 4.878, 4, Both

[5] Panchal Nilam, Risk Return Analysis: A study of IT and Automobile Sector in India, International Journal of Research in Social Sciences, May, 2018, 2249-2496, International, Main, Paper in Journal, Journal, Article, 7.081, 8, Both

[6] Tripathi, S. (2020). A Study on Adoption of Digital Payment through Mobile Payment Application with Reference to Gujarat State. International Journal of Trend in Scientific Research and Development.

[7] Afzal, S., Chandio, A.K., Shaikh, S., Bhand, M. and Ghumro, B.A., 2013. Factors behind brand switching in cellular networks. International Journal of Asian Social Science, 3(2), pp.299-307.

[8] Panchal Nilam, USAGE MOBILE APPs IN INDIA: AN ANALYSIS OF PSYCHOLOGICAL FACTORS INFLUENCING USAGE OF MOBILE APPs, International Journal of Business Economics and Management Research, March, 2017, 2229-4848, International, Main, Paper in Journal, Journal, Article, 4.963, 8(3), Both

[9] Christiana, M. and Rajan, M., 2015. Brand loyalty of customers towards mobile telephone service providers in India—An empirical analysis. EXCEL International Journal of Multidisciplinary Management Studies, 5(1), pp.90-100.

[10] Panchal Nilam, An analysis of social impact on usage of mobile apps in India: Using structural equation modeling, ECONSPEAK: A journal of Advances in Management, Dec, 2015, 2231-4571, International, Main, Paper in Journal, Journal, Article, 3.418, 12, Both