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ASSESSING ARPU GROWTH AND MONETIZATION STRATEGIES IN THE INDIAN TELECOM INDUSTRY: A FIVE-YEAR COMPARATIVE STUDY OF BHARTI AIRTEL AND RELIANCE JIO

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ABSTRACT

The telecom sector of India has transformed as one of the fastest-growing sectors in the world, driven by increasing digitalization, competitive dynamics, and the evolving subscriber base of two giant operators of the Indian telecom sector, i.e., Bharti Airtel Ltd. and Reliance Jio Infocomm Ltd., over a period of five years from FY 2019-20 to FY 2023-24. ARPU, the critical metric for assessing financial efficiency and subscriber monetization, was analyzed with the help of secondary data from annual reports, TRAI publications, and other authenticated sources. The study concluded that while both operators have illustrated a consistent ARPU growth, Airtel has continuously led with higher ARPU as compared to Jio, revealing its stronger ability to monetize its premium subscriber base and more effective plan pricing strategies. On the other hand, Jio's ARPU growth illustrates a gradual shift from customer acquisition to revenue quality and sustainability. This study contributes to academic literature by addressing a major research gap of longitudinal ARPU-based comparative performance analysis in the Indian telecom industry.

Keyword: Average Revenue Per User (ARPU), Reliance Jio Infocomm Ltd., Bharti Airtel Ltd., Indian Telecom Sector, Subscriber Base, Trend Analysis.

INTRODUCTION

The Indian telecom sector is the second largest and fastest-growing sector around the world and serves as the backbone of economic growth, social development, and digital connectivity. With near about 1199.28 million subscribers and rapidly expanding consumption of data, the Indian telecom has undergone a remarkable transformation from public sector monopolies to a technology-driven competitive marketplace. The liberalization policy of the 1990s caused an explosive rise in mobile services and broadband penetration that redefined how Indians communicate and access information.

In 2016, an iconic moment came into existence in Indian telecom history with the entry of Reliance Jio Infocomm Ltd., which disrupted the whole telecom market of India by offering free voice calls and 4G-internet services. This disruption in this industry led to an aggressive price war, industry consolidation, and financial stress among existing players. In the midst of this turbulence, Bharti Airtel Ltd. and Reliance Jio have emerged as the most dominant players competing for market leadership.

However, beyond network coverage and subscriber base, the most insightful measure of success for the telecom industries lies in revenue efficiency per customer, which is captured by a key financial metric that is Average Revenue Per User (ARPU). ARPU refers to an average amount of revenue generated from a single subscriber over a given period of time, typically per month or year. It reflects the company’s ability to monetize its customer base and is influenced by factors like data consumption patterns, subscriber segmentation, market structures, etc. This metric serves as a powerful indicator of a company’s financial health, business sustainability, and customer quality for the telecom sector specifically. Higher ARPU signifies effective pricing and customer engagement strategies, while declining or stagnant ARPU reflects revenue dilution or pricing pressure.

This study aims to provide a five-year comparative analysis of ARPU trends between the two mega giants of the telecom sector of India, i.e., Bharti Airtel Ltd. and Reliance Jio Infocomm Ltd., from the financial year 2019-20 to 2023-24. The main objective of the study is to evaluate how these two major players in this sector have performed in form of revenue generation from their subscriber-base and how their strategies have influenced ARPU growth. The scope of the studies is limited to the Indian telecommunication industry and is based on secondary data obtained from annual reports of respective companies, TRAI publications, and financial disclosures.

Despite being widely discussed in investor presentations, there is a notable research gap in academic literature that centrally focuses on longitudinal ARPU performance analysis of the telecom operators of India. Mostly, studies focus on the profitability, subscriber growth, market structure, or customer satisfaction of the telecom companies, often overlooking ARPU as a standalone strategic indicator.

