

# Impact of Disruptive Innovation on Indian Telecom Sector – A Study

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## ABSTRACT

In the Fourth industrial revolution, numerous technologies encompass unexpectedly influencing our lives. Disruptive innovations in the telecom sector verdicts a type of technology which has the potential to alter how human lives, market trends as well as other aspect especially in the communication era. Studies show that in the next few years, there are plenty of technology with the disruptive features uproots incumbency of market leader, if they are not aware of disruptive technologies. To understand the nuances of Disruptive innovation and impact on incumbents in Telecom sector in India, Reliance Jio Company has been selected for the study. Despite the rapid dawn of disruptor, the study made an attempt to know how market structure, revenue and competitive edge of incumbents shattered in the telecom sector in India. Finally, sustainable strategies of incumbent telecom players against disruption have been studied.

**KEYWORDS:** Disruptive innovation, Emerging technologies, Fourth industrial revolution, Telecommunication, Reliance Jio

## 1. INTRODUCTION

The term “**disruptive innovation**” was defined and analysed by Clayton.M Christensen in the year 1995 in his book “Innovators’ Dilemma”. Disruptions are not meant only for the telecommunication industry also increasingly impacting on all other industries. In general, all innovations are not disruptive innovation, an innovation that creates a new market and value network and ultimately disrupts incumbents’ products, services, alliances and value network.

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Reliance Jio is the game-changer in the Indian Telecom sector by offerings free offerings to low-end customers with value creation. Disruptive technology espoused by the Jio company uproots the existing Telecom incumbents Airtel, Vodafone, Idea, and Aircel. Vicious price war of Jio engendered heavy competition between the incumbents and disruptors in the sector. Ultimately, Indian telecom users are beneficiaries in this intensive competition. Some disruptive technology trends will focus on value creation to the low end customers in the telecom market.

Indeed, it can be said without any hyperbole that **Reliance has changed the game very much with its offering of free voice and discounted data packs** along with its provision of a “basket of services” complementing and supplementing the base mobile and Smartphone telephony. What more, it is also offering handsets as part of “bundled services” wherein users can have the device as well as the service.

## 2. Objectives of the study

- To understand the nuances of disruptive innovations in telecom sector
- To analyze the impacts of Reliance Jio on Indian telecom industry.

## 3. “Disruption with Discounts”

The Reliance Company used the effective pricing strategy – Fermium to heighten massive subscribers for their telecom

services within short period. It has succeeded in part in this strategy as can be seen from the acquisition of close to Two Hundred Million new subscribers. This might not be feasible over the longer term. In fact, its plan is to sign up as many subscribers as possible so that higher volumes can make up for wafer thin margins. However, it remains to be seen as to whether these customers would stick with it once the initial euphoria generated by the provision of freebies subsides and the subsidies are over.

## 4. The Historical Record of Disruptions in the Indian Telecom Sector

Traditionally, the Indian Telecom sector has perpetually been disrupting itself in the identical conduct in which the Global Telecom Sector countenances renewed spells of periodic disruption due to the materialization of innovative technologies.

In reality, within short span, the Global Telecom Sector has gone from provided that basic mobile telephony with the uncovered bare minimum services to the initiation of the Smartphone revolution attendant with the squash of Successive Generations of Wireless technologies.

For instance, when 2G emerged into the world market, it had a short duration before the next generation emerges. However, 2G quickly turned into 3G and was followed by 4G

which is now being upended by a possible 5G even out in the next few years.

Few telecom players in the Indian service sector were uprooted by Disruptor Company like Jio. In total, the entire telecom market players experienced disruptive innovation practiced by Jio Company which was unaware to incumbents and they were struggling more to compete with disruption. With all these drift, it is hard-nut for Telecom Providers to keep rapidity with lots of revolutionized innovation and necessitates them to advance in their infrastructure and technologies relentlessly. Thus, every incumbent should be aware of new global disruptive innovations happening in the Global Telecom sector.

