

Project Dissertation Report on
CHANGE IN THE CONSUMER PREFERENCES
WITH RESPECT TO AIRTEL AND JIO

Submitted By:

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2K20/DMBA/49

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CERTIFICATE OF ORIGINALITY

This is to certify that the project report entitled, “Change in The Consumer Preference with Respect to Airtel and Jio” Submitted to Delhi School of Management, Delhi technological university in the partial fulfilment of the requirement for the award of Masters of Business Administration is an original work carried out by Himanshu Mathur under the guidance of Dr. Archana Singh.

The matter embodied in this project is a genuine work done by both to the best of my knowledge and belief and has been submitted neither to this University nor to any other University for the fulfilment of the requirement of the course of study.

Signature of the student

Signature of the Guide

DECLARATION

I, Himanshu Mathur, student of MBA 2020-22 of Delhi School of Management, Delhi Technological University, Bawana Road, Delhi – 42, hereby declare that the dissertation report “Change in The Consumer Preference with Respect to Airtel and Jio” submitted in partial fulfilment of Degree of Master of Business Administration is the original work conducted by me.

The information and data given in the report is authentic to the best of my knowledge.

This report is not being submitted to any other University, for award of any other Degree, Diploma or Fellowship.

PLACE:

Himanshu Mathur

DATE:

ACKNOWLEDGMENT

It is my pleasure to acknowledge many people who knowingly and unwittingly helped me, to complete my project.

I would like to express our special thanks of gratitude to **Dr. Archana Singh** who gave me the excellent opportunity to do this wonderful project on the topic “**Change in The Consumer Preference with Respect to Airtel and Jio**”.

Secondly, I would also like to thank my parents and friends who helped us a lot in completing the project within the limited period.

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EXECUTIVE SUMMARY

This comparative study is done because everyone was saying that Jio changed the whole telecom sector and is the leader of the market in such small time period. The study started with giving the brief information of both Airtel and Jio, also some information about the competitors and consumer preference. The purpose for the study is to compare various services such as signal strength, Internet speed, Customer support services, etc.; to know the consumer view regarding Airtel and Jio Services and to find out consumers preference.

According to the comparative study of Airtel and Jio on consumer preference it can be concluded that Jio is the leader of the market and is better than Airtel in terms of low price and internet speed but Airtel is trying to increase its market share rapidly. So, Airtel have to continuously keep an eye over its competitors and market so that it can grab every single opportunity (like new market, 5G network, etc.) of the market. It is also seen that all the telecom companies are fighting to bring the 5G network in India and the first company to launch 5G network in India will get a competitive advantage which will lead to increase in the market share of that company.

For data analysis I have used Chi-Square statistical test, Power BI and graphical representation of the questions of the questionnaire which helped me to conclude my study.

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Chapter 1 Introduction

1.1 Introduction:

This research paper is chosen by me because I myself is facing issues related to telecom services provided by the companies and wanted to know that how others are reacting and what are their preference for the two big players in the Indian telecom industry.

In this research paper I will be determining which one is better between Airtel and Jio by using various statistical tools and with the help of various research papers I will be concluding this research.

The purpose for the study is to compare various services such as signal strength, Internet speed, Customer support services, etc.; to know the consumer view regarding Airtel and Jio Services; to find out consumers preference; to find out consumers are aware or not regarding offers and services; to recommend measures for improving the product.

1.2 Industry Overview

Infrastructure, equipment, mobile virtual network operators (MNVO), white space spectrum, 5G, telephone service providers, and broadband are all subsectors of the Indian telecom business.

The Indian telecommunication tower business has increased by 65 percent in the last seven years. From 4,00,000 in 2014 to 6,60,000 in 2021, the number of mobile towers has increased. Similarly, from 8,00,000 in 2014 to 2.3 million in 2021, the number of mobile base transceiver stations has increased by 187 percent.

5G technology is expected to add \$450 billion to the Indian economy between 2023 and 2040. 5G experiments are currently taking on in India to ensure that the technology is widely adopted.

According to the GSMA, India will overtake China as the world's second-largest smartphone market by 2025, with about 1 billion installed devices and 920 million mobile subscribers, including 88 million 5G connections.

The Department of Transportation hopes to have 100% internet access in villages, 55% fiberization of mobile towers, broadband speeds of 25 mbps, and 30 lakh kilometres of optic fibre rollouts by December 2022. By the end of December 2024, it expects to fiberize 70% of towers, with an average internet speed of 50 mbps and a 50 lakh km long optic fibre deployment across India.

1.3 Company Overview

1.3.1 Bharti Airtel Limited



1.3.1 Airtel logo Source: [logo.wine/logo/Airtel](https://www.logo.wine/logo/Airtel)

Introduction

Bharti Airtel Ltd. is an Indian telecommunications firm with headquarters in New Delhi. It operates in over 20 countries throughout South Asia and Africa. Depending on the country of operation, Airtel offers 3G and 4G mobile services, as well as fixed line broadband and phone services.

Airtel is credited with developing the minutes factory model of high volume and cheap cost by outsourcing all of its business processes except marketing, sales, and finance.

Mission

Hunger to win customers for life.

Vision

To enrich the lives of our customers.

To win customers for life through an exceptional experience.

Products

Airtel India is the second largest mobile telephony operator in the country, trailing only Jio, as well as the second largest fixed telephone provider in the country. It also provides television and broadband subscription services. It uses the Airtel brand to market its telecom services.

Broadband

Airtel offers internet leased lines, MPLS, and DSL broadband internet connection, as well as fixed line and IPTV telephone services. Bharti supplied fixed line telephony and broadband services under the Touchtel brand until September 18, 2004. Under the brand name Airtel now offers all telecom services that includes fixed line services. As of June 2019, Airtel provides Telemedia services in 99 locations and Airtel had 2.342 million broadband subscribers.

Set-top box for television

The digital television company in India provides Direct-to-Home (DTH) TV services under the brand name Airtel digital TV. It launched on October 9, 2008, and as of June 30, 2019, it had over 16.027 million customers.

Banking

In January of this year, Airtel Payments Bank was established. Airtel Payments Bank is a New Delhi-based Indian payments bank. Bharti Airtel owns and operates the firm. The Reserve Bank of India, under the second schedule of the RBI Act, 1934, gave it scheduled bank status on January 5, 2022.

Business

Managed services and cloud, digital signage, Wi-Fi dongles, NLD/ILD connection, conferencing solutions and phone solutions are all available through Airtel Business.

Airtel Business, Bharti Airtel's B2B arm, has introduced a first-of-its-kind specialised digital platform to assist developing organisations' expanding connectivity, communication, and collaboration needs, such as SMEs and startups.

1.3.2 Jio



1.3.2 Jio logo Source: Jio.com

Introduction

Jio Infocomm Ltd. (Jio) is an Indian telecommunications business. It is situated in Navi Mumbai, Maharashtra, and maintains a nationwide LTE network that spans all 22 telecom circles. It is owned by Reliance Industries. Jio's network does not offer 2G or 3G services, instead relying on voice over LTE to deliver call service.

Vision

Vision is to provide the latest telecommunication facilities to every Indian at the price of a post card.

Mission

Mission is to create world-class benchmarks

Products

Broadband wireless

In September 2016, Jio started providing 4G broadband services across India. The 4G broadband was supposed to be out in December 2015, but according to some reports, the business was still waiting for final regulatory permits. It provides 4G internet and voice services, and ancillary services like as instant music streaming, movie and messaging.

JioFiber

Jio launched Jio GigaFiber, a new triple play fibre to the home service that includes broadband internet with speeds ranging from 100 to 1000 Mbit/s, with television and landline telephone services, in August 2018.

The service would be introduced as JioFiber on September 5, 2019, to mark the company's third anniversary, according to reports from August 2019. Members of JioFiber will be able to stream movies that are currently showing in theatres ("First Day First Show").

JioBusiness

In March 2021, the company launched connection alternatives for businesses, which were paired with Jio Platforms, Reliance Retail, and Office 365 services.

Jio LYF

LYF phones with the Jio logo, in June 2015, Jio and Intex, a domestic handset manufacturer, agreed to sell 4G handsets capable of voice over LTE (VoLTE). In October 2015, Jio, on the other side, announced that it would launch mobile handset brand, LYF under its own name.

