

Internship Report on

**CHANGE IN CONSUMER BEHAVIOUR FOR
INDIAN TELECOM NETWORKS POST JIO'S
IMPACT**

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A REPORT
ON
**“CHANGE IN CONSUMER BEHAVIOUR FOR INDIAN TELECOM
NETWORKS POST JIO’S IMPACT”**

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**Delhi School Of Management
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**A report submitted in partial fulfilment of the requirements of
MBA Program of Delhi School Of Management, DTU, Delhi.**

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DECLARATION

I, **Pratikhya**, student of MBA Batch 2016-18 of Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-42 declare that Summer Internship Report on **CHANGE IN CONSUMER BEEHAVIOUR FOR INDIAN TELECOM NETWORKS POST JIO'S IMPACT** is submitted in partial fulfilment of Degree of Masters of Business Administration is the original work conducted by me.

The information and data given in the report is authentic to the best of my knowledge.

This Report is not being submitted to any other University for award of any other Degree, Diploma and Fellowship.

Pratikhya

Place: New Delhi

Date :30th April 2018

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EXECUTIVE SUMMARY

The year 2016 is a landmark year in the Indian telecoms industry. The much awaited sector consolidation set-in. Some of the key drivers for market consolidation include increasing pressure on profitability, hyper-competition, spectrum trading and sharing guidelines and favourable M&A policy. In addition, the sector also witnessed a number of spectrum trading and sharing deals.

In August 2016, spectrum auction took place with the largest quantum of spectrum being made available by the Government of India. However, the auctions witnessed muted response, primarily on account of high reserve prices. Of the 2,355 megahertz (MHz) total spectrum across seven bands put up for auction, only 40% of the spectrum got sold with no activity seen in 700MHz and 900MHz band. Telecom operators bid selectively to plug coverage gaps and enhance spectrum portfolio, especially for 4G services.

In another significant development, 2016 saw the entry of a Greenfield 4G operator, introducing aggressive tariff plans, with free voice calls and low-cost data. It is expected to usher in exponential growth in data. Leading operators have launched 4G services in select circles, which would further boost data growth.

The Indian telecoms sector has traditionally been voice driven. Commoditizing voice calls and offering tiered data tariffs would shift the business model from a voice to a data centric one.

India is already one of the largest smartphone markets in the world in terms of volume. According to Ovum, India's smartphone penetration stood at 24% of total connections in 2015. The average handset price for smartphones has been declining, with an entry-level 4G

smartphone available for INR2,999. Prices are expected to further reduce helping drive data usage.

The average data consumption per user is increasing, with increased adoption of smartphones and availability of content. For example, 3G data consumption per user has grown to 753 MB/month in 2015 as compared to 338 MB/month in 2011. The overall network traffic growth is expected to mirror the increases in average data consumed on a handset as more people start using advanced data services. The overall data traffic grew by 50% y-o-y in 2015, driven by an 85% surge in 3G data traffic, according to the Nokia Mobile Broadband Index.

Mobile banking transactions are on the rise due to increased smartphone adoption. Between FY13 and FY16, mobile banking transaction volume and transaction value have increased at a CAGR of 90% and 306%, respectively. This reflects that wireless smart devices are becoming a preferred medium for banking transactions.

In addition, the digital payments ecosystem is growing by leaps and bounds in India. This is largely possible as India is transitioning to a digital economy. Digital wallets witnessed exponential growth in the back of the recent demonetization drive by the Government of India. The proportion of mobile wallet transaction volume to total payment transactions has increased from 0.4% in FY13 to 4% in FY16, and is expected to grow significantly in future. Further, with the launch of Payments Bank by a leading operator in 2016, financial inclusion for the unbanked would get a major boost.

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INTRODUCTION

1.1 History and Background

The Telecom Services have plays an important role in socio-economic development of a nation and even its infrastructure is treated as a crucial factor to attain the socio-economic objectives in India. Accordingly, the Department of Telecommunications (DOT) has been assigned with formulating developmental policies and projects for the accelerated growth of the telecommunication services in India.

Till 1991, provision of all types of domestic telecom services in the country except Mumbai and Delhi was a monopoly of the DOT. The telecom services in the metropolitan cities of Delhi and Mumbai are already entrusted to Mahanagar Telephone Nigam Limited (MTNL), a company owned by the Government of India which came in to existence on 1st April 1986. The state owned Videsh Sanchar Nigam Limited (VSNL) was the monopoly carrier of international traffic since its inception in 1986. DOT was, all in all, the policy maker, the service provider, the licenser and regulator. In 1991, as part of the new industrial policy unveiled by Narasimha Rao led Congress Government, the DOT for the first time invited private participation in telecom services when privatization, globalization and liberalization reforms were introduced.

Today, India is one of the most deregulated telecom markets in the world and provides opportunities for both foreign operators and equipment sellers. With the opening of telecom sector to private investment and establishment of independent regulator, the matter of separation of service providing functions of DOT and ensuring a level playing field to various service providers had been engaging the attention of the government.

In 1997, the government set up TRAI (Telecom Regulatory Authority of India) which reduced the interference of Government in deciding tariffs and policy making. The political powers changed in 1999 and the new government under the leadership of Atal Bihari Vajpayee was more pro-reforms and introduced better liberalization policies. In 2000, the Vajpayee government constituted the Telecom Disputes Settlement and Appellate Tribunal (TDSAT) through an amendment of the TRAI Act, 1997. The primary objective of TDSAT's establishment was to release TRAI from adjudicatory and dispute settlement functions in

