

# Comparative Study of Public And Private Telecom Wireless Services In India

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## Abstract

India has seen fair share of both public and private players in telecom market and this research paper aims in projecting a comparative study of both telecom wireless of public and private telecom wireless services providers like BhartiAirtel Limited, Tata Communications Limited, Idea Cellular Limited, Reliance Communications Limited, Vodafone India Limited and Bharat Sanchar Nigam Limited (BSNL). The research presented in this paper is on the basis of secondary data which includes data from last five year.

**Key Words:** JIO, BSNL, Airtel, Vodafone, Idea, Telecom, Wireless Services.

## 1. Introduction:

The Indian telecom industry holds the position of second largest telecom provider in the world in terms of the number of subscribers. In the last few years, the sector has outstandingly grown and has witnessed exponential development and that's majorly due to inexpensive tariffs, broad accessibility, roll out of facilities and services such as Mobile Number Portability (MNP), 3G and 4G, evolving consumption patterns of subscribers and a contributing regulatory environment.

There has been significant growth in the number of subscribers during the year 2016-17 and the trend has been continued. The subscriber base reached 1194.58 million at the end of the financial year out of which 1170.18 million were wireless subscribers. In all these years, wireless subscriber base recorded an increment of 136.55 million, while the total tele-density enhanced from 83.36 to 92.98. If we talk about rural tele-density, the year also experienced increase from 51.37 to 56.91 while the urban tele-density has increased from 154.01 to 171.80.

63.63 million subscribers have opted for porting in the year 2016-17, to different service providers for taking benefit of Mobile Number Portability (MNP) feature. These requests have

incremented from 209.13 million in March 2016 to 272.76 million at the end of March 2017. As compared to 342.65 million as on 31st March 2016 the internet subscriber base in the country stands at 422.19 million on 31st March 2017. On the other hand, the total broadband customer in the country has enhanced to 276.52 million on March 2017 from 149.75 million on March 2016.

The leading telecom service providers in India are as follows:-

1. **BSNL:** Indian state-owned telecom company headquartered in New Delhi, Bharat Sanchar Nigam Limited (BSNL) was incorporated on 15 September 2000. It took over the business from the Central Government Departments of Telecom Services (DTS) and Telecom Operations (DTO) of providing of telecom services and network management with effect from 1 October 2000. With more than 60% market share its the largest fixed line and broadband service provider. Its also the 5<sup>th</sup> largest mobile telephone provider in India. Yet, in recent years, the company's revenues and market share have dropped into heavy losses due to exquisite competition in the Indian telecommunications sector. The company is India's oldest and largest communication service provider holding a customer base of 117 million as of January 2014.

2. **Bharti Airtel:** Bharti Airtel Limited is a major global telecommunications company with operations in 16 countries across Asia and Africa headquartered in New Delhi, India, the company stands among the top 3 mobile service providers globally in terms of customers. In India, the company's product offerings include 2G, 3G and 4G wireless services, mobile commerce, fixed line services, high speed home broadband, DTH, enterprise services including national & international long distance services to carriers. Within rest of the region, it offers 2G, 3G, 4G wireless services and mobile commerce. BhartiAirtel had over 413 million customers across its operations at the end of March 2018.

**3. Vodafone Communication:** Previously known as Hutchison Essar, Vodafone Communication, is a cellular operator that serves 21 telecom circles in India. The official name of the company is Vodafone Communication but its products are simply branded Vodafone. With very strong coverage in major metros, it offers both prepaid and postpaid GSM cellular phone coverage throughout India. Vodafone Communication provides 2G services based on 900 MHz and 1800 MHz digital GSM technology, offering voice and data services in 21 of the country's 23 license areas.

**4. Idea Cellular:** Idea Cellular is wireless telecom service provider operating in various states in India. It was started in year 1995 when Tatas, Aditya Birla group and AT and T come together as a joint venture and operated in Madhya Pradesh, Up west, Rajasthan. In starting, Idea Cellular have very limited presence in GSM area but accusation of "Escotel" in 2004 gave this company full india presence covering Goa, Madhya Pradesh, Chattisgarh, Maharastra, Gujarat, UP(West and East), Delhi(NCR), Rajasthan, Kerela, haryana. The company has been the first to offer flexible tariff plans for prepaid customers. It also offer GPRS services in india in urban regions. The Idea has it's outlets under banner "Idea n' U".

**Note:** On 31st August 2018, Idea Cellular was merged with Vodafone India and renamed as Vodafone Idea Limited. But, both the parties decided to continue their brand with names as Idea and Vodafone. Currently, Vodafone holds 45.1% share in company and Aditya Birla group holds 26% and the rest of the shares is held by public.