JioPhone Next

On June 24, 2021, Mukesh Ambani announced the launch of JioPhone Next. It's a fully working Android smartphone built in collaboration with Google over a long period of time. The low-cost smartphone was released in India on November 4, 2021.

1.4 SWOT Analysis:

1.4.1 Industry SWOT Analysis

Strengths

- **Technology is advanced and easy to implement:**
As we know that the technology in the telecom industry is advanced, and more amount of investment are being made in this area day by day to keep up with the rest of the globe.
- **High growth rate:**
Every year, the number of customers grows as mobile phones become a need for practically every age group.
- **High return on Investment:**
Easier to have economies of scale, thus increasing return on investment.
- **Basic requirement:**
This sector is becoming the basic way to connect people now days.

Weakness

- **Expensive Infrastructure Costs:**
The telecom industry's infrastructure costs are quite high.
- **Low customer retention power:**
Customer retention rate in the Indian telecom industry is very low, and customers frequently switch service providers.
- **Most Competitive market:**
Many companies are already present in the market and there is also free entry to new companies.
- **Late technology adopters:**
India was one of the last countries to adopt 3G and 4G technology.

Opportunity

- **Population:**

India's population represents a huge opportunity for telecom service providers, as the number of people without access to the internet is also very significant. To thrive, the sector must focus on India's massive population.

- **Changing Population Psychograph:**

The demographic profile of the population is changing. Previously considered an emergency service, telecommunications have evolved into an integral element of life in our country.

- **Increased Penetration:**

All of the industry's organisations are attempting to increase their penetration levels, or, in other words, the country's tele-density. The urban Indian population provides the sector with a tremendous growth opportunity.

- **FDI:**

Foreign direct investment in telecommunications has been increased from 49% to 74%. This is good news for the sector, since it would require Rs 700–900 million in investments over the next five years. In the telecom sector, FDI inflows totaled 9950.94 cores by 2004. Telecom companies from Europe, Korea, and Japan are poised to enter India, which is regarded as the world's fastest expanding telecom market.

Threats

- **Government Policies:**

The government may grant licences to a large number of foreign companies, posing a challenge to the industry's existing participants.

- **New technology has the potential to alter market dynamics:**

A slew of new technologies is on the way. Then you have the potential to change the overall industry dynamics or even build a replacement for present telecom services.

- **Declining Average Revenue Per User:**

As a result of the constant pricing battle in the market, per-user revenue is declining in order to stay afloat.

- **Competition:**

Because of the high number of service providers and the free entry of new enterprises into the Indian market, competition is always a threat to the market.

1.4.2 Company SWOT Analysis

Bharti Airtel

Strengths

- **Reputable Telecom Company:**

Thanks to its 19+ years of telecom expertise, this MNC has risen to become the world's third biggest telecom operator overseas, with operations in around 20 countries.

- **High Brand Equity:**

It is one of the earliest telecoms brands, with a big subscriber base and high brand memory.

- **Extensive infrastructure:**

Airtel's infrastructure has expanded across the country thanks to the construction of the Indus tower and its partnerships with Idea and Vodafone, resulting in national penetration.

- **Torchbearer of the telecom Industry:**

As the torchbearer of the telecom business, Airtel has effectively integrated people's lives, with having top position due to its remarkable services in growing economies. Airtel is a major national player in Indian telecom industry and the torchbearer of this industry, whilst Vodafone is a newcomer.

Weaknesses

- **Outsourced Activities:**

Airtel was able to cut costs by outsourcing operations. But they run the risk of being reliant on other businesses, which could have an impact on their operations.

- **Expanding into Africa:**

Despite the fact that Airtel has owned Zain's Africa division for years, the company is still fighting to turn around the unit, which was purchased for a whopping \$9 billion.

- **Excessive Debt:**

With its acquisitions proving to be poor investments, as well as high credit and low profits, the Airtel group is heavily in debt. Airtel does not have the same financial resources as Vodafone.

- **Pricing:**

- Due to price rivalry from other telecom operators, market share is constrained.

Opportunities

- **Strategic Partnership:**

Partnering with smart phone companies will be a good approach in terms of MNP (mobile number portability in India). This will ensure future cash flow stability and a wider consumer base.

- **Market Development:**

With fierce competition and shrinking margins in the telecom market, the company will gain by expanding into new regions and developing economies.

- **VAS:**

VAS (Value Added Services) is the telecoms industry's future, and Airtel may differentiate itself in a crowded market by focusing on this area. Airtel may boost its profit margins by adding new services.

- **The existing market's untapped geography:**

Although it now offers 3G and 4G services, these services are limited to specific geographic areas. The company's expansion of these services across the majority of its locations will help it gain additional margins and customers.

Threats

- **Government Regulatory Framework:**

Changes in government policy and frequent spectrum auctions pose a danger to the industry's security and survival, impacting the industry players.

- **Competition:**

A pricing battle in the home market is hurting the company's whole operation, resulting in shrinking profits.

- **MNP:**

MNP (Mobile Number Portability) allows customers to change form one service provider to other while keeping their phone numbers same.

- **New Entrance:**

The biggest threat to Airtel is the entry of new competitors.

1.4.3 Jio

Strengths

- **Best Customer Acquisition Strategy:**

By far the most effective client acquisition technique is that of Reliance Jio. For a period of 3-6 months, all users were granted free access to the brand's services. With millions of customers, Reliance Jio has become one of the most successful customer acquisition techniques in telecom history.

- **Technology:**

Jio uses 4G LTE technology, which is one of the best technologies for the future. Voice over LTE enables this, as it is scalable and compatible with 5G and 6G technologies, which are expected to be the wireless communication technologies of the future.

- **Strong support from parent business Reliance Industries:**

Reliance Industries is a trustworthy brand that reflects Indian feelings and has strong customer trust. Jio's partnership with Reliance acts as a major asset.

- **A variety of services under one name:**

Reliance Jio provides a variety of services to its clients, including movies, gaming, shopping, chats, and messaging, among others.

Weaknesses

- **Late entry into the industry:**

After established businesses like Airtel and Vodafone had entrenched their places in the eyes of customers, Reliance Jio entered the market late.

- **Activation Troubles:**

Due to its failure to contain the vast number of users it had attracted, Reliance Jio suffered major activation challenges. Delays in SIM Card activation during the transition period were one example.

- **Pricing controversies:**

Reliance Jio has been chastised for cutting its prices below what was ethical in order to gain market share, leading to suspicions of corruption and money laundering.

- **Weak data connection:**

Reliance Jio's data connection is frequently weak, and its range is limited, resulting in slower loading rates in some locations.

Opportunities

- **Futuristic technology:**

Reliance Jio employs a VoLTE 4G network that can scale to accommodate more users.

- **Advance 5G and 6G technology:**

These provide Jio with a variety of options for future capacity increase.

- **Competitive Pricing Strategies:**

Reliance Jio is recognised for providing inexpensive Internet and mobile services. Because the majority of their rivals can't afford their pricing, they may utilise this as a selling point to attract new clients and expand their market share.

- **Expansion to other countries:**

Only India is now accessible by Reliance Jio. However, there is plenty of potential for international expansion, at least in the near future.

Threats

- **Customer attrition risk:**

Customers prefer Jio mostly due of the low prices it offers. There may be a loss of clients if the corporation raises its prices at some point.

- **Criticism and a poor image:**

Reliance Jio has been the subject of various legal battles since its beginnings. As a result, the company's reputation has suffered.

- **Poor Code of Ethics:**

Many of Reliance Jio's activities have been exposed as unethical, including low pricing, free bandwidth, and market penetration techniques, which might affect the company's image in the long term.

- **Competition:**

Existing significant companies in the market, including as Airtel, are putting a lot of pressure on Jio.

1.5 Objectives of the Study

The objectives of the study are as under:

Primary Objective

- To find out the customer preference towards Airtel and Jio services.

Secondary Objectives

- To identify the customer satisfaction towards the services rendered by both Airtel and Jio.
- To study customer buying behaviour and factors which influence the purchase decision process.

- To assess the customer satisfaction towards signal coverage, low price, internet speed, customer service of Jio and Airtel.
- To assess the factors affecting customer satisfaction.