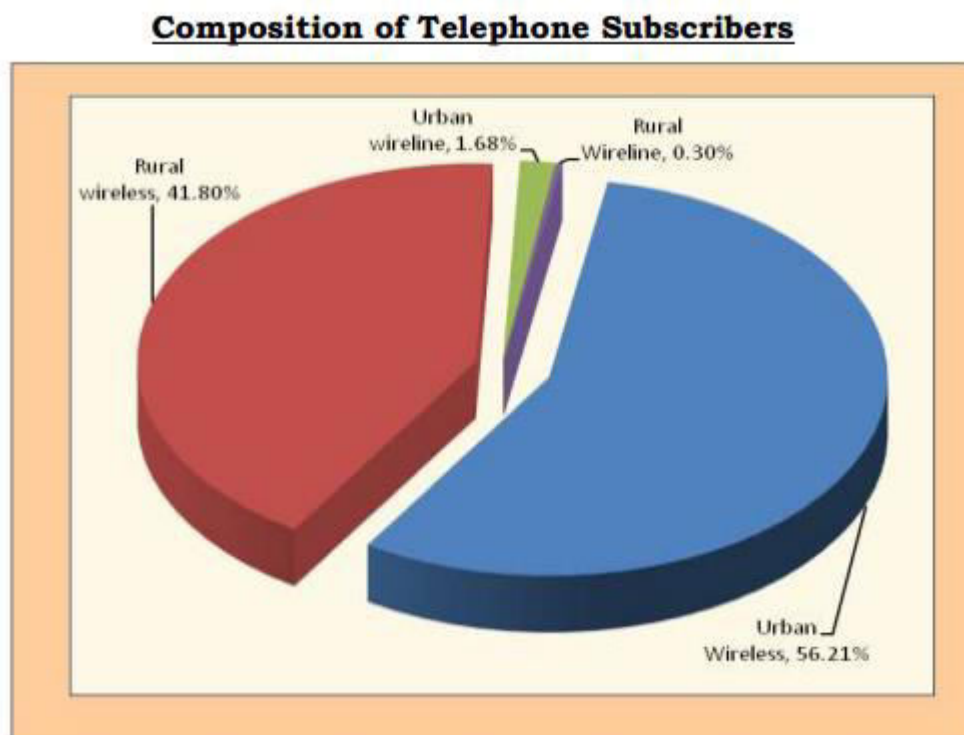
order to strengthen the regulatory framework. Any dispute involving parties like licensor, licensee, service provider and consumers are resolved by TDSAT. Moreover, any direction, order or decision of TRAI can be challenged by appealing in TDSAT. The government corporatized the operations wing of DoT on 1 October 2000 and named it as Department of Telecommunication Services (DTS) which was later named as Bharat Sanchar Nigam Limited (BSNL). The proposal of raising the stake of foreign investors from 49% to 74% was rejected by the opposite political parties and leftist thinkers. Domestic business groups wanted the government to privatise VSNL. Finally, in April 2002, the government decided to cut its stake of 53% to 26% in VSNL and to throw it open for sale to private enterprises. TATA finally took 25% stake in VSNL.

In March 2008 the total GSM and CDMA mobile subscriber base in the country was 375 million, which represented a nearly 50% growth when compared with previous year.[31] As the unbranded Chinese cell phones which do not have International Mobile Equipment Identity (IMEI) numbers pose a serious security risk to the country, Mobile network operators therefore suspended the usage of around 30 million mobile phones (about 8% of all mobiles in the country) by 30 April. Phones without valid IMEI cannot be connected to cellular operators.[32] 5–6 years the average monthly subscribers additions were around 0.05 to 0.1 million only and the total mobile subscribers base in December 2002 stood at 10.5 million. However, after a number of proactive initiatives taken by regulators and licensors, the total number of mobile subscribers has increased rapidly to over 929 million subscribers as of May 2012.

India has opted for the use of both the GSM (Global System for Mobile Communication) and CDMA (code-division multiple access) technologies in the mobile sector. In addition to landline and mobile phones, some of the companies also provide the WLL service. The mobile tariffs in India have also become the lowest in the world. A new mobile connection can be activated with a monthly commitment of US\$0.15 only. In 2005 alone additions increased to around 2 million per month in 2003–04 and 2004–05.

1.2 Market Size

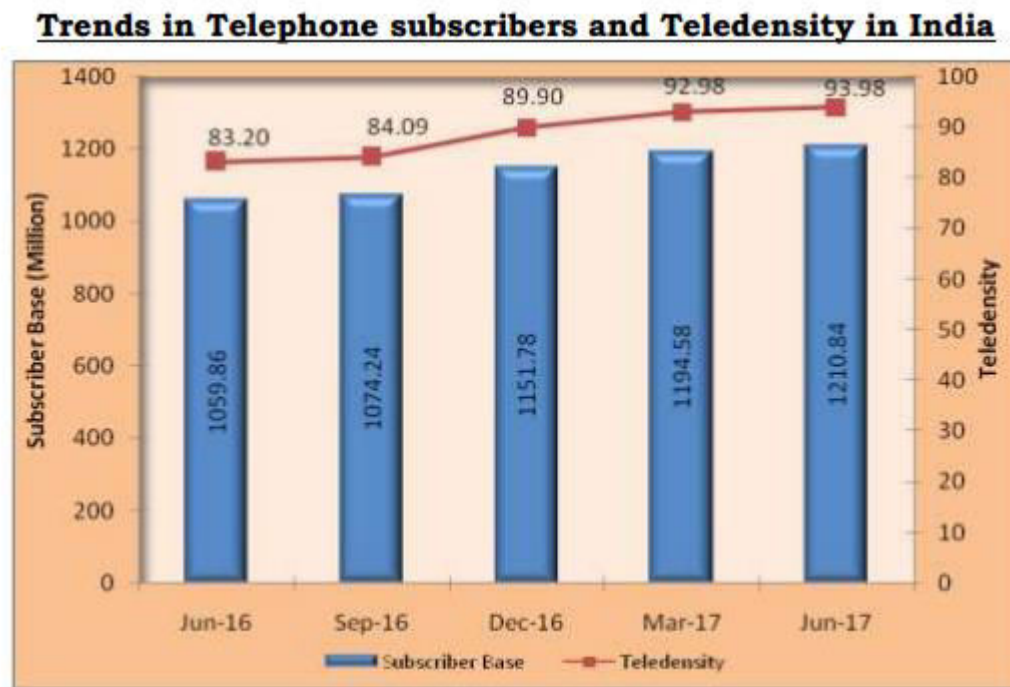
The Indian telecommunication services market will likely grow by 10.3 per cent year-on-year to reach US\$ 103.9 billion by 2020. Smartphone subscription in India is expected to increase four-fold to 810 million users by 2021, while the total smartphone traffic is expected to grow 15-fold to 4.5 exabytes (EB) per month by 2021.



