

Rewriting the Rules Altogether in Indian Telecom Industry: A case study of Reliance Jio Infocom Limited

Mr. Ajay Jamnani

Research Scholar, University of Mysore
jamnani.ajay@gmail.com

Mr. Sameerulla Inamdar

Student of MBA 2nd Semester, KLS IMER
sameerulla_inamdar@klsimer.edu

Abstract

No Indian will ever have to pay for voice calls again - a single statement that marked the beginning of a new era when Mukesh Dhirubhai Ambani announced the launch of a new telecom operator Reliance Jio Infocom Limited at the 2016 Reliance Annual General Meeting. Telecom industry in India has been very competitive since early 2000. Over the years Bharti Airtel has been the choice of Indian consumers for its constant upgradation followed by Vodafone, Idea, BSNL etc. This paper throws light on Jio as a new entrant into the Indian telecom industry, strategically posing humungous challenges to its competitors and future plans of success

Keywords: Reliance Jio, Telecom Industry, Challenges

Introduction

In June 2010, RIL bought a 96% stake in Infotel Broadband Services Limited (IBSL), which had won 22 circles in the Broadband Wireless Access (BWA). Although they were unlisted, they were worth over Rs 4,800cr, and were the only company to gain broadband spectrum in all 22 zones of India. They started to work as a telecom subsidiary of Reliance and later in January 2013, they were named Reliance Jio Infocom Limited.

The 4G services were initially launched only for Jio's partners, its staff and their families on 27 December 2015. Bollywood actor Shah Rukh Khan, the brand ambassador of Jio, kickstarted the launch event which took place in Reliance Corporate Park in Navi Mumbai, along with celebrities like musician A R Rahman, actors Ranbir Kapoor and Javed Jaffrey, and filmmaker Rajkumar Hirani. The closed event was witnessed by more than 35000 RIL employees. The company commercially launched its services on 5 September 2016. Within the first month of commercial operations, Jio announced that it had acquired 16 million subscribers. Jio crossed 50 million subscriber mark in 83 days since its launch subsequently crossing 100 million subscribers on 22 February 2017.

How did it Begin?

It all started with Reliance unveiling their plans to launch 4G in India. With no background in telecom field (Reliance Communication is owned by Anil Ambani and not Mukesh Ambani) The project involved laying of Optical Fiber Cables for approximately 3.5 lakh kms all over India. This was not going to be an easy task for Reliance although they have had previous experience of taking up mammoth projects and complete those within time. Until now in India, all the cable laying works were taking place by digging the roads. The utility companies had to apply for a permission to local authorities to dig up the roads. Upon receiving such permission only then they can dig the roads to lay in the utilities. Laying of 3.5 lakh kms of cable and getting permission for all that was itself a big roadblock for this project.

Reliance then decided to go with a technology which is little known in India. It is called as Horizontal Directional Drilling (HDD). The machinery using this technology does not require digging of roads to lay in the utility. It drills its own way

from underground and installs the utility. You can find lot of videos on YouTube explaining this technology. By the time they were ready to launch 4G in some cities, Airtel had beaten them in launching their own 4G network. While Reliance was going all gaga about their 4G launch, Airtel was silently working on getting their network ready. This involved a great marketing strategy by Airtel. They started with launching 4G internet using dongles.

The project also had some technological challenges. When you are laying a cable for mobile phone network, you also need to have strong network for towers. While other players like Airtel, Idea, Vodafone already had their own tower network, Reliance Jio did not have one. They had to start from the scratch while their competitors had to only upgrade their currently existing towers to 4G capable towers. While doing this Reliance also had to make sure that their customers are not getting bad service. We all are very familiar with what happened earlier when Reliance Communication had launched their services. In this case they had to make sure that they deliver the promise of good network countrywide and not just in urban areas. Table 1 provides information on origin of JIO.

Table 1 : What Led to the Origin of Jio?