1.6 Scope of the study

In this research paper I will be comparing Airtel and Jio on the basis of consumer preference and to interpret this I will be studying the various factors that define consumer preference with the help of various research papers and to analyse the data of approx. 200 respondents I will be using Chi-Square statistical test to analysis the data that is collected with the help of the questionnaire and above all I will be using data visualising tools to define the data in the forms of graphs.

On the basis of the data analysis, I will be giving some findings of my research as well as the recommendation to both the companies which will help me in defining the conclusion of my study.

Chapter 2 Literature Review

2.1 Conceptual Discussion

2.1.1 Consumer Preference

Consumer preference is defined as an individual's subjective tastes as assessed by their satisfaction with items acquired after purchase. Consumer preferences can be measured by comparing their satisfaction with a particular item to the opportunity cost of that item, because when you buy one, you lose the opportunity to buy another.

The study of economics does not incorporate individual consumer preferences. Personal preferences are influenced by a multitude of variables, including personal taste, culture, education, and peer pressure from friends and neighbours.

2.1.2 Why Is Consumer Preference Important?

Understanding customer preferences may help you predict consumer demand since it determines what items people will purchase within their budget. This data can help you ensure that you have enough product to fulfil demand and determine the pricing of your goods.

When people prefer one product over another, even if the price difference is significant, one product may outsell the other. When the difference in preference is insignificant, however, price and availability become the deciding variables in which one will sell better.

2.1.3 Factors Affecting Consumer Preferences

The elements that impact how people purchase products and services are known as consumer preferences. Analyzing the factors that drive consumer preferences may assist businesses in focusing their products on specific customer groups, developing new products, and determining why certain items succeed more than others.

- **Advertising**

Advertising has a big influence on customer preferences, especially for non-durable commodities like food and magazines. Consumers are informed about available goods and services, and their perceptions of these things are shaped by advertising. Advertising can also generate demand; for example, a consumer may not have desired a new cell phone until he saw dazzling new phones shown on television.

- **Institutions of Social Welfare**

Social institutions such as parents, friends, schools, religion, and television shows all impact consumer choices. For example, children may want the same toys as their peers, while young adults may want to purchase the same items as their parents.

- **Cost**

When a product's price drops, customers are more inclined to purchase more of it. A product's consumption may be boosted through a sale or lower prices. An increase in price, on the other hand, may result in lower consumption, particularly if the commodity has readily available replacements.

- **Consumer Spending**

When people's income rises, they often want more expensive items and services. If their income falls, people are more inclined to opt for less expensive items and services. A firm selling luxury goods, such as jewellery, will, for example, be more successful in a high-income neighbourhood than in a low-income neighbourhood.

- **Substitutes that are available**

Consumers will be more sensitive to price fluctuations if a product has multiple replacements — other items that consumers might choose instead of a certain brand of product. Consumers will be less inclined to switch to a substitute based on price if they do not view similar products to be effective alternatives — for example, if they do not believe Coke and Pepsi are similarly delicious. The price elasticity of demand is the term for this phenomenon.

2.2 Literature Review

2.2.1 Research Papers

- 1. An Empirical Study on Reliance JIO Effect, Competitor's Reaction and Customer Perception on the JIO'S Pre- Launch Offer (2016):**

By: Pawan Kalyani

Summary:

This research paper has used Survey questionnaire method which results in the finding that "Until the pre-launch deal," "wait for the next best plans," and "most likely they will continue as another connection for Data usage" were the most common responses when asked how long they plan to use Reliance JIO. "Until the pre-launch deal," "wait for the next best plans," and "most likely they will continue as another connection for Data usage" were the most common responses when asked how long they plan to use Reliance JIO.

- 2. A study on service quality and its impact on customer's preferences and satisfaction towards Reliance JIO in trichy region (2017):**

By: KR Mahalaxmi and Suresh Kumar N

Summary:

The research methodology used in this research paper is questionnaire method which suggests that most customers pick this service provider because of its unlimited voice calling and high-speed data connection capabilities. In just five months, Reliance JIO has seized a third of the market, and their marketing strategy has played a key role in this.

- 3. Perception Study of telecom user post Jio plans (2017):**

By: Parag Amin, Anagha Kale and Ajay Nilakantan

Summary:

This research paper used sampling and questionnaire method which helped to arrive at a conclusion that Jio offers excellent value for money (both prepaid and post-paid). Vodafone's main priority is good call connectivity. Airtel has better voice clarity and data coverage, and Jio, Airtel, and Vodafone all have good customer service.

4. A Comparative Study on brand impact on Customers with Respect to Idea, Airtel and Reliance Jio Brands with reference to West Godavari District (2017):

By: Mr.N.Venkat, Mr.M.Nagabhaskar and Mr.D.Subbareddy.

Summary:

In this research paper the authors have used customer satisfaction surveys, post net promoter score, customer effort score and social media monitoring to come at the conclusion that Observation of social media sites suggests that many individuals are responding positively to Reliance Jio's internet package. In addition, respondents are quite concerned about the quality of connectivity and the amount of free calls offered by Reliance Jio.

5. Changing the Indian telecom sector: Reliance Jio (2017):

By: KR Mahalaxmi and Suresh Kumar N

Summary:

This research paper has conducted pilot survey which helped to reach at the final conclusion that promotional offers make the most of the customers to prefer JIO service provider. Reliance JIO has already occupied the one third of the market share within a span of 5 months.

6. Impact of Customer Satisfaction on Customer Loyalty w.r.t.selected Telecom Services in Bilaspur, Chhattisgarh (2018):

By: Dr. Ashok Kumar Chandra , AmitStieve Henry and Hashdeep Khurana

Summary:

In this research paper sampling technique is used to come at the conclusion that this research shows that customers do become loyal towards the brands when the get satisfied with the offered services.

7. An Empirical Study on Consumer Expectation and Satisfaction Towards 4G Mobile Phone Service Era (2017):

By: Dr. Kiran Kumar Thoti

Summary:

In this research paper structured questionnaire and personal interview are used to infer that the respondents have given valuable and common suggestions for improvement of overall function of mobile phone service. It is evident that 70% of subscribers use prepaid scheme and rest of them use post-paid scheme.

8. Disruptive Innovation and Reliance Jio: A Descriptive Study (2019)

By: Mr. Biswarup Chatterjee

Summary:

In this research paper descriptive and analytical method is used to conclude that JIO has a significant impact on Indian telecom companies' day-to-day operations. Also, a small number of people are hesitant to label this as disruptive since they believe it is a passing fad.

9. An Online Comparative Study on 4G Technologies Service Providers in India (2019):

By: P. S. Aithal, Krishna Prasad K

Summary:

In this research paper ABCD analysis techniques are used to come at the conclusion that 4G technology's extensive adoption in India, with applications in entertainment, education, military and defence, and health care.

10. Customers attitude towards mobile phone networks service providers in salem district (2020):

By: S. Gnana Lakshmi

Summary:

In this research paper sampling is used to come at the conclusion that to attract a large crowd, Reliance must primarily focus on enhancing customer service, expanding bill payment locations, and executing a variety of new appealing advertising programmes.

11. Shifting of Loyalties: Perception of Telecom customers after launching of “Jio” in Jalgaon city (2020):

By: Mrs. Veena P. Bhosale and Mr. Ashwin Nirmal Jain

Summary:

In this research paper sampling is used to come at the conclusion that increased non-voice income and improved penetration in the rural sector are predicted to propel India's telecoms business forward.

12. Analysis of Service Quality Gap of Mobile Phone Sector Customers in Virudhunagar District: Application of Chi-Square Test (2020):

By: Mr. A. Selvaraj and Dr. M. Selvakumar

Summary:

In this research paper sampling is used to give the conclusion that in order to maintain the positive gap, the mobile phone network should give quality services to the customers quickly and resolve their queries and problems.

13. Feasibility Study of Enhancement of Mobile Spectrums (with Special Reference to 4G and Proposed 5G) (2020):

By: Shrey Kumar and Gurendra Nath Bhardwaj

Summary:

In this research paper secondary data is collected through various published reports, and relevant articles which helped in giving the conclusion that In India, almost all telecom providers are currently mired in a cycle of rising costs and flat income. As a result, the quality of services will undoubtedly suffer in the near future.