LITERATURE REVIEW

- (Kathuria, 2019) analyzes the financial stability, profitability, and overall economic performance of Indian telecom companies, using key financial metrics and trends that impact their operational efficiency and market competitiveness for the time period from 2011 to 2018. The main objective of the paper is to examine the financial health of the telecom sector and to check the financial trends and challenges faced by this sector. The study also examines ARPU of the sector that signifies that even though the revenue realization per megabyte is declining, ARPU has been rising for the last two years. The study concluded that despite this sector being one of the largest and fastest-growing globally, it has experienced significant financial stress, especially after the entry of Jio in 2016.

- (Agarwal and Prasad, 2023) analyze an overview about the development of the Indian telecom industry, which mainly focuses on how new technologies, policy reforms, and changing consumer behavior shape the telecom sector of India. The study also highlighted the industry's contribution to economic growth through GDP and employment and pointed out the challenges like low ARPU, high debt, and the competition faced by the companies after the entry of Reliance Jio. The study concluded that the sector needs to grow further.
- (Dr. Chava, 2021) critically examines the performance of the Indian sector of telecom using five major key performance indicators like subscriber base of telephones, subscriber base of Internet, teledensity, gross revenue, and ARPU. The study highlights that the wireline and broadband connections are rapidly growing, but the sector shows declining ARPU and reduced wired usage. The study suggested that the sector needs some regulatory reforms that empower this sector.
- (Agarwal & Garg, 2022) presents and reviews the growth of the telecom sector of India and future opportunities available to the sector. This study uses descriptive research methodology based on secondary data collected from sources like Telecom Authority of India (TRAI), the Department of Telecommunication (DoT), government reports, etc. The study concluded that Indian nation has emerged as the world's second-largest telecom sector, with near about 1.16 billion fixed and mobile phone subscribers. The study gives a reader a full understanding of current market trends and also assists in highlighting changes in the telecom sector of India.
- (Singh, 2023) focuses on identifying the various factors that influence the satisfaction level of customers of the telecom sector. The main objective of the study was to compare the level of satisfaction of the subscribers of Airtel and Jio. The study uses both primary and secondary data for the study. The researcher finds that there is no major difference in factors affecting the level of satisfaction of customers for both the companies. The study analyzed that in some factors Reliance Jio wins the customer satisfaction, like on reasonable and economical prices, while Airtel wins on factors like better network coverage.
- (Barot & Japee, 2022) attempts to study the financial performance of telecom companies in India after the entry of Jio in 2016, and it mainly focuses on the profitability, solvency, and liquidity of Airtel and VI. The study uses a descriptive research design to evaluate the financial performance for the period of five years from 2015 to 2020. The researcher concluded that Airtel is performing better in terms of profit from VI, and in terms of liquidity, both companies are on the same track.

RESEARCH GAP

In the recent scenario, most of the research work that the scholar explored have studied the financial performance and overall growth of the Indian telecom sector, but there is a deficiency in academic research that mainly focuses on longitudinal ARPU trends among different telecom operators in a comparative framework. Despite being a critical indicator for revenue generation, the existing studies do not focus on a comparative five-year evaluation of ARPU patterns between the two leading telecom operators of India, i.e., Bharti Airtel Ltd. and Reliance Jio Infocomm Ltd. This study trys to fill that gap by conducting detailed comparison of ARPU trends for the financial year from 2019 to 2024 that helps to contribute new understanding into how revenue realization strategies differ across these two mega-giant players of telecom in India.

SIGNIFICANCE OF STUDY

The recent study is significantly important as it analyzes Average Revenue Per User (ARPU), a key financial metric that helps to reflect a company's ability to generate revenue from its subscriber base. Understanding the ARPU trend in the recent scenario is very essential for assessing revenue efficiency and pricing strategies in such a competitive and digitally evolving sector. By comparing the two leading operators in telecom over a period of five years, we highlight the impact of different business models on ARPU growth. The study provides a valuable insight for telecom professionals, investors, policymakers, and researchers to evaluate financial health and strategic direction in this sector.

OBJECTIVE OF STUDY

1. To study the ARPU trend for Bharti Airtel Ltd. and Reliance Jio Infocomm Ltd. over the period from 2019 to 2024.
2. To compare the growth rate of ARPU of both the companies.