Vodafone Idea Limited is India's largest telecom operator with its headquarters in Mumbai, Maharastra. The pan-india presence of Vodafone Idea offers services in 2G, 3G and 4G under two brand names Vodafone and Idea. Other services offered by Vodafone Idea Limited are IOT, Mobile payments, entertainment, which are accessible via both channels on-ground touch points and digital channels spread across the country. As of July 2018, The company has almost 39% market share in India making India's largest telecom network provider and second largest telecom network in the world.

**5. Reliance Communications:** Reliance Communications is currently operating in 8 circles and plans to launch in other regions too. Formerly known as Reliance Info Comm, along with Reliance Telecom and Flag Telecom, is part of Reliance Communications Ventures. According to the statistics of National Stock Exchange, Anil Ambani heads the telecommunication company. The company uses CDMA2000 1X technology. It is also into the Wire line business across India and also has the largest OFC backbone architecture which

approximately runs 110,000 km in the country. The company also has licenses in the GSM telecom services space for most of the Telecom Circles (zones in layman's words).

**6. Tata Communication :** Tata Teleservices Limited (TTSL) is an Indian Conglomerate which is part of Tata group of companies. It runs under the brand name Tata communication in India, in various telecom circles of India. Besides this company, Tata group have also presence in Tata Teleservices(Maharashtra) Limited (TTML) and TATA Communications Limited. The chairman for this company is Mr.Ratan Tata and it was founded out in year 2000. Tata group has also announced to provide CDMA mobile services targeted towards the youth of India and Virgin, UK, company has decided to be part of this.

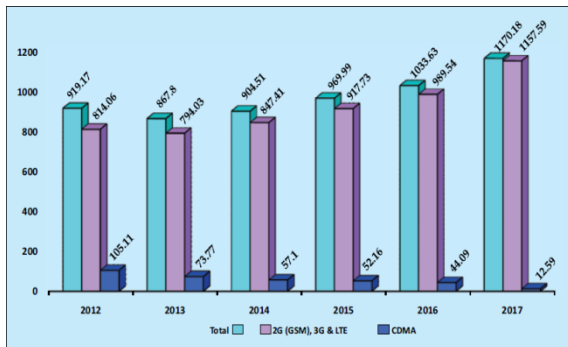
## 2. Research Methodology:

In this paper, a study to compare the major telecom wireless service providers in India is presented. Wireless telecom Service Providers such as BhartiAirtel, Idea Cellular, Reliance Communications, Tata Indicom and BSNL are compared. For this purpose secondary data was collected pertaining to last five years. After collection of secondary data, graphs were plotted for each of the business matrices which present the comparison of the performance of the wireless telecom service providers for the last five years for that particular business matrix.

Mishra [3], Upadhyaya [8], Sivanesan [6], Sudheesh [7], Yadav [9], Rajasekhar [5], Prasad [4], Baruah [1], Franklin [2] and others have discussed Comparative Study of various Telecom service Providers in India in various years. Subsequent to them we shall try to put Comparative Study of various wireless telecom service providers in India.

## 3. Data Analysis:

The Wireless Subscriber base is 1170.18 million as on 31st March 2017 in comparison to the subscriber base of 1033.63 million as on 31st March 2016. The subscriber base has increased by 136.55 million subscribers in the financial year 2016-17. The total subscriber base of wireless services has grown from 919.17 million in March 2012 to 1170.18 million in March 2017. Out of 1170.18 million subscribers at the end of financial year 2016-17, 1157.59 million (98.92%) were 2G (GSM), 3G & LTE Subscribers and 12.59 million (1.08%) were CDMA Subscribers. The trend of subscriber base from March 2012 to March 2017 is depicted in Figure-1.



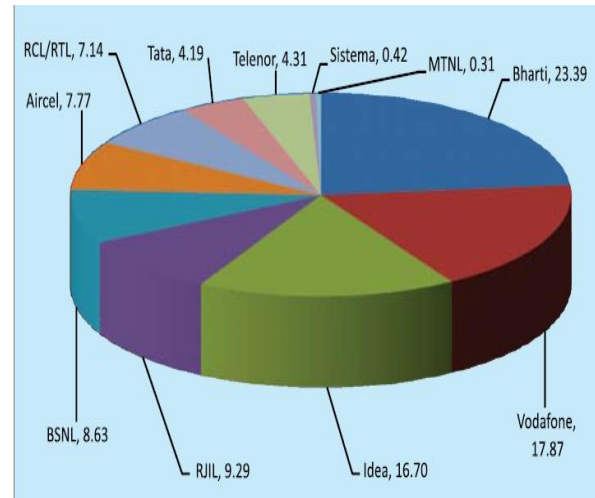
(Figure-1: Subscriber base of wireless Operators (in million))

The subscriber base of individual wireless service providers from 2012-13 to 2016-17 along with their percentage growth over the financial year 2015-16 is given in the Table-1.