14. A Study of Consumer Behaviour on Selecting Mobile Services with Special Reference to the Jabalpur City (2021):

By: Sourabh Jain and Sheetal Kaur Ahuja

Summary:

In this research paper random Sampling and questionnaire approach is used to come at the conclusion that in the present scenario Indian telecom industry by concentration about the mobile service providers and they observe there are very high competitions among the players in the telecom industry.

15. Effect of service quality on customer loyalty and the mediating role of customer satisfaction: an empirical investigation for the telecom service industry (2021):

By: Atul Kumar

Summary:

In this research paper secondary data is used to come at the conclusion that Customer pleasure is influenced by simply empathy and reliability, whereas customer loyalty is influenced by empathy, assurance, responsiveness, and tangibility. Client satisfaction serves as a partial mediator between empathy and customer loyalty when it comes to mediation.

Chapter 3 Research Methodology

3.1 Research Methodology

A search for knowledge is referred to as research. A scholarly and systematic search for information on a given topic can also be defined as research. Research promotes the formation of logical organisational thinking habits by combining scientific and inductive reasoning.

In some sense, research technique is a set of guidelines for conducting studies. Methodology in research has many different components. It includes not just research procedures, but also the philosophy behind the methods utilised in the study, as well as criticisms of why only one strategy was used.

- **Descriptive Research**

It is used to acquire information concerning the current status of the phenomenon to describe what existing with respect to variables or conditions in a situation. The questions who, what, where, when, and how are answered by descriptive research. The research cannot explain what produced a circumstance, despite the fact that the data description is truthful, exact, and systematic.

- **Analytical Research**

Analytical research advances descriptive research by attempting to explain the causes of a specific occurrence through the discovery of causal links. Following the discovery of causal links, the focus switches to factors that can be changed (variables) in order to influence the chain of causality.

3.2 Methodology Adopted

3.2.1 Research design:

In this research project both the descriptive and analytical design is adopted to meet the objective of this research.

3.2.2 Data Collection Method:

The respondents were asked to fill the questionnaire which was created using Google forms and sent to them with the help of social media with the help of which I was able to collect 194 responses.

3.2.3 Data analysis techniques:

The summary of the data collected from the respondents was obtained from google form. The summary was analysed by Chi-Square (statistical tool) and through graphs.

The hypotheses defined for the study are as follows:

Null Hypothesis: A consumer choosing a service provider is independent of the brand, i.e. a consumer is indifferent towards the brands.

Alternate Hypothesis: A consumer choosing a service provider is influenced by the brand, i.e. a consumer is concerned about which service provider is used.

Chapter 4 Data Analysis

4.1 Chi-Square:

For analysing the data, I have used Chi-Square Test for association

For the given data,

Null Hypothesis: A consumer choosing a service provider is independent of the brand, i.e. a consumer is indifferent towards the brands.

Alternate Hypothesis: A consumer choosing a service provider is influenced by the brand, i.e. a consumer is concerned about which service provider is used.

The test compares the observed data to the expected data and determines if there is any association or not.

Here, my Observed Data is as follows:

<i>Observed</i>	Airtel	Jio	VI	Other	Total
Count	74	78	26	15	193
Among Jio and Airtel which telecom service is better?	82	88	0	20	190
Whose post-paid connection do you prefer?	96	87	0	0	183
Whose prepaid connection do you prefer?	90	98	0	0	188
Whose customer service do you prefer?	91	99	0	0	190
Total	433	450	26	35	944

4.1.1 Observed values Source: Self Analysis

Since, Expected values in each cell = (Row total * Column total)/Table total

So, my Expected Data is as follows:

<i>Expected</i>	Airtel	Jio	VI	Other	Total
Count	88.52648	92.00212	5.315678	7.15572	193
Among Jio and Airtel which telecom service is better?	87.15042	90.57203	5.233051	7.044492	190
Whose post-paid connection do you prefer?	83.93962	87.23517	5.040254	6.784958	183
Whose prepaid connection do you prefer?	86.23305	89.61864	5.177966	6.970339	188
Whose customer service do you prefer?	87.15042	90.57203	5.233051	7.044492	190
Total	433	450	26	35	944

4.1.2 Expected values Source: Self Analysis

Let's put the data to the test now. The formula for Chi-Square Test is:

$$\chi^2 = \sum \frac{(Observed - Expected)^2}{Expected}$$

I have used the CHISQ.TEST function of excel to calculate the p-value for the test instead of manually calculating from the formula. Calculating the same using data for Airtel and Jio (since, comparison is happening between the same) we get p-value as 0.074034806.

If done manually the Chi-Square value = 8.52827441 and Degree of Freedom = 4, from these the calculated p-value is 0.074034806 (same as above)

H0:	A consumer choosing a service provider	$p1 = p2$	consumer is indifferent
H1:	A consumer choosing a service provider	$p1 \neq p2$	consumer is concerned

Calculating Manually

Chi-Square Value (x)	8.52827441
Degree of Freedom (df)	4
p-value	0.074034806

Calculating using Excel function

p-value	0.074034806	< significance level(0.05) to reject null hypothesis
	5% level of significance	>= significance level(0.05) to reject null hypothesis

4.1.3 Acceptance of Null Hypotheses Source: Self Analysis

I have assumed 95% level of confidence for the analysis. The basic hypothesis rule says:

- Reject null hypothesis if p-value < α (0.05)
- Fail to reject null hypothesis if p-value $\geq \alpha$ (0.05)

For my data the p-value is greater than alpha and thus, I fail to reject the null hypothesis and hence conclude that the consumer is indifferent towards the brands while choosing a service provider.

4.2 Power BI:

As the Chi-Square was not able to show a clearer picture that is the reason, I have created a dashboard using Power BI to give the graphical representation of the data collected and for better understanding of the consumer preference with respect to Airtel and Jio.



4.2.1 Active Dashboard in Power BI Source: Self Analysis

Interpretation:

The above Dashboard which is created using Power BI is an active dashboard and the data collected with the help of questionnaire is used to create these charts which show various graphical representations of data which will be used to give the conclusion is majorly divided on the basis of gender.

We can interpret that the results are almost similar that came from the Chi-Square test that the consumers are almost indifferent while choosing the either telecom service provider and the classification of gender shown the same that almost the male and female are equally divided among choosing the either company. But still, we can see that the above graphs are slightly in the favour of Jio.

Active Dashboard:



4.2.2 Preferred Telecom Service w.r.t females Source: Self Analysis



4.2.3 Preferred Telecom Service w.r.t Males Source: Self Analysis

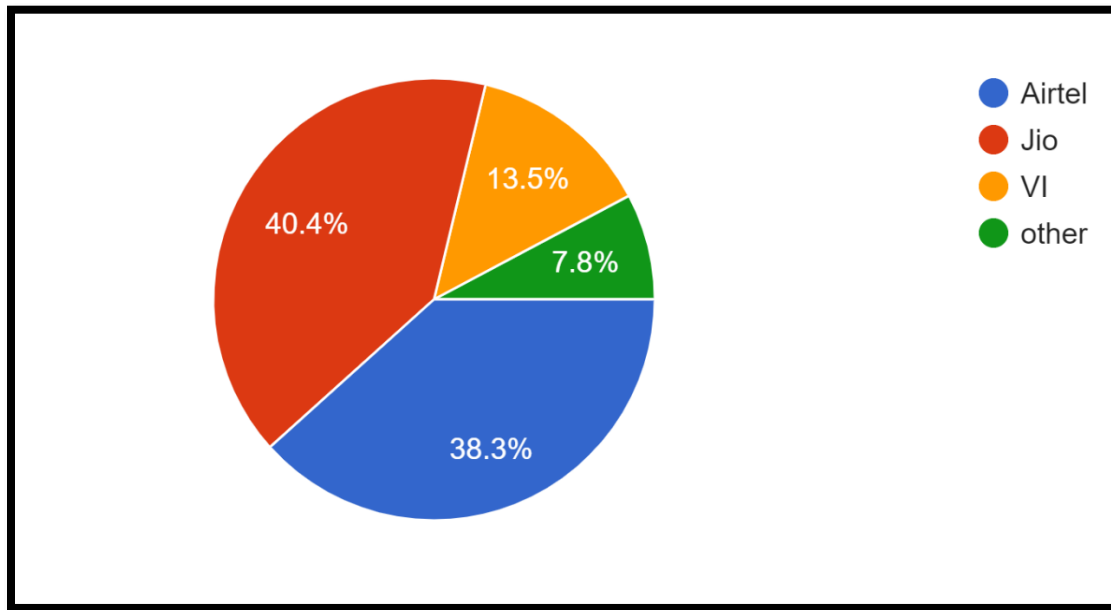
Interpretation:

In the above screenshots we can see that by clicking on the specific area of any chart all the other charts are highlighting the data of that specification which means that the above dashboard is an active dashboard and with the help of this I will be graphically representing all the questions of questionnaire so that the conclusion will show a clearer picture with respect to the consumer preference towards Airtel and Jio.