RESEARCH METHODOLIGIES

This study adopts a descriptive, analytical, and comparative research design that focuses on examining and comparing the ARPU trend for Bharti Airtel Ltd. and Reliance Jio Infocomm Ltd. over a period of five years from FY 2019-20 to FY 2023-24.

Sample Size:

1. Bharti Airtel Ltd.
2. Reliance Jio Infocomm Ltd.

Period of study: The study covers a five-year period from FY 2019-20 to FY 2023-24, which effectively analyzes recent market developments and competitive dynamics in the Indian telecom market.

Type of data collection: The data collected for the study exclusively relies on secondary data sources. The data has been extracted from the published annual reports of Airtel and Jio from 2019 to 2024, regulatory reports from the Telecom Regulatory Authority of India (TRAI), and other relevant sources, including research journals, industry articles, and authenticated publications.

Tools of study: To facilitate meaningful interpretation, data has been systematically assembled, using tabulation techniques and graphical representation using line graphs that are employed to illustrate ARPU trends and the comparative framework.

DATA ANALYSIS

Average Revenue per User (ARPU) refers to statistical metric that is used for evaluation of the fundamental performance of the telecom industry, which represents the average revenue generation by each subscriber of a telecom company over a course of time. It provides valuable information about company's ability to monetize its subscriber-base and is widely used for evaluating the operational efficiency of a telecom company and comparing performance across operators.

FORMULA

$$\textbf{ARPU (}\text{per year}) = \frac{\textit{REVENUE FROM OPERATION DURING A YEAR}}{\textit{AVERAGE NUMBER OF SUBSCRIBERS DURING A YEAR}}$$

For ARPU per month, the formula will be:

$$\textbf{ARPU}\ (\text{per month}) = \frac{\textit{ARPU PER MONTH}}{12}$$

Where,

Revenue from Operation refers to the company's core earning or revenue from the telecom services, excluding other income.

Average Number of Subscribers refers to mean value of subscribers at the beginning and the subscribers at the end.

ARPU serves as a key financial indicator of how efficiently an operator converts its subscriber's base into revenue.

TABLE 1.1: AIRTEL ARPU

Year	Revenue from Operation (in million)	Opening Subscribers (in million)	Closing Subscribers (in million)	Average Subscribers (million)	ARPU (in ₹ per user/year)
2019-20	543,171	329.36	332.21	330.79	1,641
2020-21	643,259	332.21	357.17	344.69	1,866

2021-22	707,950	357.17	366.18	361.68	1,957
2022-23	847,201	366.18	378.06	372.12	2,277
2023-24	941,198	378.06	394.54	386.3	2,436

(Sources – Data incorporated by researcher from different Annual report

TABLE 1.2: RELIANCE JIO INFOCOMM LTD ARPU

Year	Revenue from Operation (in million)	Opening Subscribers (in million)	Closing Subscribers (in million)	Average Subscribers (in million)	ARPU (in ₹ per user/year)
2019-20	543,160	306.72	388.61	347.67	1,563
2020-21	698,880	388.61	426.25	407.43	1,715
2021-22	769,770	426.25	410.17	418.21	1,840
2022-23	907,860	410.17	439.35	424.76	2,139
2023-24	1,001,190	439.35	481.77	460.56	2,173

(Sources – Data incorporated by researcher from different Annual report)

TABLE1.3: COMPARATIVE ARPU TREND PER YEAR

Year	Airtel ARPU (in ₹ per user per year)	Jio ARPU (in ₹ per user per year)
2019-20	1,641	1,563
2020-21	1,866	1,715
2021-22	1,957	1,840
2022-23	2,277	2,139
2023-24	2,436	2,173

(Sources – Data incorporated by researcher using Ms-Excel)