### 5. Attractive Indian Telecom Sector

Indian Telecom Sector is the major and fastest growing sectors in the world market. Telecom Services have covered low end to high end customers. Today, even petty shop vendors are enjoying internet services rendered by the telecom players in India. The statistics of Indian communication is given below in the below table 1.1:

Table 1.1: Telecommunications in India

Total telephone subscribers	1.192 billion
Mobile subscribers	1.170 billion
Fixed line subscribers	22.02 million
Monthly telephone additions (Net)	640,00
Teledensity	91.17%
Urban Teledensity	160.67%
Rural Teledensity	58.83%
Internet users	560.01 million
Share of World Internet Users	17%
Smart-phones	44.6 crore (4460 million)

(Source: TRAI)

### 6. Effect of Jio on Indian Telecom Industry Landscape

Jio has clutched 43.2 per cent of the mobile broadband subscriber market, more than the three incumbent telecom operators - Bharti Airtel, Vodafone and Idea Cellular put together. Usage of data has been increased over 1.2 billion GB of data a month, 80 per cent of all the data consumed in the country.

The totality of data use in the country has climbed from 200 million GB a month before Jio to 1.5 billion GB a month now, making India the world's prevalent data user, overtaking the United States (710 million GB) and China (630 million GB). And this gush has drawn closer from only 282 million customers; China's lower usage is spread across 800 million customers.

### 7. Current Standing of Telecom Service Providers

Reliance Jio took the cellular industry by storm last instantly after its ingress into the market. Ever since the Mukesh Ambani led company has entered the race, it looked like its competitors were looking at "Us in opposition to Jio" kind of war. Jio has rolled on like a juggernaut approximately compressing out every bit from three of the largest players in India namely, Bharti Airtel, Vodafone and Idea Cellular by strappingly and fully fledged its subscriber base since its launch in September 2016. According to TRAI, Jio led the race for most number of new additions. Reliance Jio added 4.7 million users month on month as compared to its

competitors. Airtel added 2.09 million new customers followed by BSNL, Vodafone and Idea Cellular.

### 8. Telecom Firms Take Merger Route

From the time when Reliance Jio Infocomm Ltd launched services in 5<sup>th</sup> September 2016, offering a lifetime of free voice calls and three months of free data (later extended until end-March, then end-June), mergers and acquisitions (M&As) had become inevitable in India's hyper-competitive telecom industry.

On 21 March, Idea Cellular Ltd, of the Aditya Birla Group had decided to merge with Vodafone Group for \$23-billion to create the worlds second largest and India's largest telecom company.

The combined entity will overhaul Bharti Airtel Ltd in India, with almost 400 million customers, coupled with a 35% customer market share and a 41% revenue market share. It will have a revenue of Rs. 81,600 crore and an operating profit of Rs. 24,400 crore.

Bharti Airtel Ltd has not been sitting at leisure. Just three days after the announcement of the Idea-Vodafone merger, Bharti Airtel agreed to buy Tikona Digital Networks Pvt. Ltd's 4G business, including its broadband wireless access spectrum and 350 cellular sites in five telecom circles, for around Rs1,600 crore.

A month earlier, Airtel had agreed to acquire the assets of Telenor South Asia Investments Pte Ltd's India business. The transaction, which will not involve any cash payments to Telenor, will give Airtel access to 44 million customers (increasing its user base to 307 million), 43.4 megahertz (MHz) of spectrum in the 1,800MHz band and 20,000 base stations.

Eventually, Reliance Communications Ltd led by Anil Ambani, and Airtel Ltd, owned by Malaysia-based Maxis Communications Bhd, announced they would merge their mobile network operations. Following closure of the deal, RCom and the present shareholders of Airtel will hold 50% each in Airtel. The creation of the new entity will first involve RCom demerging its existing cellular business, which has around 100 million subscribers.

Finally, RCom announced its merger with Sistema JSFC's Indian operation and with MTS, under which the Russian firm will hold a 10% stake in RCom. This effectively means that following the completion of the mergers (assuming that there will not be any regulatory hurdles), there would be three major telecom groups that will control over 80% market share and revenue of the Indian telecom sector. The Vodafone-Idea combine will come in first place with a 35% market share, followed by Airtel's 29% (including Telenor) and RCom-Airtel-Sistema's 16%.

### Conclusion

Telecommunication industry is one of the most emergent industries and currently India is the world's second largest telecommunication market and still growing. Mobile economy in India is increasing very fast and will add significantly to India's GDP. Emergence of Reliance Jio displaced and disrupted the incumbency of Telecom players in India. Reliance Jio come into sight with disruptive

technology focusing on low end customers and uncovered market segments. It was a lesson for other service providers to face a new kind of challenge and find difficult to cope up with new circumstances. This research paper gives insights of disruptions in telecom sector and its game changing trend.

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