4.3 Graphical Representation:

As I have used Power BI for the better understanding of the consumer preference with respect to Airtel and Jio. So, here I will be defining each and every question that is there in the questionnaire for more areas to define the accurate preference of consumers.

Q1 Which telecom service do you like the most?



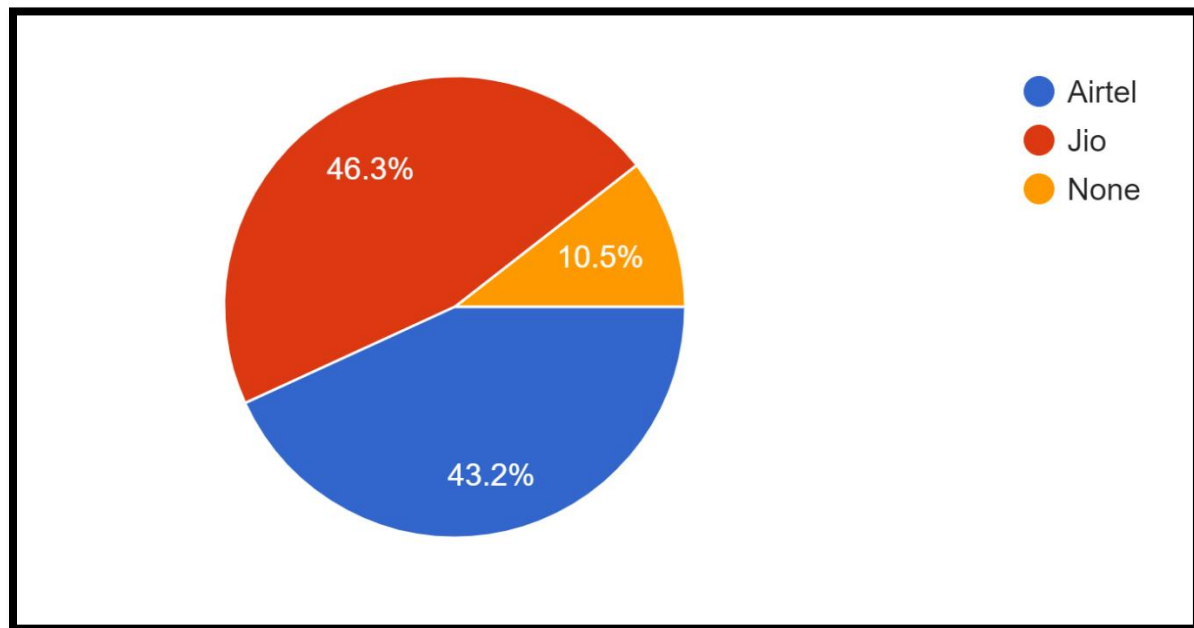
4.3.1 Preferred Telecom Service Source: Self Analysis

Interpretation:

According to my survey the maximum number of consumers like Jio and Airtel. Jio affected the whole market share of each and every company and rising its share day by day. The goodwill of Airtel helped the organisation to stay in the competition but have lost its leadership within the

Indian telecom industry, whereas VI and other players had a huge impact on its market share after the entry of Jio.

Q2 Among Jio and Airtel which telecom service is better?

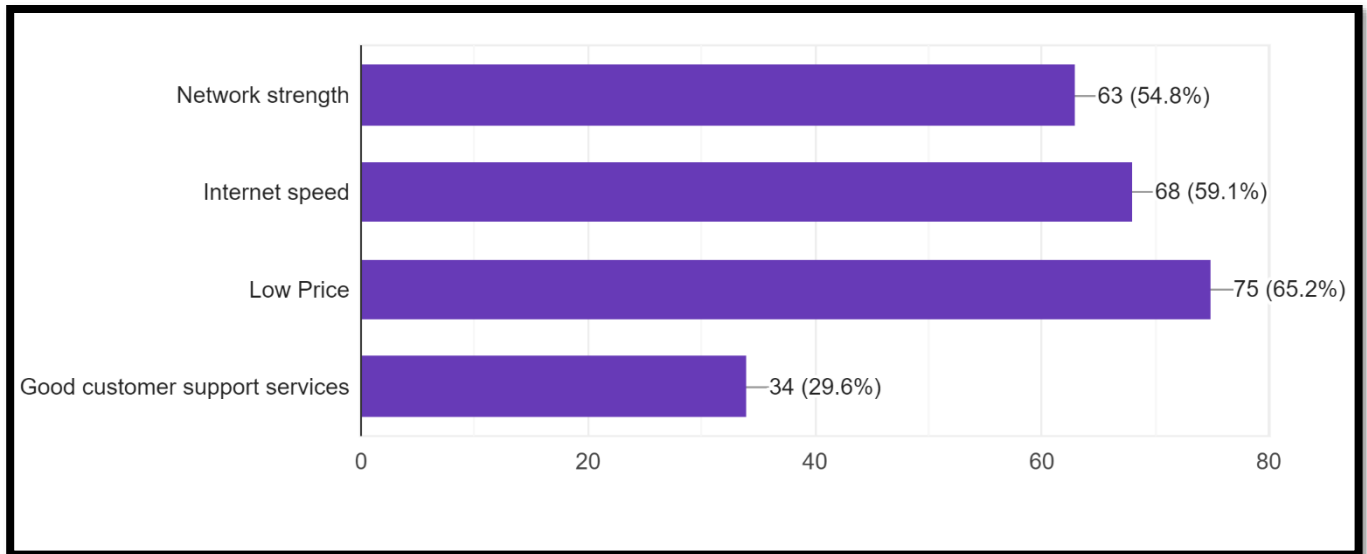


4.3.2 Better telecom service Source: Self Analysis

Interpretation:

As the main motive of my study was to find out that which is the most preferred brand between Airtel and Jio among the consumers. This shown that the majority of the population is in the favour of Jio but Airtel shown great attractiveness of consumers. Jio is rising in the market rapidly and Airtel have to take certain steps to sustain in the market.

Q3 If Jio then why?

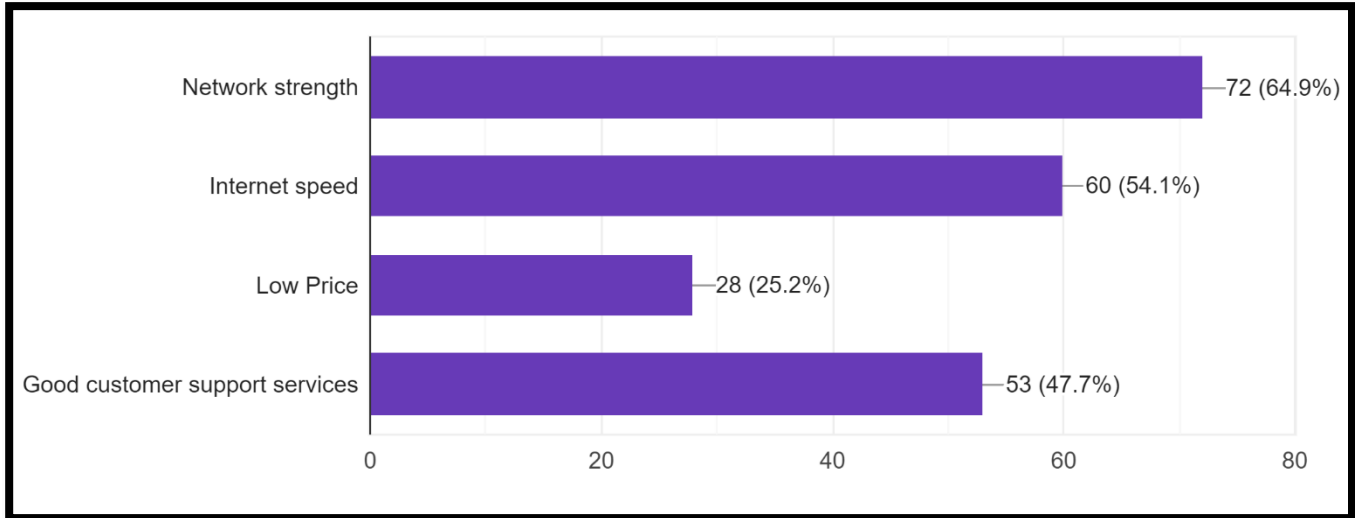


4.3.3 Why Jio Source: Self Analysis

Interpretation:

According to the data collected of 194 respondents only 116 were the once who preferred Jio and then it is further analysed that 63 people liked Jio because of its Network strength, 68 people preferred Jio because of its high speed internet service, 75 of them liked Jio because of the low prices of its packs as it was the technique adopted by Jio to enter into the market and only 34 people supported good customer services provided by the employees to them.