India' has the second largest mobile subscriber base in the world. According to Telecom Regulatory Authority of India (TRAI), the total telecom subscriber base in December 2015 stood at 1.04 billion, out of which 1.01 billion were mobile subscribers and 25.52 million were wireline subscribers.

According to a study by GSMA, smartphones are expected to account for two out of every three mobile connections globally by 2020 making India the fourth largest smartphone market. Total number of Fourth-Generation (4G) enabled smartphone shipments in India stood at 13.9 million units in the quarter ending December 2015, which was more than 50 per cent of total shipments, thereby surpassing number of Third-Generation (3G) enabled

smartphone shipments for the first time. The broadband services user-base in India is expected to grow to 250 million connections by 2017, according to GSMA. India added the highest number of net mobile phone subscriptions of 21 million during the fourth quarter of 2015.



International Data Corporation (IDC) predicts India to overtake US as the second-largest smartphone market globally and to maintain high growth rate over the next few years as people switch to smartphones and gradually upgrade to 4G. In spite of only 5 per cent increase in mobile connections in 2015, overall expenditure on mobile services in India is expected to increase to US\$ 21.4 billion in 2015, led by 15 per cent growth in data services expenditure. The Indian telecom sector is expected to generate four million direct and indirect jobs over the next five years according to estimates by Randstad India. The employment opportunities are expected to be created due to combination of government's efforts to increase penetration in rural areas and the rapid increase in smartphone sales and rising internet usage.

1.3 Government Initiatives

The government has fast-tracked reforms in the telecom sector and continues to be proactive in providing room for growth for telecom companies. Some of the other major initiatives taken by the government are as follows:

1. The Government of India has cleared India's biggest spectrum auction across seven bands, which is expected to generate revenue of Rs 5.66 trillion (US\$ 83.9 billion), expand the bandwidth and the ability of telecom companies to service consumers and address the problem of call drops.
2. The Telecom Regulatory Authority of India (TRAI) has released a consultation paper which aims to offer consumers free Internet services within the net neutrality framework and has proposed three models for free data delivery to customers without violating the regulations.
3. The Government of India has liberalised the payment terms for spectrum auctions by allowing two options of payments to telecom companies for acquiring the right to use spectrum, which include upfront payment and payment in instalments.
4. The Department of Telecommunications (DoT) has amended the Unified Licence for telecom operations which will allow sharing of active telecom infrastructure like antenna, feeder cable and transmission systems between operators, thereby lowering the costs of operations and leading to faster rollout of networks.
5. The Telecom Regulatory Authority of India (TRAI) has recommended amendments in the Unified Licence in order to facilitate interconnection at Internet Protocol (IP) level among licensed operators.
6. The Telecom Regulatory Authority of India (TRAI) has recommended a Public-Private Partnership (PPP) model for BharatNet, the central government's ambitious project to set up a broadband network in rural India, and has also envisaged central and state governments to become the main clients in this project.

7. The Ministry of Skill Development and Entrepreneurship (MSDE) signed a Memorandum of Understanding (MoU) with Department of Telecommunication (DoT) to develop and implement National Action Plan for Skill Development in Telecom Sector, with an objective of fulfilling skilled manpower requirement and providing employment and entrepreneurship opportunities in the sector.
8. The Telecom Regulatory Authority of India (TRAI) has directed the telecom companies or mobile operators to compensate the consumers in the event of dropped calls with a view to reduce the increasing number of dropped calls.
9. With a view to encourage consolidation in the telecom sector, the Government of India has approved the rules for spectrum trading that will allow telecom companies to buy and sell rights to unused spectrum among themselves. The Union Cabinet chaired by the Prime Minister, Mr. Narendra Modi, gave its approval to the guidelines on spectrum sharing, aimed to improve spectral efficiency and quality of service, based on the recommendations of the Telecom Regulatory Authority of India (TRAI).
10. The Central Government's several initiatives to promote manufacturing in the country, such as 'Make in India' campaign appears to have had a positive impact on mobile handsets manufacturing in the country. Companies like Samsung, Micromax and Spice had been assembling handsets in the country already. Xiaomi and Motorola, along with Lenovo have also started assembly of smartphones in India. Firms like HTC, Asus and Gionee too have shown interest in setting up a manufacturing base in the country.
11. The Government of India plans to roll out free high-speed wi-fi in 2,500 cities and towns across the country over the next three years. The program entails an investment of up to Rs 7,000 crore (US\$ 1.04 billion) and will be implemented by state-owned Bharat Sanchar Nigam Ltd (BSNL).

1.4 Current Scenario

India's telecom market is now larger than both Germany and the UK.

However, the industry here faces the widest set of challenges, ranging from how to service the most basic communication needs to how to deliver complex services—all in a highly competitive market driven by regulatory challenges and issues. Telecom businesses have traditionally been consumer and voice heavy. As a percentage of revenues, data services still remain at about 10%. There is therefore the need to develop a wider set of corporate offerings and strengthen distribution channels. Improving customer experience has gained importance as a distinctive means of securing and enhancing lifetime value. The bottom-line is that operators cannot afford to give them low or equal service levels, holding IT and implementation issues responsible. Major growth will be driven by the rural Indian subscriber base, where current penetration is 30% and ARPU is just INR 160. Service providers will face the dual challenge of serving them cost-effectively and giving relevant services that will be adopted and used. Service providers today also face an uncertain regulatory environment. The recent National Telecom Policy 2011 hinted towards ways and means of addressing some pertinent regulatory shortcomings. Spectrum sharing, convergence, a unified license is some of the sought-after issues where a clearer way ahead is required from the Policy. In the future, the Indian telecom industry will consolidate for players to migrate to an industry structure expected from the economics of such a market. Operators must ready themselves, strategy-wise and capability-wise, to participate and take advantage of market's life cycles by then pursuing potential opportunities.

1.5 Road Ahead

The fast pace at which telecom operators are expanding their reach and launching 4G services in India, it seems we are headed to another telecom revolution in the country. Indians can sure expect new services, better call quality and much more competitive call rates in the days to come. What else?