TABLE 1.4: COMPARATIVE ARPU TREND PER MONTH

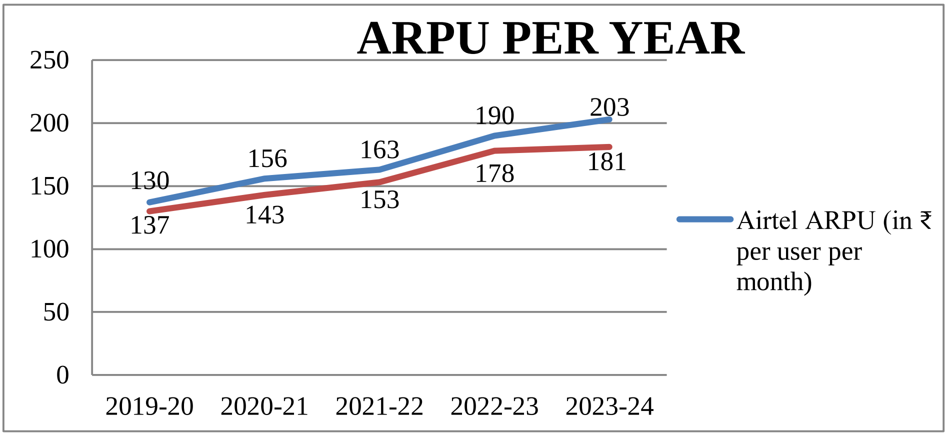
Year	Airtel ARPU (in ₹ per user per month)	Jio ARPU (in ₹ per user per month)
2019-20	137	130
2020-21	156	143

2021-22	163	153
2022-23	190	178
2023-24	203	181

(Sources – Data incorporated by researcher using Ms-Excel)

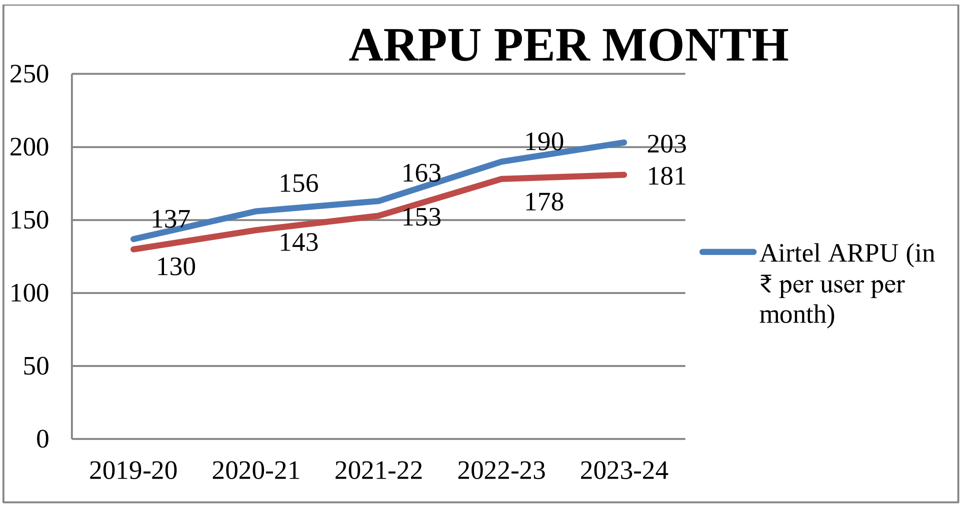
GRAPHICAL PRESENTATION OF ARPU TRENDS

GRAPH 1.1: ARPU TREND PER YEAR



(Sources – Data incorporated by researcher using Ms-Excel)

GRAPH 1.2: ARPU TREND PER MONTH



(Sources – Data incorporated by researcher using Ms-Excel)