Service Providers	2012-13	2013-14	2014-15	2015-16	2016-17	%age growth/ reduction over FY 2015-16
Bharti	188.20	205.39	226.02	251.24	273.65	8.92
Vodafone	152.35	166.56	183.80	197.95	209.06	5.61
Idea	121.61	135.79	157.81	175.07	195.37	11.60
RCOM/RTL	122.97	110.89	109.47	102.41	83.50	-18.46
BSNL	101.21	94.65	77.22	86.35	100.99	16.95
Aircel	60.07	70.15	81.40	87.09	90.90	4.37
Reliance JIO (*)	-	-	-	-	108.68	-
Tata	66.42	63.00	66.32	60.10	48.99	-18.49
Telenor	31.68	35.61	45.62	52.45	50.49	-3.74
Sistema	11.91	9.04	8.86	7.69	4.91	-36.15
Videocon (@)	2.01	4.99	7.13	6.56	-	-
MTNL	5.00	3.37	3.51	3.56	3.63	1.97
Loop (#)	3.01	2.90	-	-	-	-
Quadrant (\$)	1.37	2.17	2.73	3.16	-	-
<b>Total</b>	<b>867.8</b>	<b>904.51</b>	<b>969.89</b>	<b>1033.63</b>	<b>1170.18</b>	<b>13.21</b>

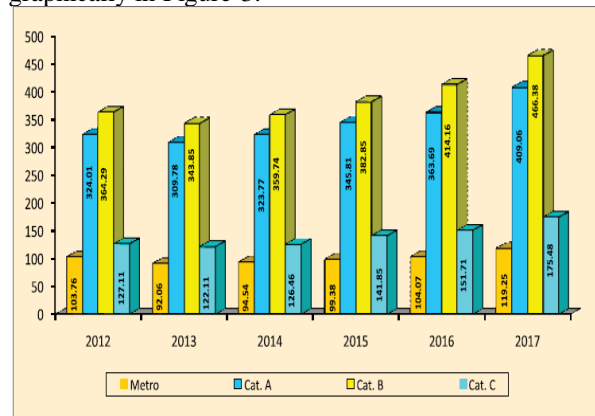
(Table-1: Wireless Subscriber Base from 2012-13 to 2016-17)

The market share of different mobile operators as on 31st March 2017 is displayed in Figure-2.



(Figure-2: Market Share of Wireless Service Providers (as on 31st March 2017) (in %))

The subscriber base for Cellular Wireless services in different categories of service areas for the period March 2012 to March 2017 is indicated graphically in Figure-3.



(Figure -3: Subscriber Base for Wireless Services in Metros and Circles from March, 2012 to March, 2017 (Figures in Millions))

The list of wireless service providers in various service areas is given in Table-2.

Sl. No	Service Provider	Number of SAs	Service Area (SAs)
1.	Bharti Airtel Limited	22	All India
2.	Aircel Group	22*	All India
3.	Reliance Communications Ltd.	20	All India (except Assam & North East)
4.	Reliance Telecom Ltd.	8	Kolkata, Madhya Pradesh, West Bengal, Himachal Pradesh, Bihar, Odisha, Assam & North East
5.	Vodafone Ltd	22	All India
6.	Tata Teleservices Ltd	19	All India except Assam, North East & Jammu & Kashmir
7.	IDEA Cellular Ltd	22#	All India
8.	Sistema Shyam Telelink	9	Delhi, Kolkatta, Gujarat, Karnataka, Tamil Nadu (incl. Chennai), Kerala, Uttar Pradesh (West), Rajasthan, West Bengal
9.	Bharat Sanchar Nigam Ltd	20^	All India (except Delhi & Mumbai)
10.	Mahanagar Telephone Nigam Ltd	2^	Delhi, Mumbai
11.	Telenor Communication (India) Pvt. Ltd.	6	Maharashtra, Gujarat, Andhra Pradesh, Uttar Pradesh (West), Uttar Pradesh (East), Bihar
12.	Reliance Jio Infocomm Ltd	22	All India

(Table-2: Wireless Service Providers as on 31st March, 2017)

#### 4. Conclusion:

From the above discussion it is clear that there is significant difference in the CRM of Practices of BSNL and Airtel. It was observed that Quality of services of Airtel was better the BSNL. Therefore BSNL has to improve its quality of services. Further the study revealed that Trust perception of Airtel tell was higher than BSNL. Relation Development and Price fairness was better in case of Airtel. Brand Image of Airtel was better as compared to BSNL. Further the expectational level of Customers of Airtel was higher than that of BSNL. The researchers recommend that:

1. Companies must improve their quality of services; particularly BSNL in order to retain its market share must improve the quality of services to build a better perception among the customers.
2. Trust, Relationship Development, Price Fairness and customer Expectations are the critical Element of CRM where BSNL is lagging behind Airtel. Therefore it is the high time for BSNL to initiative a strategic framework for improving trust , developing and maintain relationships, change price perception and come up to the expectations of its customers for long term sustainable development.

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