According to Nigel Eastwood, Group CEO- New Call Telecom, "With all telcos upgrading services 2016 will be the game changer where more people will do lot more on their smartphones, new users will upgrade to smartphones and fewer people use their desktops for everything from shopping to entertainment."

This in turn would fuel the competition in the Indian telecom market, which means telcos would need to ensure that their premium customers are served better with improved quality of services in 2016. However, while telecom service providers in India will be spearheaded for growth, they need to address the problems Indians currently face on a regular basis first. The case in point being here that of call drops and a-not-so-great data network of service providers.

"Despite deep penetration of telecom services quality of both call and data services continue to be a concern. Both could do with plenty of improvements. Call drops are becoming frequent and buffering spoils data access, like video watching or gaming experience," says Nigel.

While last year LTE, public Wi-Fi and wearables grabbed the limelight, this year, PwChas predicted several key trends, all of which point towards an intensifying battle in the telecom space.

One can even expect MTS-Reliance like merger or more spectrum trading/sharing deals between telcos like Idea-Videocon had announced recently. Moreover, Reliance Jio is also likely to open up its services to consumers by April-May 2016 while other telcos firm up their plans to expand 4G services and roll out attractive packages to help consumers switch easily to the faster and better services. Vodafone has just successfully completed the first phase of its planned 4G roll out in the country.

Nigel feels that one of the biggest differentiators for Reliance Jio could be the actual costs of Jio services. Though the company hasn't announced the prices yet, but he thinks that pricing could be between Rs 300 to Rs 500 a month for a bundle of data, e-commerce access, media and payment services. And this could be clearly a steal.

Other telecom service providers like Vodafone, Airtel and Idea will have to resort to their own way to gain a strong foothold in the 4G space and win the battle. Vodafone is currently offering free upgrade to 4G along with a 4G SIM and has even tied up with Hungama for a content deal, where users get access to about 7,500 movies for three months, besides free access to music streaming service via Vodafone Music with a library of more than 1.2 million songs.

Airtel users are getting 4G services for 3G data prices with packs starting at the cost of a chocolate bar! In addition, with every 4G SIM swap, Airtel is offering six months of unlimited music streaming and downloads on 'Wynk Music' and five free movies per month for six months on the Eros Now channel of 'Wynk Movies'. Wynk Movies, a carrier agnostic mobile app, a kind of movie mall that offers curated library movies and other popular videos. The company has also introduced a new range of 'Infinity Plans' starting at just under Rs 1,000 - high-end offers for unlimited voice calls on mobile along with data benefits and access to 'Wynk Movies' and Wynk Music. Users will also have Idea Cellular 4G services to choose from; the telco might roll out its 4G services in 750 cities across 10 circles by that time, which means consumers will have more choice.

1.6 Objective of the Study:

The objectives of my project are as follows:

1. To study the effects of promotional activities of telecom companies on buying decisions of customers.
2. To analyze the impact of carpet bombing strategies adopted by Jio on consumer behavior.
3. To find out the most desired services of customers from telecom companies in India.
4. To check the degree of loyalty of customers of telecom companies.

LITERATURE REVIEW

2.1 Reliance JIO :

Jio has completely revolutionized the current telecom industry. It was launched with its initial free offers which helped company in penetrating Indian market easily. People were standing in long quest to get the SIM card of the company. The company provided it's free call and internet services for almost an year. Reliance Jio network has been founded in 2007. It is a LTE mobile network operator in India. It is a wholly owned subsidiary of Reliance Industries headquartered in Mumbai which provides wireless 4G LTE service network (without 2G/3G based services) and is the only 100% voLTE (Voice Over LTE) operator in the country. The company offered it's free services across the country. It covers all 22 telecom circles in India. Reliance Jio has appointed Shah Rukh Khan as their brand ambassador. It can be considered as one of the move under their Carpet Bombing strategy which will be further discussed in the paper. It invests into wireless unit of about 150 billion rupee. Jio have plan to issue 15 billion new share at Rs.10, each to existing shareholders.

Reliance Industries is not only working in India, they have expanded their business across the borders as well. Reliance communications owns and operates the world's largest next generation IP enabled connectivity infrastructure which comprises 2,80,000 kilometers of fiber optic cable systems in India, USA, Europe, Middle East and the Asia Pacific region. Reliance Group ranks among India's top private sector business houses in terms of net worth. The company has a good customer base. Reliance Jio is continuously investing in it's telecom business and aims of becoming the best telecom service provider in the country. Reliance Jio is in process to set-up the 4G LTE infrastructure. RJIL is setting up reliance (4 generation) high speed internet connectivity, rich communication services and various digital services on pan India basis in key domains such as education, healthcare, security, financial services, government citizen interfaces and entertainment.

Reliance was the company that set revolution for mobile services in India back in 2002, when they launched CDMA sim with handset that offer night calling free one of the best cheap tariff plans at that time. This JIO plan is same which will revolutionize the High Speed Network to the entire nation. (namdeo, 2016). Reliance Jio is disrupting the working of India's telecommunications industry by taking on incumbents like Bharti Airtel, Idea Cellular

and Vodafone which together control almost three-fourths of the market for mobile voice and data services. Although some of its services are —free,| RJio's pricing may not be considered predatory even if its behavior certainly is. (Bhatia, 2016). Jio has set off a fierce mobile tariff war in the country: At its launch, Ambani said that Jio will offer the lowest data tariffs in the country, and will also let users make voice calls for free not just on its network but also from Jio to other networks. And, it gave its customers a free four-month trial period. Anticipating this, just a couple of days before Jio announced its data plans, Airtel slashed its prepaid tariffs by 80%, and the other operators followed suit. A closer analysis showed that although Jio's offering was certainly the cheapest, it wasn't cheaper by much. Yet, it had disrupted the data market unlike any other operator had done in the past.