Q4 If Airtel then why?

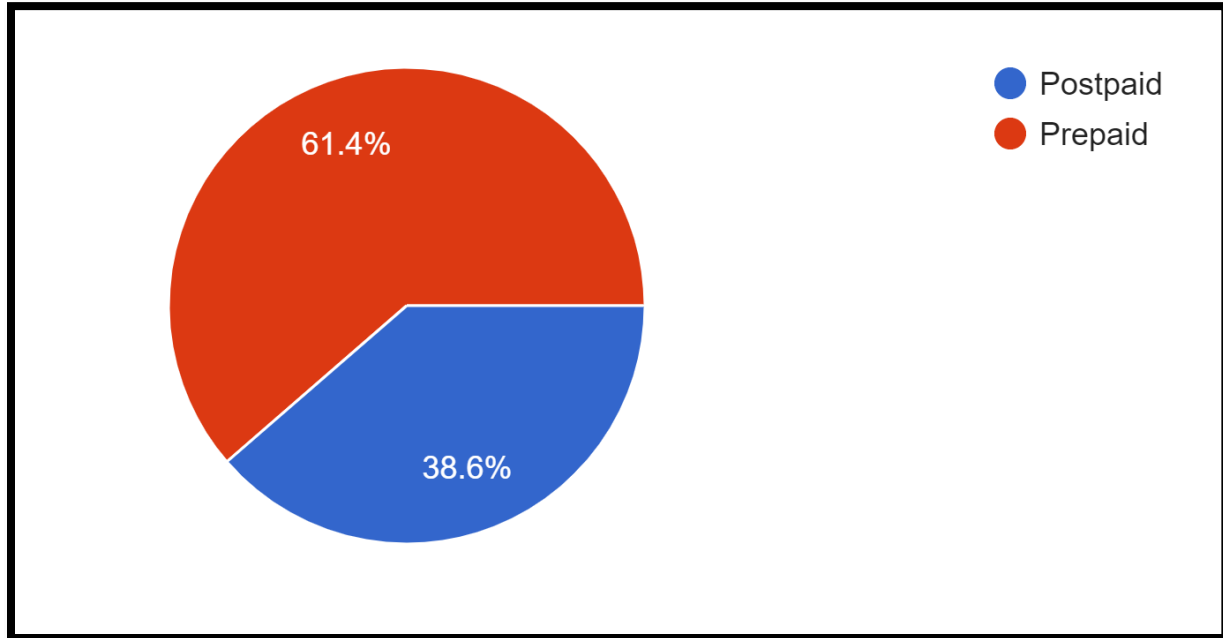


4.3.4 Why Airtel Source: Self Analysis

Interpretation:

According to the data collected of 194 respondents only 111 were the once who preferred Airtel and then it is further analysed that 72 people liked Airtel because of its Network strength, 60 people preferred Airtel because of its high-speed internet service, 28 of them liked Airtel because of the low prices of its packs and 53 people supported good customer services provided by the employees to them. So, network strength and internet speed are the reason behind the preference of airtel among the consumers.

Q5 What type of connection do you use?

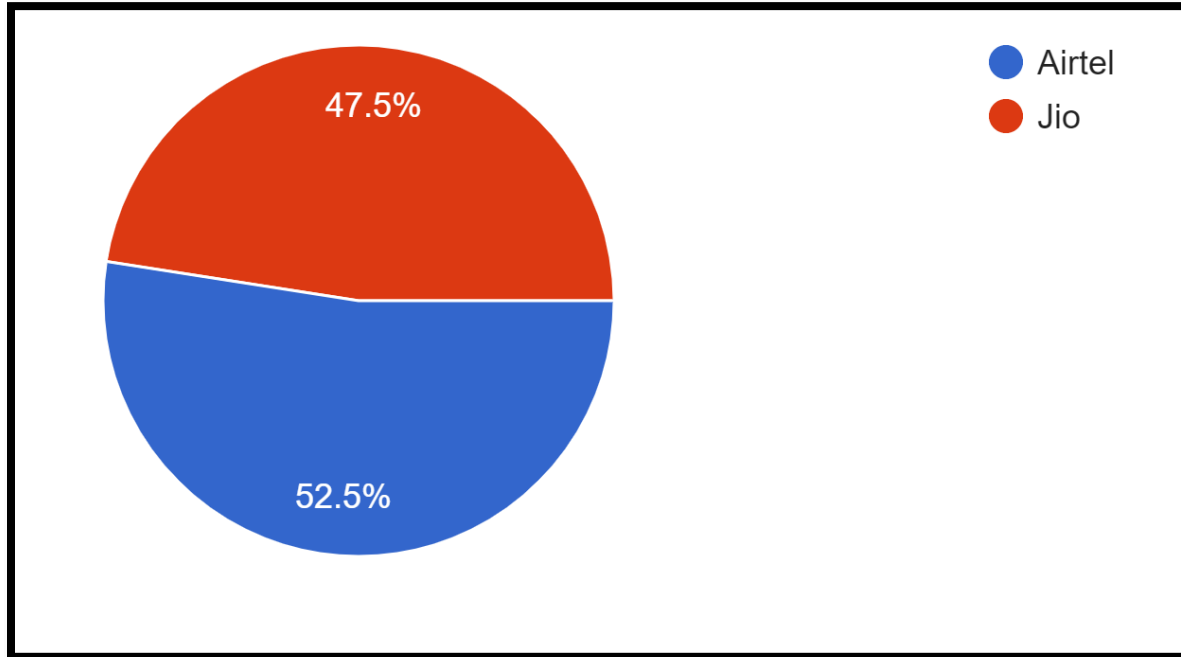


4.3.5 Type of connection Source: Self Analysis

Interpretation:

According to the survey of 194 people only 73 which is 38.6% of the whole population preferred post-paid plans and 116 people which is 61.4% of the population likes prepaid plans. This is because the maximum number of respondents were students between the age group of 18-25.

Q6 Whose post-paid connection do you prefer?