Year	Description
2002	Death of Dhirubhai Ambani left some major ownership issues between his two sons – Anil Ambani & Mukesh Ambani
2005	Kokilaben Ambani (mother) intervened and split Reliance into two parts. Anil got Telecom, Power, Entertainment & Financial Services and Mukesh got Reliance Industries & Petro Chemical
2006	Entered into a non-compete agreement
2010	Agreement was scrapped/expired
2010	Mukesh Ambani bought 96% stake in Infotel Broadband which had won 4G spectrum in all sectors in India. Later they renamed it to Jio, and started building fiber optic network around the country

Service Offerings

a) High speed data across the country

The speed of the internet can go up to one Gigabit per second (1GBPS), and Reliance Jio is expected to be able to cover 90 percent of the Indian population by the first quarter of next year. This is the core of Reliance Jio, the project is dedicated to the Prime Minister's vision of a digital India.

b) Sustainable hardware and software quality

"It is future ready, and it can be easily upgraded to support even more data as technologies advance to 5G, 6G and beyond" was mentioned in the 2016 Reliance Annual General Meeting. A part of the plan is to offer handsets to interested customers, which are going to be enabled with Voice over LTE (VoLTE) technology for people to be able to seamlessly use the data services of Jio. These handsets are going to be available at prices as low as Rs 2,999.

c) Instant activation, online or offline

In the next six weeks, RIL will ensure that anyone who walks into a Reliance store with an Aadhar card for Jio activation will have an activation and access to high speed data services in 15 minutes. They are also going to facilitate e-KYC activations, which won't even require customers to leave their homes to avail the facilities.

d) Digital fund and entrepreneurial benefits

They have created a Jio Digital India fund, which is meant to be used to partner with thousands of digital entrepreneurs in India and help fuel their growth with the high end platform that they have created. They are looking to create Digital Entrepreneurship Hubs in cities to increase opportunities for companies with good potential.

e) Access to 8 premium Jio applications viz, Jio Play, JioOn Demand, Jio Beats, JioMags, Jio News, Jio Express News, Jio Drive, Jio Security. These applications were complimentary to the launch offer and customers could access and download and go live streaming restricted to a limit of 1GB daily with high speed and over then reduced to 128mbps**f) Factual Data**

1. Voice is truly free— no charge towards voice or the data used to make 4G voice calls
2. "Unlimited at Night" pertains to 4G data used between 2am – 5am
3. JioNetWiFi Hotspot
4. The prepaid packs with denominations Rs.19, Rs.129 and Rs.299 cannot be availed as a First recharge by new subscribers
5. Students - 25% additional 4G and WiFi data benefits
6. Prepaid tariffs are inclusive of all applicable taxes
7. Postpaid subscribers opting for the Auto-debit will get 15% discount on the bill value (Taxes Extra)
8. 4G plans can only be availed by customers possessing a LTE compatible handset
9. Unlimited SMS referred in the plan benefits will be capped at 100 free SMS per day in compliance with TRAI Regulations

(Source : <https://www.jio.com/en-in/4g-plans>)

The Reliance Jio Master Plan: Volume

It is evident that an new entrant like that of Jio into the most vibrant Indian Telecom sector where market is lead by Bharti Airtel followed by Vodafone and Aditya Brila's Idea, the only way to route out and compete is low pricing strategy mounted with huge volume. Thus Jio came up with the master plan where Volume spoke louder than words.

- Step one** : Undercut the market price by giving attractive discounts
- Step two** : Let everyone switch to Jio for internet use at cheap rates
- Step three** : Unleash the power of fibre optic network to give super fast internet
- Step four** : Grow your subscriber base
- Step five** : Recover your investment using the large number of users

How does Reliance Jio Plan to Profit?

India is home to the world's second largest mobile user base and internet users. Understandably, the telecom sector in the country is hyper-competitive, with multiple groups planning to capture the largest piece of the pie. Reliance JioInfocomm Limited is the newest player to enter the competition and it's not just winning the game but rewriting the rules altogether. Table 2 provides information on Top five countries with highest number of internet users.