Tariffs for wireless data are now significantly lower. When Jio launched on September 5, other operators were offering 1GB data for around Rs 250. On Wednesday, a day after Jio Prime was launched as Rs 99 and announcement was made for the Jio plan of Rs 303 that gives users 30GB data at 4G speed and after that unlimited data at reduced speed, Airtel informed some of its post-paid users that they can subscribe to a special and surprise monthly pack of 10GB at Rs 100. (Anwer, 2017). A day before his speech, Jio announced a partnership with Uber to accept payments through JioMoney. It also said that it will add more incentives and offers, and create multiple avenues. (sen, 2017). Airtel claims to have reduced the price of its 3G/4G data pack in Delhi by up to 80 percent. If one goes by the numbers, it would be hard to argue with them. Vodafone also revised its 3GB 3G/4G monthly recharge pack. Earlier a Rs 650 plan came bundled with 3GB data, but now you get 5GB for the same price.

Currently 70-80% revenue comes from the voice, and the rest from the data, so if Jio offers the voice at free of cost then it will surely throw a serious threat to this existing players cash flow (polly, 2016). Bharti Airtel, the largest loser in terms of m-cap, lost Rs 8,455 crore m-cap at Rs 124,199 crore . Idea Cellular lost Rs 3,528 crore at Rs 30,140 crore, and RCom lost about Rs 1,182 crore at Rs 12,333 crore. (namdeo, 2016) There is nothing wrong in saying that Reliance Jio services with their quality would set benchmark standards in the telecom industry. Other operators who eventually would upgrade their networks fully to 4G would have to live up to these benchmarks and getting higher than these would then, increase competition in the market again, leading to further consumer benefit. (dubey, 2017). Though R-Jio has been asking for more points of interconnections with Airtel, Vodafone and other

operators, there have been no new inter-operator deals. For seamless connections, regulators must step in before it seriously impacts customers.

On December 20, 2016, TRAI had asked Reliance Jio to clarify as to "why the offer of free data under the promotional offer should not be treated as predatory" and also explain why its tariffs were not in violation of existing regulatory guidelines. (ET, 2017). The Telecom Commission seems to be raising the same point as argued by Vodafone India before the Delhi HC. The operator has continuously been alleging that the TRAI has been favoring Reliance Jio by approving its tariff plans which are against its own regulations. (pereira, 2017). The Telecom Regulatory Authority of India (TRAI), on a recent move, has recommended Department of Telecom to impose a hefty fine of INR 3050 crores on three prominent telecom operators in India, Vodafone, Bharti Airtel and Idea. The reason being that, these three operators have allegedly tried to deny interconnectivity operations to the newcomer in the market, Reliance Jio. (jyoti, 2016). The telecom regulator submitted before Justice Sanjeev Sachdeva that its decision will be placed before the court by the next date of hearing on February 6. The submission by TRAI came during hearing of a plea by telecom major Vodafone India which has claimed that the regulator failed to prohibit —blatant violation of its tariff orders, directions and regulations by RJio by permitting it to continue with its free offers (Trai set to reveal its decision on Reliance Jio's free services, 2017). US had seen two major telecom players T-Mobile and AT&T and when Reliance started its Jio concept, somebody (an American) started discussing how and why Reliance is going into telecom, oil was crazy high 120+ \$ back then. During the discussion he asked would ADAG group and MDA group join hands again to which I replied not likely both would likely have to compete in Indian Market. To which he said — Yeah here too T-Mobile and AT&T once tried to merge themselves and divide the Area but the US anti-monopoly law triggered and prevented that.

More than half or 56% surveyed customers in India are willing to use Reliance Jio as a secondary connection rather than a primary connection, even as there is a high willingness among consumers to try out the 4G entrant's services (Khan, 2017). , 32 percent users said that they use Jio because it is fast and 28 percent said that it is cheap. A lot of people have issues with the voice calling feature. The report said that only 18 percent people said that they will use Jio as the primary SIM, after the free offers end (FE, 2017). Reliance will focus more on product quality and better customer satisfaction as existing 4G service providers are receiving a good feedback from their users.

2.2 Impact of JIO on country's telecom ecosystem.

Reliance Jio's aggressive pricing could force other telecom firms to cut voice and data tariffs. The price war may strain finances of most telecom operators, who are already laden with high debt. Reliance Jio Infocomm Ltd's entry will be "credit negative" for incumbents in the telecom space and will also speed up consolidation, according to a Fitch Ratings report. The report said smaller telcos are likely to be impacted most and only a handful will emerge out of the shakedown. It predicted an increase in pressure on tariffs at a time when capital expenditure for incumbents is bound to increase with the upcoming spectrum auction. The rating agency also predicted a further dip in data tariffs and an increase in capital expenditure to provide an ecosystem for 4G services.

"Fitch estimates that Jio's blended tariff rates are at least 20-25% cheaper than those of the incumbent telcos, given that data charges are much lower and it does not charge at all for voice calls or text messages. Moreover, all of Jio's services will be free until the end of 2016 to kick-start its customer acquisition strategy," the agency said.

The incumbents are likely to respond by lowering their own tariffs to retain customers. The average industry blended tariff is expected to fall by 10-15% in the next year, it said. The Fitch report expects the market to move towards "data-only plans", making voice and text messages cheaper or free. "Such a shift could be particularly disruptive, given that most incumbents still derive the bulk of their revenue and profit from voice and text messages. The top four telcos' average operating EBITDA (earnings before interest, tax, depreciation and amortization) margin is likely to narrow by at least 200-250 basis points in the next year," the Fitch report said. A basis point is one-hundredth of a percentage point.

However, Singapore-based S&P Global Ratings says Bharti Airtel Limited "has financial headroom to withstand weaker operating performance from intensifying competition". The agency said in the short term, there would be a weakening of operating performance, a slowdown in revenue growth and a decline in Ebitda margins, but forecast improvement in future as competition accelerates and consolidation happens. Jio also guarantees free domestic voice calls to any network across the country with no charge or deduction of data even after 1 January 2017.

Fitch said that the rating headroom of Bharti Airtel (BBB-/stable), the market leader, is likely to narrow as Jio's high data-allocation plan will hit its premium customer base, which accounts for most of the profitability. Reliance Communication, the fourth-largest telco, is already under pressure, it said.

"Its management has committed to repay a part of its \$6.1 billion of debt through the sale of towers and merging its mobile business with smaller telco, Aircel Limited. If this commitment does not result in debt reductions which bring its FFO (funds from operations)-adjusted net leverage below 4.5 times (5.5 times in FY16) on a sustained basis, then negative rating action may result," Fitch said in its report.

