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Comparative Analysis of Jio and Airtel - Assessing Network Performance, Data Plans, and Customer Satisfaction

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Abstract

This research endeavours to conduct a comparative analysis of two leading telecommunications providers, Jio and Airtel, with a focus on network performance, data plans, and customer satisfaction. The primary objective is to provide insights into the key factors influencing consumer choices in the highly competitive telecom industry. The first facet of the study involves evaluating and comparing the network performance of Jio and Airtel. Parameters such as coverage, reliability, speed, and connectivity will be scrutinized to offer a detailed understanding of the strengths and weaknesses of each network. The second dimension of the research revolves around a comparison of the data plans and pricing structures offered by both providers. By analysing the intricacies of data plans, we seek to unveil the nuances that may influence consumer decisions in selecting a telecom service provider. The research assesses customer satisfaction by delving into reviews and survey data. The focus will be on customer service responsiveness, complaint resolution mechanisms, and the overall user experience with Jio and Airtel. Through quantitative analysis of user feedback, we intend to unveil patterns and trends that highlight the areas in which each provider excels or requires improvement, contributing to a holistic understanding of customer satisfaction in the telecom sector.

1. Introduction

The ever-evolving landscape of Indian telecommunications, choosing the right service provider can be a daunting task. Two dominant players, Reliance Jio and Bharti Airtel, constantly vie for customer loyalty through competitive offerings and network advancements. This research aims to compare Jio and Airtel, assessing their performance across key aspects: network performance, data plans, and customer satisfaction.

Customer Satisfaction: To gauge the real-world experience of users, we will leverage various data

sources. Surveys will be employed to understand customer satisfaction levels regarding network performance, customer service responsiveness, complaint resolution, and overall user experience with both providers. This analysis will provide valuable insights into how effectively each provider meets the needs and expectations of its custome

2. Objective

Assess customer satisfaction by analyzing reviews and surveys, focusing on customer service

responsiveness, complaint resolution, and overall user experience with both providers.

3. Literature Review

"A Comparative Analysis on Consumer Preference over Jio & Airtel Network Services" (Research Gate, 2023) by D. Nivetha, & Ms. V. Meena [1]. This study examines consumer preferences regarding network coverage, call quality, and data speeds between Jio and Airtel. The healthy competition between Airtel and Jio has set a benchmark for performance, fostering technological advancements and customer service excellence, ensuring mutual well-being, and paving the way for a brighter future. ISSN: 2582-7421

"An Analytical study on Reliance Jio's contribution India's telecommunication to market" (Research Gate, 2019) by Drashti Chovatiya. This research analyzes Jio's impact on the Indian telecom market, focusing on its network architecture and impact on network performance benchmarks [2]. Reliance Jio's impactful entry in 2016, driven by low-cost data plans, aggressive pricing, and investments in advanced technologies, has not only garnered a substantial customer base but also catalyzed increased internet usage, smartphone adoption, reduced tariffs, superior network quality, and positive economic effects on the Indian telecom market.

"Study on Comparative Analysis of Airtel vs. Jio (B2B)" (IRE Journals, 2020) by Samyak Jain, & Shweta Patel [3]. This study compares data plans and pricing structures offered by Jio and Airtel for businesses, highlighting factors influencing customer choice beyond just cost. The sales team, as the company's front line, crucially shapes anchor relationships by fostering positive first impressions, communication, employing strong proactive problem-solving, and prioritizing client and anchor satisfaction, thereby cultivating long-term partnerships, identifying potential clients, and driving growth opportunities, ultimately contributing indispensably to the business's success despite challenges. IRE Journals | Volume 6 Issue 12 | ISSN: 2456-8880.

"A Comparative Study on Jio and Airtel Services Among Public in Coimbatore City" (IJRPR, 2023) by Rochit Singh [4]. This study analyzes customer

satisfaction levels with various aspects of Jio and Airtel services, including network performance, customer service, and value for money. In comparing telecom giants Airtel and Jio, both well-established, Airtel is perceived as superior in quality and service across classes, yet Jio gains an edge in popularity, particularly among the younger demographic, leading to its dominance in the Roorkee and Dehradun regions, attributed to better services and competitive pricing.

