PERCEPTION STUDY OF TELECOM USER POST JIO PLANS

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Abstract: *This research is an earnest endeavour made to understand what makes a consumer of mobile services choose a particular service provider in current competitive scenario particularly with reference to recent launch of Reliance Jio. The objective of researchers was to find out the perception of mobile users about services provided by Reliance Jio. The responses were collected by incorporating a structured questionnaire and the technique of convenience sampling was used. The sample size was restricted to 155 respondents in view of constraints faced by individual researchers. The scope of the survey was restricted to the city of Mumbai, India. The survey is expected to yield, the service preferences according to various demographic factors. In addition to this, the research is also expected to provide insight about the specific factors that influence the choice of customers for a specific service provider as well as their overall perception about the offerings of Reliance Jio.*

Key words: Reliance Jio; mobile; service providers; consumer perception; telecom industry; India.

JEL Classification Codes: M31.

1. INTRODUCTION

India is currently the second-largest telecommunication market and has the third highest number of internet users in the world and has been growing strong for the past decade and half. This has also led to significant growth in India's GDP. India's telephone subscriber base expanded at a CAGR of 19.96 per cent, reaching 1058.86 million during FY07–16. In March 2016, total telephone subscriptions were 1,058.86 million, while teledensity was at 83.36 percent. According to market research report, the Indian telecommunication services market will likely grow by 10.3 per cent year-on-year to reach US$ 103.9 billion by 2020.

The Indian telecom sector is expected to generate four million direct and indirect jobs over the next few years. There will be employment opportunities created in rural areas and increase usage of Smartphones. Reliance JioInfocomm commercially launched its services on 5 September 2016 and started with a boom, within the first month of commercial operations, Jio announced that it had acquired 16 million subscribers. Reliance Jio crossed 50 million subscriber mark in 83 days since its launch and had crossed 100 million subscribers on 22 February 2017. In June 2015, Jio tied up with a domestic handset maker – Intex and supplied 4G handsets enabled with voice over LTE (VoLTE) feature. Through this it plans to offer free 4G voice with its high speed. However, later Jio launched its own mobile handset named LYF. Prior to its pan-India launch of 4G data and telephony services, Jio had started providing free Wi-Fi hotspot services in cities throughout India. In March 2016, Jio started providing free Wi-Fi internet to spectators at six cricket stadiums hosting the 2016 ICC Cricke Twenty20 matches. Jio net was made available in many stadiums across India (Wankhede Stadium (Mumbai), Eden Gardens (Kolkata) etc.) In May 2016, Jio launched a lot of apps on google play. This app is available for everyone, free of cost but requires a Jio sim card to use them. They include My Jio, JioTV, JioCinema,JioChat Messenger, JioMusic, Jio4GVoice (earlier JioJoin), JioMags, JioXpressNews, JioSecurity, JioDrive, JioMoney Wallet, JioSwitch. Jio has also launched portable Wi-Fi routers by the name JioFi where it can connectup to 4 devices and even Non-4 G-device users can also connect to it. There are four different versions of JioFi Router.

2. LITERATURE REVIEW

Deoskar Aruna (2009), in her study "A study of mobile services from customer's perspective", shows the spectacular revolution in information technology happened in India which boosted telecom sector. The main objective is to study the impact of customer service on customer satisfaction and to associate various factors like data coverage, billing facilities with it. The findings gathered by testing data using SPSS states that all the sub parameters like billing service and data coverage has a significant impact on the customer satisfaction influencing customer perception.

Menon (2014) in the study entitled "Customer perception towards A public Sector Telecom Company (BSNL) in Mobile services" focuses on consumer perception about government Indian company BSNL using primary research data. The variables takes here are age groups, Income of the family, qualification, opinions and also studied their correlation in between these factors. The correlation significance between these factors is 0.05 according to analysis.

Ibrahim et al. (2014) in their study "The Impact of telecom services characteristics on consumer for use in Pakistan" focuses on factors like consumer perception, advanced telecom services, quality, ease of use and cost and impact of these factors on consumers. The paper concludes the positive relationship with the impact.

Kalyani Pawan (2015) in her research study "An Empirical Study on Reliance JIO Effect, Competitor's Reaction and Customer Perception on the JIO'S Pre- Launch Offer" states the future effects that will be observed after the launch of JIO. The study includes overall scenario of telecom sector, its history and its growth projected. The paper shows the future scope in this sector and different type strategies used by various companies.