DATA ANALYSIS AND INTERPRETATION

The study reveals the comparative analysis trend of Average Revenue Per User (ARPU) per year and per month between Reliance Jio Infocomm Ltd and Bharti Airtel Ltd from FY 2019-20 to FY 2023-24 that highlights the competitive dynamics between the two leading telecom operators of India. Over this five-year study period, the study shows a consistent trend in ARPU, underscoring an industry-wide shift towards higher revenue generation per subscriber. This positive trajectory reflects a combination of increased uptake of premium, effective tariff hikes, and data-focused plans. The study discloses that Bharti Airtel has maintained an upward edge over Jio in terms of ARPU. The constantly elevated ARPU of Bharti Airtel points to the company's strategic ability to attract and retain a more lucrative subscriber mix, optimize service offerings, and successfully sell value-added services. While Jio's continuous progress in enlarging its subscriber base and boosting its ARPU has narrowed the gap with Airtel in the past few years, Airtel's ability to generate higher revenue per user remains evident. Airtel's higher ARPU performance may be linked to a combination of premium branding, unique service offerings, and focused customer engagement that enables the company to monetize its subscriber base more effectively than its competitor.

On the other hand, Jio's ARPU, although increasing and gradually approaching Airtel's figure but still lagging marginally behind, indicates that Jio's aggressive subscriber acquisition strategies that showed rapid growth in former years may have contributed to a larger proportion of lower-paying users. However, Jio's continuous upward ARPU growth specifies a strategic move towards greater monetization, which is possibly encouraged due to the allocation of bundled services, converting subscribers to premium plans, and utilizing digital platforms.

The continuous rise in APRU has directly affected both companies' financial stability and future competitiveness, as higher subscriber revenue enhances the ability to invest in innovative technologies, such as 5G and overall network improvement.

In summary, both Reliance Jio and Bharti Airtel have made significant progress in enhancing ARPU; Airtel's higher ARPU reflects its expertise in extracting higher value from its subscriber base. Meanwhile, Jio's performance illustrates its transformation from purely emphasizing growth to focusing on quality revenue and profitability. This continued rivalry is probably going to encourage better innovation, service differentiation, and customer-centric tactics in the telecom industry of Indian nation

CONCLUSION

The study provides a detailed five-year comparative assessment of Average Revenue per User (ARPU) trends for two mega-giant operators of the telecom sector of Indian nation, i.e., Bharti Airtel and Reliance Jio, and elucidates the revenue optimization strategies that help in shaping India's rapidly evolving telecommunication sector. The analysis reveals the consistent ARPU growth for both operators, which may be attributed to strategic pricing modifications, expensive digital integration, and expansion of data-centric services. The continuous ARPU dominance of Bharti Airtel reflects its effective premium positioning in the market and superior capability of its monetization of its subscriber base, whereas Reliance Jio's accelerated ARPU indicates a strategy shift from rapid subscriber base growth to enhancement of revenue efficiency. The study remarks ARPU as a critical benchmark for revenue productivity and long-term monetary resilience in the telecom sector. This study also finds that Airtel is maintaining a lead, yet Jio is narrowing the gap, and that intensifying rivalry is anticipated to promote greater innovation, service differentiation, and customer-oriented strategies.

REFERENCE

[1] Kathuria, R., Kedia, M., & Sekhani, R. (2019). A study of the financial health of the telecom sector (No. 380). Working paper.

[2] Agarwal, R., & Prasad S G, R. (2023). Survey paper on growth of telecommunication industry in India. International Journal of Research Publication and Reviews, 4(5), 6653-6657.

[3] Chava, S. (2021). The frills & ills of Indian telecom sector. The Management Accountant, May 2021, 27–30.

[4] Agrawal, J., & Garg, D. P. (2022). Study on changing trends in telecom sector in India. Saudi Journal of Humanities and Social Sciences, 7(3), 83-86.

[5] Singh, R. Comparative Analysis of JioVsAirtel. IJFMR-International Journal For Multidisciplinary Research, 5(3).

[6] Barot, B., & Japee, G. (2022). A Study on Financial Performance of Selected Telecom Companies in India. Towards Excellence, 13(2), 1-14.

[7] www.trai.gov.in

[8] https://www.jio.com/investor-relations/rjil/

[9] https://www.airtel.in/about-bharti/equity/results

[10] https://www.icra.in/Rating/DownloadResearchSpecialCommentReportViewer/5796