"Disruptions in Indian Telecom Sector: A Oualitative Study on Reliance Jio" (Emerald Insight, 2016) by Sahil Singh Jasrotia, Roop Lal Sharma & Hari Govind Mishra. This study explores the disruptive impact of Jio's entry into the market, focusing on how it influenced customer perceptions and satisfaction with telecom services [5]. Reliance Jio's disruptive entry into the telecom industry, marked by affordable tariffs, high-speed internet, strategic brand endorsements, and innovative free services, triggered a revolution leading to significant market shifts, including job losses, company mergers, and a rapid rise to become India's secondlargest telecom operator within 18 months, showcasing its profound impact on competitors and customer preferences.

"An Empirical Study on Consumer Satisfaction Related to Telecommunication Services - (A Comparative Analysis of Airtel & Jio Services)" (ICEIMLP, 2019) by Dr. Dimpy Sachar. The study identifies the five factors that influence the satisfaction level of mobile service users [6]. These factors are named Information, Quality Service, Tariff Plans, Internet, and International Call Rates. The analysis reveals Jio's superiority over Airtel in various aspects, including internet and downloading speed, calling rates, and tariff plans, despite Airtel's better network coverage; however, Airtel users express higher satisfaction.

"A Comparative Analysis on Customer Preference of Service with Special Reference to Airtel and Jio in Vadodara" (JETIR, 2014) by Bhim Raj Suthar, Shubham Kumar Thakur, & Dr. Tapesh Dubey [7]. The study helps to find what are the factors that influence the buying decisions of customers so we they find out the customer preferences. This research delves into the dynamics

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of the telecommunications industry, revealing Jio's revolutionary impact with its free high-speed internet acquisition strategy, Airtel's competitive schemes, and customer preferences favoring Airtel due to perceived service reliability, indicating a balanced competition shaping the industry's future.

"Comparative Analysis between Selected Mobile Service Providers on Satisfaction Level of Urban Consumers' of West Bengal: An Empirical 2018) by Dr. Debarun Analysis" (JMRD Chakraborty [8]. The study explains that there is a significant relationship between satisfaction and independent variables i.e. service quality, price, and perceived value on Airtel, Vodafone, and Reliance Jio users in urban West Bengal. The study emphasizes the paramount importance of service quality in enhancing customer satisfaction amidst intense competition in the Indian mobile phone market, urging operators to focus on various dimensions of service quality and innovate valueadded services to meet changing customer demands and foster loyalty.

4. Research Methodology

4.1.Data Collection - Customer Satisfaction

4.1.1.Primary Data

The responses collected through your Google Form survey (85 responses) focused on:

• Customer service experience and complaint resolution effectiveness for both providers.

4.2.Data Analysis

4.2.1.Quantitative Analysis

Analyzed survey data using cross-tabulation to identify relationships between variables [9].

5. Data Analysis

In this study, we analyze Jio and Airtel, assessing network performance, data plans, and customer satisfaction. Utilizing the cross-tabulation method we aim to provide a comparison for an in-depth understanding of the telecom landscape [10].

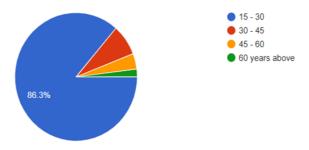


Figure 1 Showing Age classification

Fig 1 illustrates The age classification pie chart highlights the distribution of respondents. The largest group, 15–30 years old, accounts for 86.3% with 44 responses, indicating a youthful majority. The 30–45 age group follows with 7.8% and four responses. The 45–60 age group represents 3.9% with two responses [11]. The smallest segment, 60 years and older, makes up only 2% with one response. This data shows that most participants are young, while older age groups are significantly fewer.

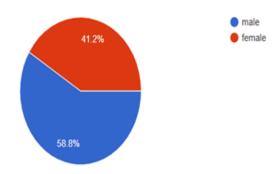


Figure 2 Showing Gender Classification

Fig 2 illustrates The gender classification pie chart shows the customer distribution of Jio and Airtel users. It indicates that 58.8% of the users are male, while 41.2% are female. This data highlights that male customers dominate the user base, while female customers are fewer in comparison. This distribution helps understand the gender-based preference for Jio and Airtel services.