Singh Abhishek Kumar and Pangrikar Malhar (2013) in their research "A Study Report, to Find out Market Potential for 4g Businesses in Pune" states the potential markets available for 4G business in the Pune city. The research also talks about the perception of consumers in city Pune regarding their respective service providers. The study gives an overview about awareness, 4G services provided and the consumer usage patterns.

Sugunathi Meena and Shanthi R. (2017) in their research paper conducted a study based on customer opinions about service they are using with parameters responsiveness, reliability, empathy, assurance and tangibility. The factors which matters most are on time and right service when customer expects it. Also the visual appeal of physical facilities play a role.

Sudheesh et al. (2015) in their study paper "A comparative study on customer satisfaction towards Airtel & Vodafone with reference to Avadi, Chennai" reviews the consumer perception about the two giants in Indian telecom industry; Vodafone and Airtel in city Chennai. The consumers expect different services from networks; this study highlights those services and the importance of the same.

Darlami Rajan (2016) in his research paper, "Customer satisfaction towards reliance JIO", highlights the users experience about the new JIO SIM. The research includes the detailed analysis about the industry as well as a sector. The findings include customer's satisfaction about the service also the other services provided by JIO.

Telecom Regulatory Authority of India (2006) published a paper "Financial Analysis of Telecom Industry of China and India" regarding the finance involved in telecom industry of both countries. The two countries are different in their economic status. The paper includes the overview of the both the countries. The paper focuses on comparison between telecom industry of India and China. The parameters on which comparison is done are subscriber base, broadband subscriber, coverage of telephone services in rural areas, telecom revenue, average revenue per year, minutes of usage per subscriber of mobile, average short message service (SMS) per subscriber per month, OPEX per subscriber, termination charges, capital employed per subscriber. The paper gives a crisp understanding of the situation.

Bhattacharya Manas (2010) gives a gist about the future of telecom industry in India. The paper throws light on reforms about telecom tax policies and industry policies. The paper discusses the no of telephone lines used in order to establish the growth factor of this industry. The effects of economic changes on this industry are explained briefly in this paper. The paper also talks about IT impact, Competition policy, and technology trend. In conclusion, the researcher emphasizes on requirement of advanced planning in this ever-growing industry, need to develop deeper understanding of the sector and the need of IT in this industry.

Gopica (2015) in her research paper "Growth and development of telecom sectors in India- an overview" the paper gives an idea about telecom origin and also about the huge evolution that has taken place in this sector. The paper in view of researcher gives an overview about the various authorities like Telecom Regulatory Authority of India also the different networks which are present in this industry.

Birudavolu Sriram and Nag Biswajit (2011) in his paper "A Study of Open Innovation in Telecommunication Services: A Review of Literature & Trends" talks about the overall review of telecom with the crisp idea about the innovations that has happened in telecom over the period of time.

3. RESEARCH METHODOLOGY

To study the consumer's perception towards existing mobile network service providers with specific reference to Reliance Jio. This is a quantitative type of study, mainly this type of study is used to quantify data and generalize results from a sample to the population of interest. Random sampling as the method was used for collecting data.

In view of constraints faced by an individual researcher, the sample size is restricted to 155. The primary data was collected by incorporating a survey questionnaire delivered to respondents of specific age groups. Secondary sources of data including several research papers and articles as well as industry reports were referred to in addition to the primary data. Survey questionnaire was used as a data collection tool. SPSS and Excel were used as a tool for data analysis. Chi square test, frequency distribution is some of the test done by researchers. Similar queries and responses are netted and are made into one. Data is made in the form of Pie charts and Bar graphs for easy understanding.

4. DATA ANALYSIS AND INTERPRETATION

The frequency distribution is presented in table 1.