Fitch does not foresee positive EBITDA for Jio as the company will incur huge initial costs at a lower subscriber base due to the lack of penetration of 4G-compatible devices. "Currently, fewer than 5% of Indian consumers have such handsets. However, this is likely to change quickly, as over 70% of new handsets are now 4G, but it is unlikely that Jio will be able to win more than 20-30 million subscribers and 3-4% revenue market share over the next year," the report said.

The larger chunk of consumers—almost 22% of subscribers—that Jio is targeting with its Rs.149 plan are 2G customers that yield an ARPU (average revenue per user) between Rs.150 and Rs.300. According to a Bernstein Research report dated 1 September, for these 2G customers, a handset for as low as Rs. 2,999 offered by Jio could be unaffordable. Analysts at Bernstein Research also noted that the average data consumption of an Indian user is 800MB per month, and in such a scenario, a 300MB plan (Jio's Rs.149 plan) may not be accepted well. "Our expectation is that the data explosion is just beginning and 300MB will be far too low for any real 4G user," the Bernstein report said.

RESEARCH METHODOLOGY

3.1 Methodology:

The objectives of the project were accomplished by following the below mentioned action plan:

1. Reading journals/papers online and from the company intranet regarding the current scenario of Indian Telecom market at the domestic fronts.
2. Survey about the competitors in the industry from consumers.
3. Gain knowledge regarding the various product feature variations, specifications and requirements for different functions that drive customer purchase decisions by reading different sources.
4. Preparation of questionnaires consisting of issues like preferred features by customers, customer loyalty etc.

The project is to be accomplished by using secondary and primary research.

Collect Data  **Analyze Data**  **Decision making for company**

Secondary Research: To understand consumer behavior from different aspects: their priority towards certain features, benefits acquired from it etc. Secondary research sources such as internet, reports and journals would be used.

Primary Research: To get a practical understanding of the consumer and employee behaviour as well as that of the B2B clients'. This would further validate the findings and research from secondary sources and hence help to gain further clarity on the subject.

5. Reading the prevalent market strategies in the company and do a SWOT analysis. Then, using the analysis made to devise new strategies for future value-addition to the company.

REFORMS POST JIO

4.1 Change in usage:

Start of a two-SIM culture

With Reliance Jio's clear focus on data, Greyhound Research believes this announcement will spark a two-SIM culture in the country. With its network chiefly built for data, voice quality may not compare to its peers and consumers are likely to opt for different SIMs for voice and data. This culture may also be triggered for other reasons including yet-to-be-known service levels from Reliance Jio.

The onset of price wars

This announcement will unleash price wars among telecom operators. Players including Bharti Airtel Ltd, Vodafone India Ltd, Idea Cellular Ltd and others will be under tremendous pressure to launch both monetary and service measures to retain customers. Greyhound Research believes this move will benefit consumers who can expect the cost for data (not voice) to reduce in the range of 25-35%.

Invest or consolidate

Jio's announcement will further add bottom-line pressures on the already struggling telecom operators. At Greyhound Research, we believe the Indian market has an appetite for two or three pan-India players at best. With deep pockets, the likes of Reliance Jio and Bharti Airtel are highly likely to come out triumphant in this war; Vodafone and Idea could well be forced to invest more aggressively or consolidate.

Significant focus on VAS

By making data as the key hinge of their announcement and offering free apps worth Rs.15,000, the company has made clear its focus on value-added services (VAS). In an effort to fight back, other telecom operators will be forced to refresh their VAS offerings including partnerships with VAS providers and start-ups. Greyhound Research believes this will have a two-fold impact. One, this can potentially lead to net neutrality issues, as seen in the past with Airtel Zero and Facebook Free Basics, and very well run into complications with the telecom regulator. Two, it can also lead to a situation where there is not enough volume and variety of apps for users to consume as part of VAS offerings. While Reliance has announced an

investment of Rs.5,000 crore towards Jio Digital India Startup Fund, the current VAS ecosystem needs 2-3 years to mature.

Focus on core telecom operations

Unlike its peers, which have steered clear of non-core telecom operations (particularly handsets), Reliance Jio has chosen otherwise. According to the company, Reliance Jio will offer 4G LTE smartphones starting at Rs.2,999. While this may sound like great news for consumers, it is critical to note Reliance Industries' struggles with managing and scaling the CDMA handset business in the past. Greyhound Research believes with increasing competition, it is critical for telecom operators to focus on core operations.

In the end,organizational DNA matters

With the consumer mindshare and loyalty switching at the drop of a hat, telecom operators must undividedly focus on what truly matters: delivering unparalleled customer experience. The recent technology investments by Airtel and Vodafone on Data Analytics exemplify this.

4.2 Shifts in consumer behaviour:

The telecommunications industry has been critical to the process of digitization across a range of other sectors. From retailers to financial services, firms depend on telecom networks to provide customers with compelling online and mobile experiences designed to capture their interest and keep them coming back. Yet the industry's own efforts to transform the way it interacts with consumers to market, sell, and support its products and services, have lagged. It's time for that to change. Consumers are rapidly learning the value of digital through their experiences in other, more advanced industries, and they are coming to expect the same from their telecom operators. To meet this objective, operators must offer an integrated, omnichannel user experience: on the desktop, on mobile devices, on the phone, and in stores. That, in turn, will enable them to build a portfolio of new products and services designed to match the requirements of each customer. Together, these two elements — an omni channel experience and better products and services — will allow operators to boost value. If operators are to make the digital transition, however, they must first define just how ambitious they want to be in taking advantage of digitization, creating a truly omni channel experience, and developing the digital products and services that customers want, and then build the operating model and information technology needed to support these ambitions. Success will require designing a strategy for creating the digital experiences that customers will expect three years from now, not today. It will also entail working closely with customers and collaborating across business unit and functional boundaries in creating digital experiences, constant experimentation, and a willingness to learn from mistakes — all with an eye on the ultimate goal of creating value.