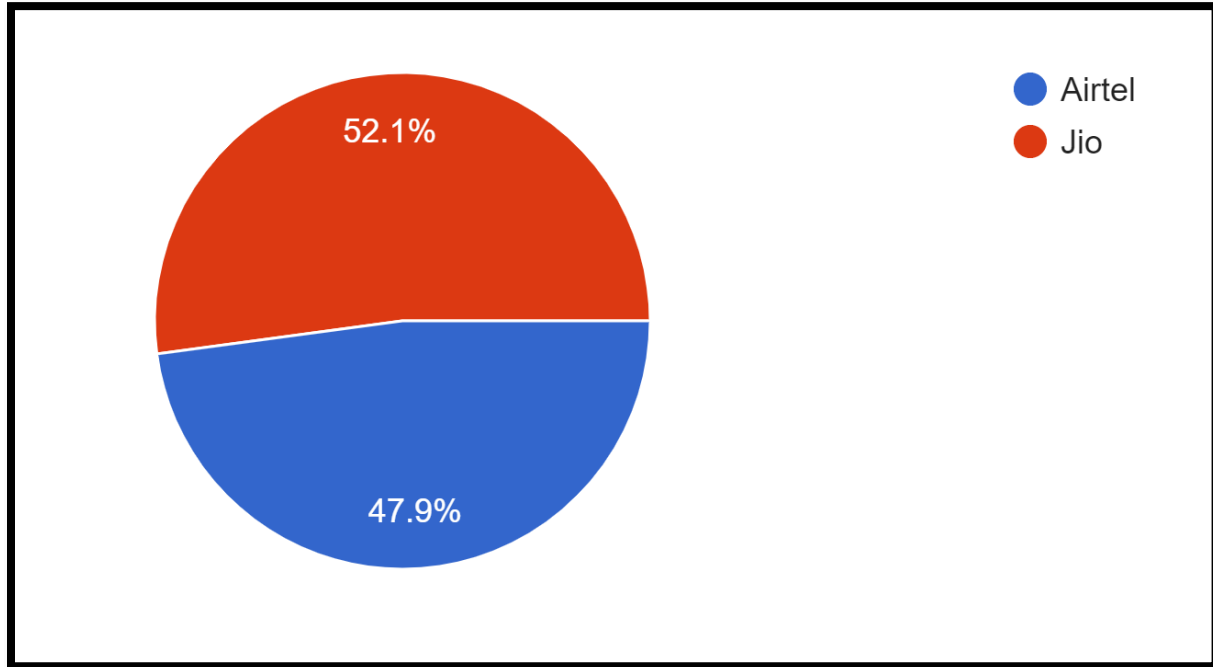


4.3.6 Whose Post-paid Source: Self Analysis

Interpretation:

According to the responses 47.5% of the total population think that Jio post-paid plans are better than Airtel post-paid plans, but the majority of the population think that Airtel post-paid plans are much better than the Jio post-paid plans. This is because Airtel is an old organisation and Jio just started in the market.

Q7 Whose prepaid connection does you prefer?

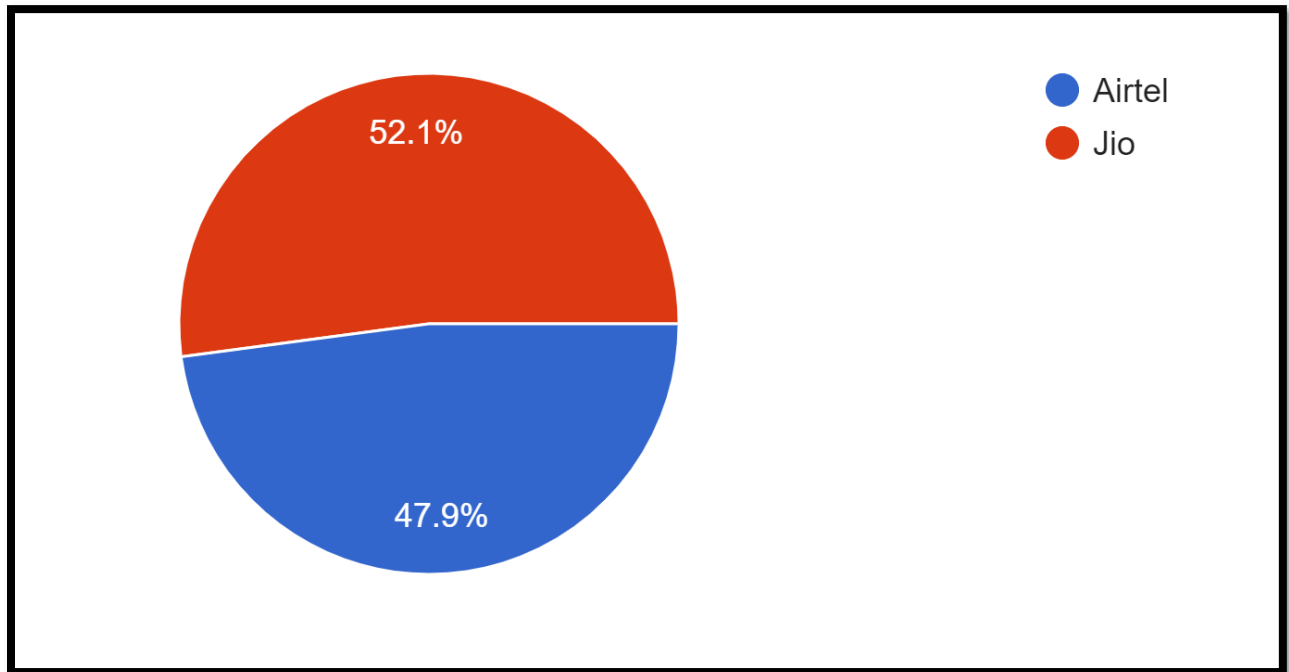


4.3.7 Whose prepaid Source: Self Analysis

Interpretation:

According to the responses there is cut throat competition between Airtel and Jio in terms of prepaid plans as Jio is the reason behind changing the selling pattern of Airtel. As it can be seen in the above diagram that Jio is only 4.2% more than the Airtel in terms of prepaid plans, so Jio is able to set an image in the eyes of consumers for the prepaid plans.

Q8 Whose customer service does you prefer?

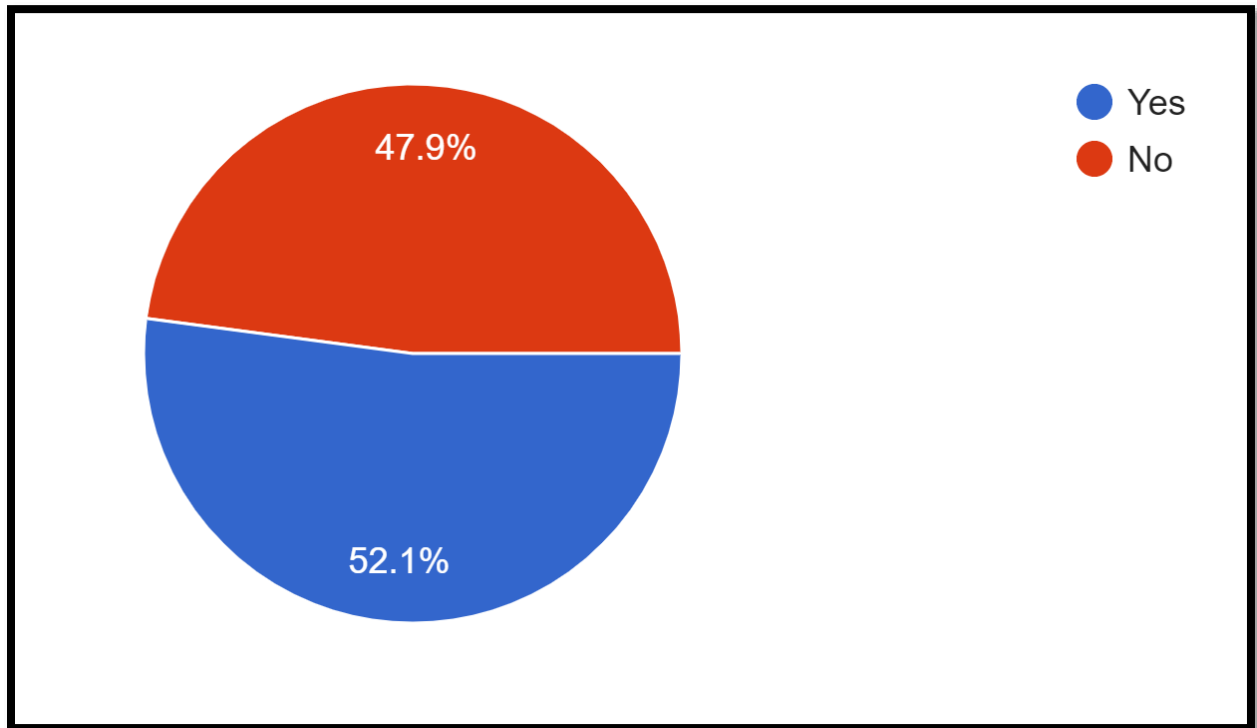


4.3.8 Customer Service Source: Self Analysis

Interpretation:

It is said that Airtel is known for its good customer services and according to the data collected from 194 respondents it is quite shocking to see that Jio is able to have more votes but still the difference is not that much so we can say that almost all the users of both Airtel and Jio are satisfied with the customer services provided by both the companies. In comparison of Airtel and Jio, Airtel's customer service is liked by 91 people whereas 99 people liked Jio's customer service.