Table 1. The frequency distribution

Category	Class	Frequency/Count	Percent
Age	Student	94	50.8
	Self - employed (business)	9	4.9
	Service	48	25.9
	Others	4	2.2
Occupation	Age 16-24	76	41.1
	Age 25-34	38	20.5
	Age 35-44	15	8.1
	Age 45-55	19	10.3
	Age >55	7	3.8

Hypothesis and the interpretation are presented in table 2:

Table 2. Hypothesis and the interpretation

SR NO.	Hypothesis	Sig. value	Result
1.	H0: There is no relationship between age and Occupation H1: There is a relationship between age and Occupation	.000	Since the sig value is .000 We accept H1 and conclude that there is a relationship between age and Occupation
2.	Ho: There is no relationship between age and Monthly spends H1: There is a relationship between age and Monthly spends	.000	Since the sig value is .000 We accept H1 and conclude that there is a relationship between age and Monthly spends
3.	H0: There is no relationship between age and Monthly data used H1: There is a relationship between age and Monthly data used	.053	Since the sig value is .053 We accept H0 and conclude that there is no relationship between age and Monthly data used
4.	H0: There is no relationship between age and Primary SIM used in mobile phones H1: There is a relationship between age and Primary SIM used in mobile phones	.107	Since the sig value is .107 We accept H0 and conclude that there is no relationship between age and Primary SIM used in mobile phones
5.	H0: There is no relationship between Occupation and Call connectivity in mobile phones H1: There is a relationship between Occupation and Call connectivity in mobile phones	.073	Since the sig value is .073 We accept H0 and conclude that there is no relationship between Occupation and Call connectivity in mobile phones
6.	H0: There is no relationship between Occupation and Voice clarity in mobile phones H1: There is a relationship between Occupation and Voice clarity in mobile phones	.558	Since the sig value is .558 We accept H0 and conclude that there is no relationship between Occupation and Voice clarity in mobile phones
7.	H0: There is no relationship between Occupation and Data coverage in mobile phones	.984	Since the sig value is .984 We accept H0 and conclude that there is no relationship between Occupation and

	H1: There is a relationship between Occupation and Data coverage in mobile phones		Data coverage in mobile phones
8.	H0: There is no relationship between Occupation and Value prepaid plans in mobile phones H1: There is a relationship between Occupation and Value prepaid plans in mobile phones	.200	Since the sig value is .200 We accept H0 and conclude that there is no relationship between Occupation and Value prepaid plans in mobile phones
9.	H0: There is no relationship between Occupation and Value post-paid plans in mobile phones H1: There is a relationship between Occupation and Value post-paid plans in mobile phones	.302	Since the sig value is .302 We accept H0 and conclude that there is no relationship between Occupation and Value post-paid plans in mobile phones
10.	H0: There is no relationship between Occupation and Customer service in mobile phones H1: There is a relationship between Occupation and Customer service in mobile phones	.476	Since the sig value is .476 We accept H0 and conclude that there is no relationship between Occupation and Customer service in mobile phones

5. FINDINGS

The perceptions of the respondents in different age groups are as follows:

➢ **16-24**:
- Total Count: 76
- 92% of the respondents are students, 8% are from service
- Mobile expenditure: 38% spend less than 249rs, 63% spend between 250 – 499rs and 9% spend between 500 – 999rs.
- Monthly mobile data: 30% use 500-1gb, 33% use 1-2gb, 16% use 2-5gb, 18% use more than 5gb and 3% do not use mobile data.

➢ **25-34:**
- Total Count: 38
- Respondents are mix of students (63%), service (32%) and self-owned business (5%)
- Mobile expenditure: 18% spend less than 249rs, 34% spend between 250 – 499rs, 26% spend between 500 – 749rs and 21% spend more than 750rs
- Monthly mobile data: 45% use less than 2gb, 53% use more than 2gb and 2% do not use mobile data
- 42% have not used Jio and out of the remaining 58% - 26.3% use Jio as their primary sim, 18.4% use Jio as their secondary sim and the remaining have stopped using Jio.

➢ **35-44:**
- Total Count: 15
- Age groups: 87% of the respondents are in service, 77% of them use a post-paid card
- 80% spend more than 500rs monthly.
- 47% use data less than 2gb and 53% use more than 5gb.
- 50% have not used Jio, 25% use Jio as their primary sim, 25% do not have dual sim.

➢ **45-55**
- Total Count: 19
- Age group: 89% of the respondents are in service and 11% have their own business.

- 89% of them use a post-paid card and spend more than 250rs monthly.
- 53% use more than 2gb, 42% use less than 2gb and the remaining 5% do not use internet.
- 52% use Vodafone as their primary sim, 11% of them use Jio and the remaining use other sim card as their primary sim.