Six Digi-Shifting Trends

1. **Device shift – from PCs to mobile/touch devices.** Smartphones are fast becoming ubiquitous, with penetration of about 60 percent in the US. Just over 30 percent of US Internet-equipped households now have a tablet as well, and the rest of the developed world is close behind. Mobile phones and tablets now account for around 44 percent of all personal computing time, having nearly doubled since 2008. Most device manufacturers and their major retail partners are already experiencing the implications of this shift.

2. **Communications shift – from voice to data and video.** E-mail and telephonic voice have fallen from over 80 percent to about 60 percent of the telecoms “communication portfolios” while time spent on social networks has doubled to take over a quarter of all user communications time. And when consumers do use their phones, only about 20 percent of the time is for talking (down from over 60 percent just five years ago).). The majority is used for more data-centric activities such as streaming music, browsing Web sites, and playing games. Mobile carriers in particular face challenges in reorienting their business models to focus on data rather than voice minutes. The US market has many lessons for the rest of the world in this area.
3. **Content shift – from bundled to fragmented.** Thanks primarily to powerful search tools, the “long tail” of media and content (whether text, video, classifieds, products for sale, etc.) is accessible to anyone. Thus, some of the value in traditional “bundles” (newspapers, network TV stations, or big-box retailers) has been eroded. The way mobile phones are used illustrates this well. The number of apps installed (typically for a specific, single purpose) has doubled to over 30 per phone from 2008 to 2012. Spending on these apps is, however, highly fragmented, and growth potential remains very uncertain. Challenges abound for both content owners and marketers in reaching and engaging audiences that access such eclectic, fragmented media.
4. **Social shift – from growth to monetization.** Social networking represents almost a quarter of all Internet time (up 10 percentage points since 2008) and reaches over 75 percent of all Internet users. But for the first time, we have seen small declines in both total audience and levels of engagement in developed economies. This is a remarkably fast climb to maturity, given that major players like Facebook, LinkedIn, and Twitter have yet to celebrate their tenth birthdays. Facebook and LinkedIn now face the quarterly earning pressures of the public markets as well. At the same time, businesses of all shapes and sizes are actively trying to use social media as part of their marketing efforts. Achieving real and measurable returns on these efforts will be a continuing challenge for players across the TMT spectrum.

5. **Video shift – from programmed to user-driven.** Traditional live, linear television consumption remains relatively flat on an absolute basis, but has slipped on a relative basis. It now represents just 65 percent of all video viewing for US consumers on their television screens and 52 percent across all screens. Time-shifted DVR content – watching video on PCs and over-the-top Internet videos services such as Netflix – makes up much of the balance. The increase in all varieties of time-, place-, and device-shifting video options will continue to pressure traditional advertising supported business models for distributors, advertisers and content owners.
6. **Retail shift – from channel to experience.** Despite its tremendous growth and transformation of the retail landscape, e-commerce only accounts for about 5 percent of all retail sales. As connected mobile devices proliferate, their potential to transform the shopping experience (both in the store and online) is the next opportunity. About half of all smartphone owners now use their devices for retail research – and although only few today, significantly more consumers will soon be using smartphones and tablets to complete their transaction as well. The combination of mobile retail and true multichannel integration will have a transformative effect on the retail experience and ring in the era of Retail 3.0.

PROJECT SPECIFIC ANALYSIS

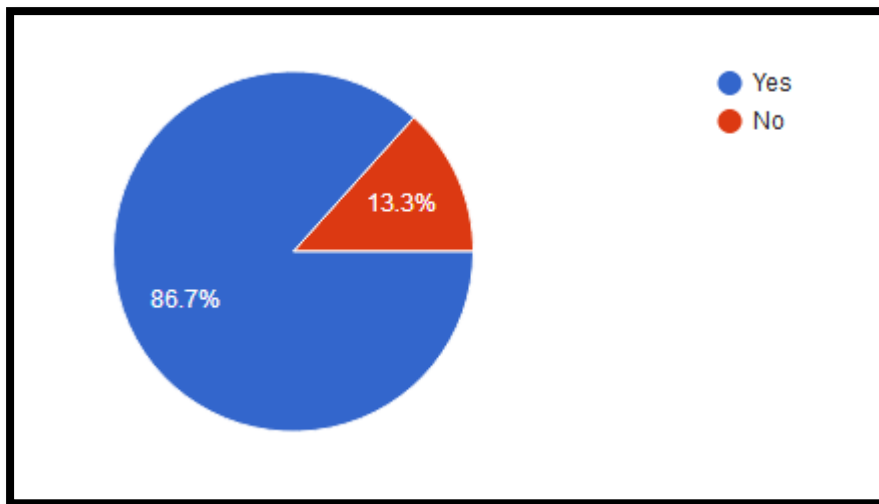
5.1 Consumer Survey Data Analysis:

Sample size: 100 employees

Current service provider analysis

1. Do you have a 4G smartphone?

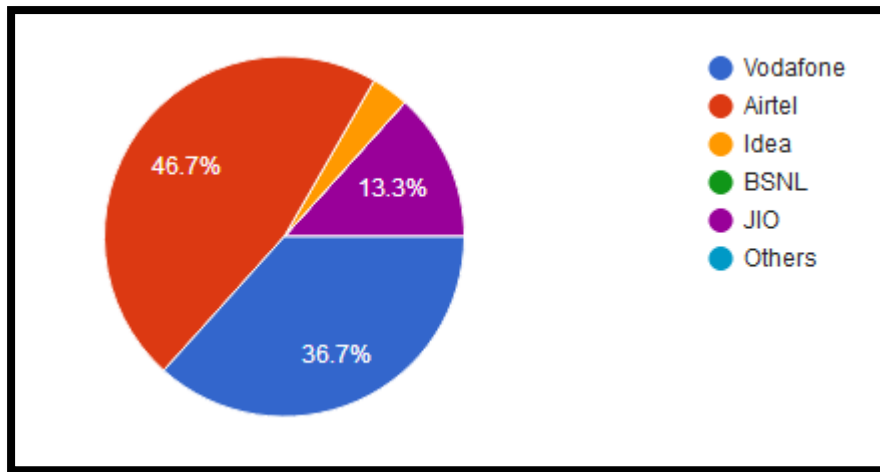
- ☐ Yes
- ☐ No



This data shows that there are still people who have 3G phones but they are very less than those having 4G so how the era of 4G came post JIO.