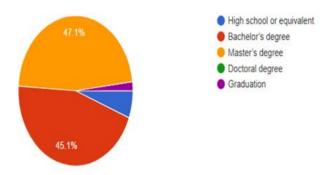


Figure 3 Showing Educational Qualification

Fig 3 illustrates The educational qualification pie chart shows the distribution of respondents' academic backgrounds. The majority, 47.1%, hold a master's degree, making them the largest group. Bachelor's degree holders follow closely at 45.1%. A smaller portion, 5.9%, have completed high school or its equivalent. The smallest group, 2%, represents those with graduation qualifications.

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This data highlights that most respondents have higher education qualifications, with master's and bachelor's degrees being the dominant categories.

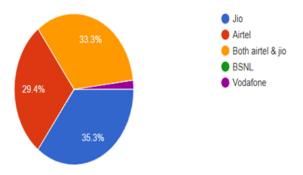


Figure 4 Showing Telephone Service Providers

Fig 4 illustrates The pie chart illustrates the distribution of phone service providers among users. Jio emerges as the most popular provider, with 35.3% of users, followed by Airtel at 33.3%. A smaller portion, 29.4%, uses both Airtel and Jio services. Vodafone holds the smallest share at 2%, while BSNL is not labelled. The data highlights that Jio and Airtel dominate the market, with most users preferring these two networks, either individually or in combination.

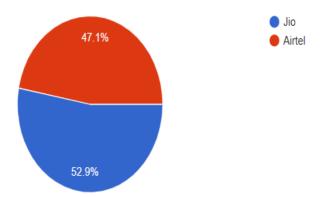


Figure 5 Showing that Which Mobile Service Provider Has Better Customer Service

Fig 5 illustrates The pie chart illustrates survey responses regarding which mobile service provider offers better customer support. The findings reveal that 52.9% of respondents believe Jio provides superior customer service, while 47.1% prefer Airtel's customer support. This indicates that Jio is perceived to have slightly better customer service than Airtel. However, the difference is minimal, showing that both providers offer competitive customer support services according to user opinions.

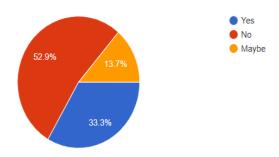


Figure 6 Showing the Data about Switched from Jio to Airtel or vice Versa

Fig 6 illustrates The pie chart represents survey responses about switching between Jio and Airtel services. The data reveals that 33.3% of respondents have switched between the two networks, indicating a significant portion of users have changed providers. Meanwhile, 52.9% of respondents have never switched, showing loyalty to their current service. The remaining 13.7% are uncertain, indicating they might consider switching in the future. This data highlights that customer preferences can shift based on service quality, pricing, or network performance.

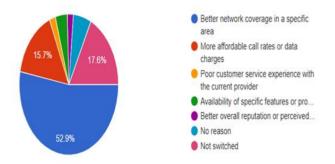


Figure 7 The Reasons for Switching the Mobile Service Provider

Fig 7 illustrates The survey highlights the reasons for switching mobile service providers. The majority, 52.9%, switched due to better network coverage in specific areas, making it the most common reason. Affordable call rates or data charges influenced 15.7% of respondents. Smaller portions switched due to poor customer service (2%), special features or promotions (3.9%), and better overall reputation (2%). Interestingly, 5.9% had no specific reason for switching. The findings indicate that network coverage and pricing play the most significant roles in customers' decisions to change service providers.

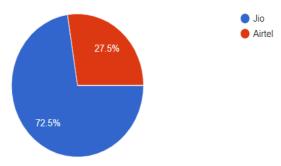


Figure 8 Showing Which Provider Provides Better Discounts and Offers to Its Customer

Fig 8 illustrates The pie chart reveals customer opinions on which service provider offers better deals and discounts. The majority, 72.5%, believe Jio provides superior offers, while only 27.5% think Airtel offers better discounts. This suggests that Jio is more popular for its attractive promotions and affordable packages, making it a preferred choice for users seeking cost-effective mobile services.

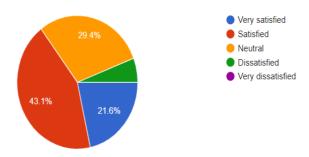


Figure 9 Showing Satisfaction of Respondents with The Billing and Payment Options for The Service Provider

Fig 9 illustrates The pie chart illustrates customer satisfaction with billing and payment options provided by their mobile service providers. The majority, 64.7%, expressed satisfaction, including 21.6% who were very satisfied and 43.1% who were satisfied. Around 29.4% of respondents remained neutral, showing neither satisfaction nor dissatisfaction. Only 5.9% reported being dissatisfied, while no one was very dissatisfied. The results indicate that most customers are happy with the billing and payment services, reflecting the providers' efficiency in managing payment options.