➢ **>55:**

- Total Count: 7
- 57% of the respondents are having their own business, 29% of them are retired.
- All use post-paid cards.
- 71% spend less than 2gb and 29% spend more than 2gb
- 57% spend more than 1000rs on their mobile bills, the remaining 43% spend between 250-749rs

6. CONCLUSION

This research helps us to understand the specific requirements of telecom users regarding various parameters such as money spent, data usage and preferred service provider based on age group. This study will be useful to make specific plans considering the above parameters:

- ➢ 38 out of 72 users (53%) use Jio as their primary SIM from which 71% of them are students, 24% are from service and the remaining 5% are self-employed.
- ➢ 34 out if 72 users (47%) use Jio as their secondary SIM.
- ➢ Post Jio (after Jio prime) there has been 81% conversion rate with respect to people who have used Jio or are currently using.
- ➢ 50% of the Non -Jio users feel that they don't have a suitable tariff plan, face network issues and data charges are high. 40.47% seem to be satisfied with their existing mobile service provider.
- ➢ Preferred mobile service: 4G speed, Value for money (both prepaid and post-paid) are observed to be high for Jio. Good call connectivity is the highest for Vodafone. Voice clarity & data coverage for Airtel and good customer service is more or less the same for Jio, Airtel and Vodafone.

Preferred mobile features: Connectivity, call rate (std or local charge) and data plan.

The Researchers were unable to find the research done work specific to Jio, post Jio launch. Most of literatures reviewed were not specific to metro area Mumbai. The sample size was restricted to 155 in view of limitations faced by individual researchers and the geographical area is restricted to metro city Mumbai.

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Annexure - Questionnaire

Consumer perception about JIO network

Q1) Age: * (single code) 16-24 25-34 35-44 45-55 >55	Q2) Gender: * (single code) Male Female Other:	Q3) Occupation: * (single code) Student Self - employed (business) Service Home maker Other:
Q4) Type of payment* (single code) Prepaid Postpaid	Q5) Monthly spends on your mobile phone including all viz., voice, data etc* (single code) FOR BOTH PREPAID & POSTPAID 0-99 100-249 250-499 500-749 750-999 >1000	Q6) Monthly data i use in my mobile * (single code) 500mb-1gb 1gb-2gb 2gb-5gb >5gb Non - internet user
Q7) Reasons for choosing a particular service provider: * (multi code) Call rate (std or local charge per call) Data plan Calling clarity Mobile network connectivity (Availability/ reliability of connection) Net speed (Better download/ upload speed) Roaming Charges Customer service Offers (Receiving free data, Talktime	Q8) I have used Reliance Jio for: * (single code) Less than a month 1-3 months 3-6 months >6 months Non – user	Q9) I am <u>currently using</u> the following mobile network as my <u>primary sim</u> * (single code) Jio Vodafone Airtel Idea MTNL BSNL Aircel TATA Docomo Other:

plans) Offers wrt other apps (PayTM, cards) Ease of paying bill Feedback from peers Geographical location of service center Other:		
Q10) I have a dual sim phone and second sim belongs to network No dual sim Jio Vodafone Airtel Idea MTNL BSNL Aircel TATA Docomo Other:	Q11) What do you find better in your current service provider? * (This question should be answered based on your primary sim) (multi code) Call rate (std or local charge per call) Data plan Calling clarity Mobile network connectivity (Availability/ reliability of connection) Net speed (Better download/ upload speed) Roaming Charges Customer service Offers (Receiving free data, Talktime plans) Offers wrt other apps (PayTM, cards) Ease of paying bill Other:	Q12) Challenges with the current service provider? * (This question should be answered based on your primary sim) (multi code) No suitable tariff plans Network issues Connection problems Unnecessary balance cut Bill Payment options (post paid) Do not get bill on time (post paid) None of the above Other:

Q13) I find the following statements to be true across different mobile network providers:
(This is more of a comparative study, tick one or more options in each category as per your experience)

	Jio	Airtel	Aircel	Vodafone	TATA Docomo	Idea	Others	None of them	Both my sim
Good call connectivity in different region/ Areas									
Good voice clarity									
Good data coverage in different regions/ Areas									
High4G speed									
Value for money offers: mobile plans (pre paid)									
Value for money offers: mobile plans (post paid)									
Efficient and reliable customer service									

Q14) Have you purchased Portable Hotspot Router?* (single code)
a) Yes b) No
Q15) should there be any improvement/ changes made? If yes, Please specify
(open ended; drop box)