Table 2 : Top 5 Countries with highest number of Internet users - June 30, 2016

#	Country or Region	Population 2016 Est.	Internet Users 30 June 2016	Internet Penetration	Growth(*) 2000-2016
1	China	1,378,561,591	721,434,547	52.3%	3,106.4%
2	India	1,266,883,598	462,124,989	36.5%	9,142.5%
3	United States	323,995,528	286,942,362	88.6%	200.9%
4	Brazil	206,050,242	139,111,185	67.5%	2,682.2%
5	Indonesia	258,316,051	132,700,000	51.4%	6,535.0%

Source: <http://www.internetworldstats.com/top05.htm>

Reliance Jio's commercial launch in September 2016 sent shockwaves through the Indian telecom industry. The MukeshAmbani led company launched their services with an unbelievable inaugural offer — free 4G data, voice calls and SMS for all its customers. He announced that even after the conclusion of the trial period, Jio would never charge for voice calls and that its data rates would be among the lowest in the world.

Fearful of the unchallenged domination such an offer would afford Jio (around 70 percent of the industry's revenues come from voice), India's biggest mobile network operators appealed its illegitimacy to the Telecom Regulatory Authority of India (TRAI). But TRAI found Jio's offer to be legal and instead imposed massive fines on Bharti Airtel, Vodafone, and Idea Cellular for trying to undermine the Reliance Industries Limited (RIL) subsidiary by not providing sufficient points of interconnect to its SIM card users.

Following instances would give a fair idea to the conjuncture, how Jio would make a profit:

a) The foundation

Reliance Jio was founded on Ambani's belief that mobile internet is the revolutionary technology of this century. And while it will undoubtedly undergo many transformations, the core technology will remain the same, and therein lies the crux of his plan. Fuelled by an investment of Rs 1,50,000 crore and backed by partnerships with eight global carriers viz., British Telecom, Deutsche Telecom, Millicom, MTS, Orange, Rogers, TeliaSonera and Tim. Jio has successfully created the largest only 4G and LTE networks not only in India, but in the world. A 2,50,000 kilometres route of fibre optic cables and 90,000 eco-friendly 4G towers work to provide unmatched 4G coverage in all of India's 22 telecom circles

While all the existing network providers are using a modified 2G/3G infrastructure to provide 4G in India, Jio has set up a Greenfield network (created from scratch) that offers higher bandwidth and faster speeds. The Jio network is also future-proof and capable of offering 5G and 6G connectivity as and when the technology materialises.

Reliance Jio is also the first telecom to launch a 'VoLTE-only' (Voice over LTE) network in India. This technology will shun the fluctuations of the 2G/3G network in favour of high speed data transfer which allows for more robust connectivity and clearer voice calls.

After establishing this infrastructure, Reliance Jio's next hurdle was acquiring customers. And they did it by offering the Indian population what they sorely needed: high-speed mobile internet that was affordable. Before the commercial launch of Jio, less than 15 percent of India had access to 4G connectivity.

b) Average Revenue Per User (ARPU)

Affordability and quality are the only things that make a person want to switch their mobile network. For the current network providers in India, the monthly average revenue per user (ARPU) is around Rs 150, and users who spend over Rs 250 per month are regarded as 'high value' customers. Jio's tariff plan, considering only those packs with 28 days validity, begins at Rs 149 and offers customers 0.3GB of 4G data (plus unlimited data at night) besides free voice calls, both local and STD. These rates are infinitesimal when compared to the ones charged by telcos like Airtel and Vodafone. And since there have been no complaints about quality more and more people are making the switch over to Jio. Table 3 provides information on Average revenue per user.

Table 3 : Average Revenue per user.

	S	M	M	L	XL	XXL	XXXL			
Price	₹ 19.00	₹ 129.00	₹ 149.00	₹ 299.00	₹ 499.00	₹ 999.00	₹ 1499.00	₹ 1999.00	₹ 3999.00	₹ 4999.00
Free Voice Calls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4G Data	100MB	750MB	300MB	2GB	4GB	10GB	20GB	35GB	60GB	75GB
Unlimited Data At Night (2AM-5AM)	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Jio Apps Subscription worth ₹1,250	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SMS	100 per day	100 per day	100 per month	100 per day	100 per day	100 per day	100 per day	100 per day	100 per day	100 per day
WiFi (JioNet Hotspot)	200MB	1.5GB	No	4GB	8GB	20GB	40GB	70GB	120GB	150GB
Validity - Prepaid	1 Day	7 Days	28 Days	21 Days	28 Days	28 Days	28 Days	28 Days	28 Days	28 Days