6. Findings

• Jio dominance across age groups, Airtel's niche in the 55-64 age bracket.

- Males showcase higher overall satisfaction, insightful breakdown of dissatisfied, moderately satisfied, and satisfied responses among males and females.
- Students favor diverse features, employed individuals prioritize validity period, self-employed opt for cost, data allowance, and validity period, and unemployed individuals focus on cost.
- Airtel tends to occasional and rare usage, Jio users exhibit balanced distribution across frequent categories
- Jio leads with high ratings, and Airtel is also trusted, revealing user perceptions of reliability in remote areas.
- Airtel and Jio elicit positive feedback, users are generally content with current plans.
- Airtel and Jio data plans receive positive feedback, and excellent ratings predominately, and users perceive plans as cost.
- Airtel and Jio elicit positive feedback, excellent ratings are predominant, users are satisfied with responsiveness.

Conclusion

In conclusion, the comparative analysis of various figures highlights distinctive patterns in user preferences and satisfaction levels across different dimensions of mobile network providers Airtel and Jio. Jio emerges as the more popular choice overall, exhibiting higher user counts in every age group and fostering a broad user base. Notably, the 25-34 age demographic stands out with the highest predominantly total users, favouring Airtel, while maintaining a presence in all age groups, generally lags behind Jio in user counts. Examining user satisfaction, gender-based differences reveal that males express higher overall satisfaction levels compared to females. When evaluating mobile plan preferences based on occupation, students prioritize diverse features, employed individuals focus on validity periods, and self-employed individuals show preferences in cost, data allowance, and validity. Unemployed individuals, on the other hand, emphasize cost in their preferences. The frequency of network usage unveils that Airtel users tend to use the network infrequently, while Jio users exhibit a more

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balanced distribution across usage frequencies. Trust in remote area coverage positions Jio as more reliable, though Airtel is still perceived as acceptable. Lastly, satisfaction with data allowances and the cost of plans is generally high for both providers, with customer service responsiveness receiving positive feedback, albeit with a slight advantage for Jio. These insights provide a nuanced understanding of user perceptions and preferences, contributing to a comprehensive view of the mobile network landscape.

References

- [1].https://www.trai.gov.in/
- [2].https://www.ijfmr.com/papers/2023/3/303 6.pdf
- [3].https://indusedu.org/pdfs/IJREISS/IJREIS S_3172_30536.pdf
- [4]. Satyanarayana, D., Rao, K.S., & Naidu, S.K. (2017). The impact of Reliance Jio on Indian mobile industry-A case study on mergers and acquisitions of idea Vodafone and Airtel Telenor. International journal of applied research, 3, 209-212.
- [5].Mr. Rajesh Kumar and Mr. Bijendra Kumar Puskar (2019. A comparative analysis on customer preference of service with special reference to airtel and jio in vadodara. Journal of emerging technologies and innovative research. https://doi.org/10.55041/ijsrem17020
- [6]. Venkat, N., Nagabhaskar, M., & Subbareddy, D. (2017). A comparative study on brand impact on customers with respect to Idea, Airtel, and Reliance Jio brands with reference to West Godavari District. International Journal for Innovative Research in Multidisciplinary Field, 3(9), 46–49
- [7]. Aggarwal, M. (2019). A comparative study on customer satisfaction in the telecommunication industry. International Journal for Research in Engineering Application & Management (IJREAM), Special Issue
- [8]. Jayalakshmi, J. (2021). A study on impact of Jio on the telecom industry in India. International Journal of Law Management and Humanities, 4(5), 2149–2163

- [9].Rengarajan, V., Amudha, R., & Nalini, R. (2017). Customers' repurchase intention towards Airtel dongles. International Journal of Economic Research, 14(6), 417–423
- [10]. Kalra, S., Padacheril, M., & Chandak, S. (2018). To study the impact of Jio on the Indian telecom industry through their marketing strategies. International Journal of Creative Research Thoughts (IJCRT), 6(1), 907–913
- [11]. Shiji, R., & Uma, M. (2018). A study on customer satisfaction towards usage of Airtel mobile service (with reference to Coimbatore city). PARIPEX Indian Journal of Research, 7(2), 62–64