Q9 Are the current prices of telecom services satisfactory?

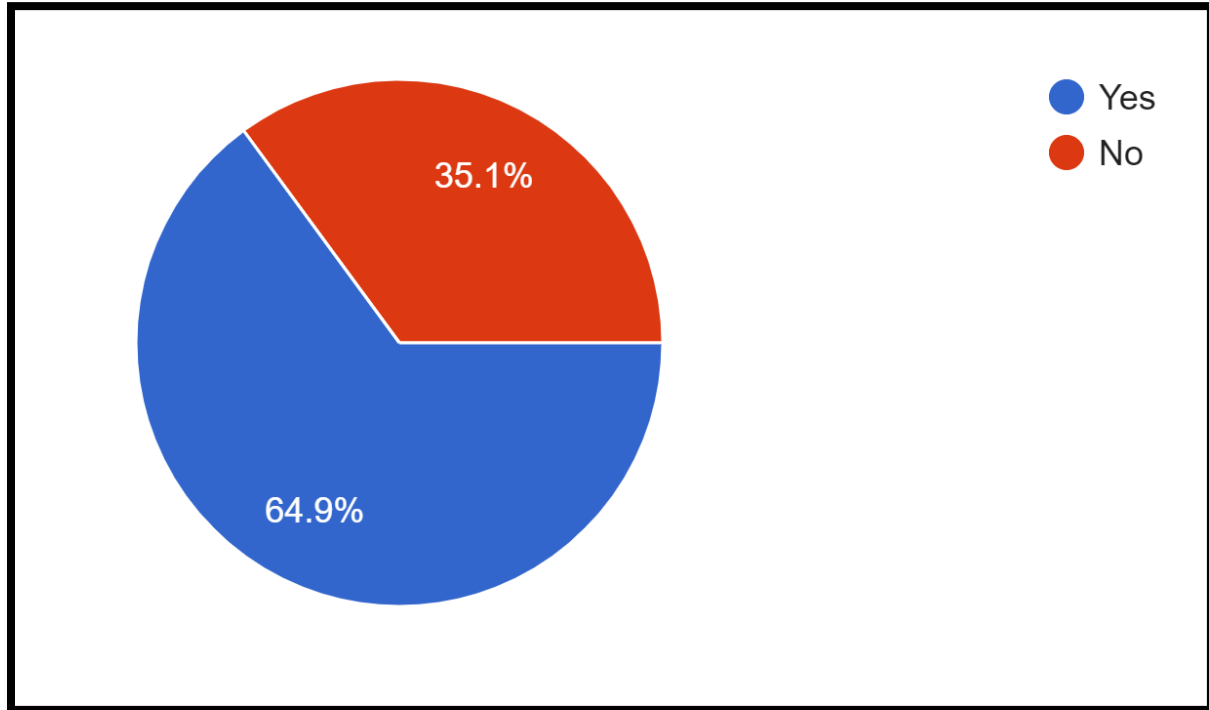


4.3.9 Current telecom service price Source: Self Analysis

Interpretation:

It is said that the demand is never ending, even after such fall in the telecom service prices some people are still not satisfied with the prices according to them the prices are still high but they might be true because when the companies were charging 1 rupee per minute, we were satisfied but after Jio entered our mind set changed and accepted that the earlier prices were high. But we can see that the majority of the population is satisfied with the current telecom service prices.

Q10 Has Jio changed your telecom service preference?



4.3.10 Impact of Jio on Indian telecom industry Source: Self Analysis

Interpretation:

Earlier in the Indian telecom sector the customers were at the stage of indifference i.e., they were indifferent while choosing the telecom company but Jio changed the market thinking as majority of the people say that Jio changed their telecom service preference. The respondents said that Jio changed all the other company's plan.

Chapter 5 Findings and Recommendation

5.1 Findings:

- Jio is the market leader.
- Jio is famous because of its internet speed and low-price services.
- Airtel is famous because of its network strength and internet speed.
- Both Jio and Airtel have cut throat competition among themselves.
- Jio is better than Airtel because of its
 - Low-Price
 - Internet Speed.
- Chi-Square test resulted in selecting the null hypotheses that consumer is indifferent between both the telecom service providers.
- Power BI helped to identify that the respondents are in the favour of Jio but the competition between both the companies is very high and as we know that Jio is the current market leader but it doesn't mean that Airtel is far behind.
- The graphical representation of each question gave a better understanding of the consumer preference that the consumers are inclined toward Jio but still it can be seen that the post-paid service of Airtel is better and if we increase the respondents, it is quite possible to see that Airtel might be the preferred brand.
- It can be seen that Jio is the market leader as well as the preference of the consumers is towards Jio but the results might get change if we divide the data with respect to prepaid and post-paid services with more responses.

5.2 Recommendations

- Airtel should advertise more to become the market leader again.
- Airtel should be more aware of opportunities so new companies like Jio will not be able to grab them and make a move in the industry.
- Airtel should increase its customer base by bringing the old subscribers back.
- Jio should work on price of its post-paid services.
- Jio should work on its customer services quality and availability of its customer support centres.
- Jio should increase its network towers so that the complain of network strength can be resolved.
- Both should increase their post-paid users.
- Both telecom service provider must ensure that its network and value-added services are of the highest quality.
- Both should try to attract old generation also.
- Both should give more periodic offers to its customer.
- Both the companies should do periodic surveys and take feedbacks from customers, distributors, employees, etc. to develop itself and gain competitive advantage.

Conclusion

The Indian telecom sector is growing at a rapid rate as the market is allowing new companies to enter by declining the tariffs and favourable regulatory policies. Identification of customer preference will lead to help Jio and Airtel to identify the weaknesses and complains of the customers which can be resolved.

According to the comparative study of Airtel and Jio on consumer preference it can be concluded that Jio is the leader of the market and is better than Airtel in terms of low price and internet speed but Airtel is trying to increase its market share rapidly. So, Airtel have to continuously keep an eye over its competitors and market so that it can grab every single opportunity (like new market, 5G network, etc.) of the market. It is also seen that all the telecom companies are fighting to bring the 5G network in India and the first company to launch 5G network in India will get a competitive advantage which will lead to increase in the market share of that company.

This study finding also tell that Jio can use its low cost and internet speed as strengths and through this it may able to increase its customer base. Jio was able to change the telecom service perception of the users after its entry in the market and with the help of gained customer base Jio is leading the Indian telecom industry.

Apart from the questions asked some respondents shared a major issue which they have with Jio. They say that Jio is seen as a cheap telecom provider in the market because it first distributed its sim for free, which is the reason for using Jio as the secondary sim by various users.

Limitations of the study

- The information provided by the respondents may be accurate.
- The study area is limited.
- Any suggestions given by analysing data collected may not be accurate for other locations as people mind set and Expectations differ from one place to other.
- The study of Comparative analysis of Airtel and Jio is very limited due to time and money constraint.
- Getting negative responses from the respondents.
- The information is widely collected from the youngsters.

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Annexure

Comparative study of Airtel and Jio on Consumer Preference

1. Name

2. Gender

Mark only one oval.

Male

Female

3. Which telecom service do you like the most ?

Mark only one oval.

Airtel

Jio

VI

other

4. Among Jio and Airtel which telecom service is better ?

Mark only one oval.

Airtel

Jio

None

5. If Jio then why ?

Check all that apply.

- Network strength
- Internet speed
- Low Price
- Good customer support services

6. If Airtel then why ?

Check all that apply.

- Network strength
- Internet speed
- Low Price
- Good customer support services

7. What type of connection do you use ?

Mark only one oval.

- Postpaid
- Prepaid

8. Who's postpaid connection do you prefer ?

Mark only one oval.

- Airtel
- Jio

9. Who's prepaid connection do you prefer ?

Mark only one oval.

- Airtel
- Jio

10. Who's customer service do you prefer ?

Mark only one oval.

Airtel

Jio

11. Are the current prices of telecom services satisfactory ?

Mark only one oval.

Yes

No

12. Has Jio changed your telecom service preference ?

Mark only one oval.

Yes

No

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