Source : 2016 Reliance Annual General Meeting

From the chart we can analyze that customers will get addicted to use internet in times to come as everything around us is going digital and hence Plan 499 would be welcomed followed by higher plans for more data usage and so on. However plan 149 stands unique as it has target customers looking only for voice and little preference towards data which also coincides with the fact that ARPU in telecom sector.

c) Profit pie through LYF mobile phones

Jio offered LYF mobiles to its customers ranging as low as Rs. 2,999 onwards. These mobile were usually unsold mobile phones in China which resulted as dumping into another country. These mobile phone were bought at throw away prices and were linked with Jio's offering. All lyf mobile phones have

- ▶ Very Low Specs
- ▶ Made in China
- ▶ Re-labelled and sold in India
- ▶ Previous generation unsold 4G phones
- ▶ Among the cheapest 4G phones in the world

d) Promising future

Despite having a massive user base (over 100 million), internet penetration and speed in India is sadly low when compared to other countries. Only about 24.3 percent of the Indian population accessed the internet through mobile phones in 2016. But the figure is expected to rise to 37.4 percent in 2021 as the Indian population particularly in rural areas becomes progressively 'digital'.

As an increasing number of people will require mobile and internet connectivity in the coming decade, Reliance Jio will be in the prime position to capture the massive untapped market.

Jio's ambitions aren't limited exclusively to mobile internet. The company plans to rake in profits from its LYF brand smartphones, broadband internet offerings, and Jio mobile applications - the entire suite, which includes apps like Jio Music, Jio TV, Jio Cinema, and a digital wallet, will be charged as a Rs 15,000-per-year subscription. Reliance also plans to consolidate its 'Digital India' missive with the setting up of Jionet Wi-Fi hotspots in multiple cities like Mumbai, Kolkata, Surat, Ahmedabad, Indore, Mussoorie, and Lucknow are among the cities which currently feature these hotspots in select locations.

e) Global Aspirations

Internet of Things (IoT) has been widely regarded as one of the most promising technologies of future. Understanding the potential of this sector, RIL in November entered into a partnership with US-based General Electric (GE) to enter the industrial IoT space. The partnership under which RIL will reportedly develop software applications for GE's Predix cloud platform will provide IoT solutions to customers in various industries such as telecom, healthcare, oil and gas, and power among others. Driven by the industries need for increasing operational efficiency and the widespread use of data analytics, RIL will generate vast new revenue streams not only in India, but around the world.

f) High risk high rewards

Mukesh Ambani has recognised mobile internet to be the most profitable venture in the long run and has consequently invested considerable time and money to make RIL the foremost company in the sector. RIL's and by extension Jio's, credo is founded on the principle that a business needs a purpose beyond just making profits. As he rightly mentioned in an interview, "I believe that if you create societal value, if you create customer value and employee value, and if you focus on these, then shareholder and economic return is just a by-product." And going by the current scenario, in which Reliance Jio is certainly creating societal and customer value, the company will surely build huge revenues in the future.

g) Psychologically 28 days make a month for Telcos

There's a common phenomena of offering recharge pack as 28 days instead a month which has 30 and 31 days respectively. However over a year it has been noticed that customers fall to pay out 13 months (a month extra) instead of 12 months. Thus logically operators get paid for a month extra than usual.

Future Expansion Plan

Jio plans to launch New Submarine Cable System - Reliance JioInfocomm Ltd. (Jio), the largest 4G and mobile broadband digital services provider in India, announces the launch of the Asia-Africa-Europe (AAE-1) submarine cable system. AAE-1, the longest 100Gbps technology based submarine system, will stretch over 25,000 km from Marseille, France to Hong Kong, with 21 cable landings across Asia and Europe. The new terabit capacity and 100Gbps direct connectivity to global content hubs and interconnection points ensure that Jio will continue to offer its customers the most exceptional high speed internet and digital service experience

Due to its advanced design and route, AAE-1 provides one of the lowest latency routes between Hong Kong, India, Middle East and Europe with the fewest hops

Conclusion

Jio has brought transformational changes in digital services space to enable the vision of Digital India for 1.2 billion Indians and propel India into global leadership in digital economy. It has created an eco-system comprising network, devices, applications and content, service experience and affordable tariffs for everyone to live the Jio Digital Life. With spearhead competitions from other operators and news of consolidation of Vodafone and Idea are already on table, only Bharati Airtel stands strong in long term to compete. Nevertheless Jio has been the market disruptor off late and has changed the rules altogether in the Indian Telecom industry.

References

1. Abhishek Josh (2016, September 2) Reliance Jio Prices Revealed: 75GB 4G Data & 4500 Mins Call Time for Only Rs. 200. Retrieved from <http://trak.in/tags/business/2016/03/30/reliance-jio-data-price-voice-calling-sim-card/>
2. IANS (2016 March 31) With RJio 4G, India's mobile Internet ranking to reach top 10 globally: MukeshAmbani. Retrieved from <http://indianexpress.com/article/technology/tech-news-technology/with-rjio-4g-indias-mobile-internet-ranking-to-reach-top-10-globally-mukesh-ambani/>
3. Media release (2017, June 29) Jio launches new submarine cable system. Retrieved from <https://reliance.ssl.cdn.sdlmedia.com/file/636389919460056646BO.pdf>
4. Our Bureau (2016, June 15) Reliance Jio's voice and broadband network is upgradable to 5G: Mukesh Ambani, The Economic Times. Retrieved from <http://telecom.economictimes.indiatimes.com/news/3g-4g/reliance-jios-voice-and-broadband-network-is-upgradable-to-5g-mukesh-ambani/47644803>
5. P.R Sanjai&Shavik Ghosh (2016, Jan 16) Reliance Jio to raise Rs15,000 crore through a rights issue, Livemint.com, Retrieved from <http://www.livemint.com/Industry/tyb7WgA82kVA9vGM5DtHoJ/Reliance-Jio-to-raise-Rs15000-crore-via-rights-issue.html>
6. Press Report (2016, September 26) Reliance Jio takes the green towers a step further, erects towers that look like trees, telecomtalk.com. Retrieved from <https://telecomtalk.info/reliance-jio-takes-the-green-towers/143650/>
7. Rakesh Kurup (2016 December 17) *Only 9% of mobile users have 3G connection*. Retrieved from <http://www.thehindubusinessline.com/info-tech/only-9-of-mobile-users-have-3g-connection-clsa/article8000932.ece>
8. Sumit Moitra (2015, December 21) RJio logs into biggest broadband cable system, dnaindia.com. Retrieved from <http://www.dnaindia.com/money/report-rjio-logs-into-biggest-broadband-cable-system-2157904>
9. SarithaRai (2016, December 4) India Just Crossed 1 Billion Mobile Subscribers Milestone And The Excitement's Just Beginning. Retrieved from <https://www.forbes.com/sites/saritharai/2016/01/06/india-just-crossed-1-billion-mobile-subscribers-milestone-and-the-excitements-just-beginning/#5a2a29d67db0>
10. Salman Ansari - DNAWeb (2016 September 01) Here are 12 new Reliance Jio announcements MukeshAmbani made today. Retrieved from <http://www.dnaindia.com/money/report-12-new-announcements-mukesh-ambani-made-about-reliance-jio-today-2250946>
11. Tarun Mittal (21 Feb 2017), How does Reliance Jio plan to profit? Retrieved from <https://yourstory.com/2017/02/reliance-jio-business-plan>
12. TNN (2016, Jan 22) Undersea 8,000-km-long cable project by Reliance Jio, Vodafone, others reaches Chennai, The Economic Times. Retrieved from <http://telecom.economictimes.indiatimes.com/news/undersea-8000-km-long-cable-project-by-reliance-jio-vodafone-others-reaches-chennai/50686502>
13. VidhiChoudhary (2016 March 31) Reliance Jio initial investment at Rs250,000 crore. Retrieved from <http://www.livemint.com/Companies/ncT04NLRTtEMDEHAWdMPGN/Reliance-Jio-initial-investment-at-Rs150000-crore-Mukesh-A.html>

Websites

1. <https://successtory.com>
2. <https://yourstory.com>
3. <https://www.quora.com>
4. India Internet Users-internetlvestats.com
5. www.Internetworldstats.com