2. Which network are you using currently as primary network?

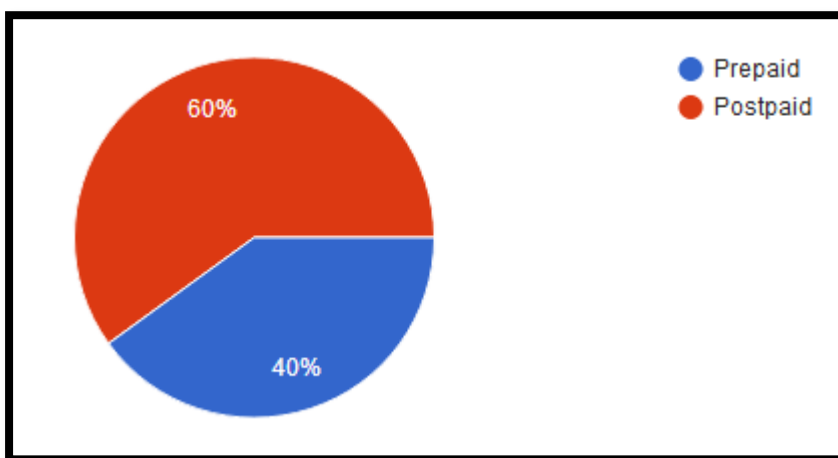
- ☐ Vodafone
- ☐ Airtel
- ☐ Idea
- ☐ BSNL
- ☐ JIO
- ☐ Others



This data shows that people currently are using the Airtel network as their primary network user rather than JIO after entry of JIO in the market.

3. What type of service do you use?

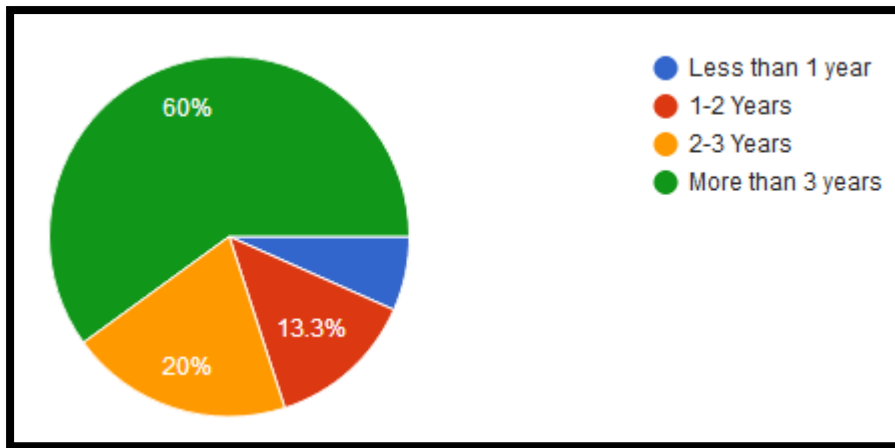
- ☐ Prepaid
- ☐ Postpaid



This data shows that most people like to use the postpaid services rather than the prepaid.

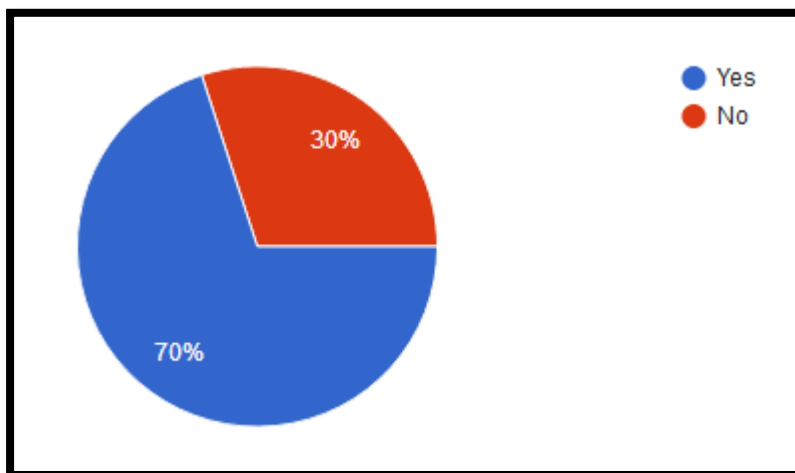
4. How long have you been using your current network?

- ☐ Less than 1 year
- ☐ 1-2 years
- ☐ 2-3 years
- ☐ More than 3 years.



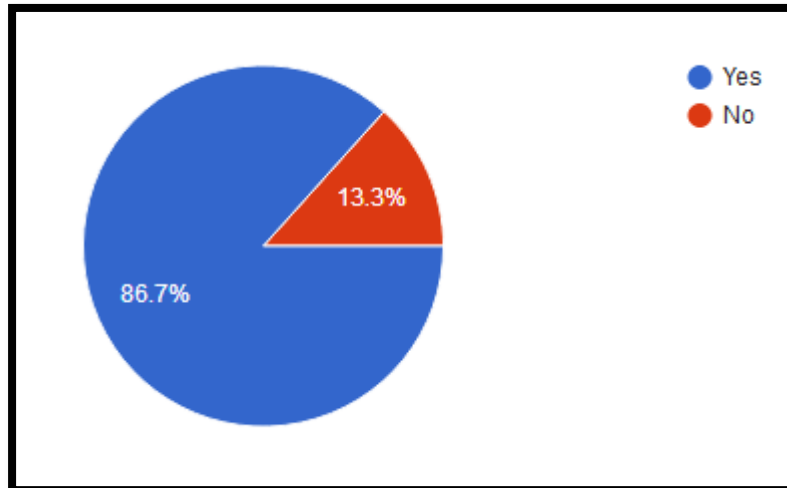
This data shows that how the consumers are loyal to their service providers because most people are using data more than 3 years. Even after the JIO entry in the market most consumer are still loyal to their service providers.

5. Do the services provided by your service provider has/had improved post JIO's entry?
- ☐ Yes
 - ☐ No



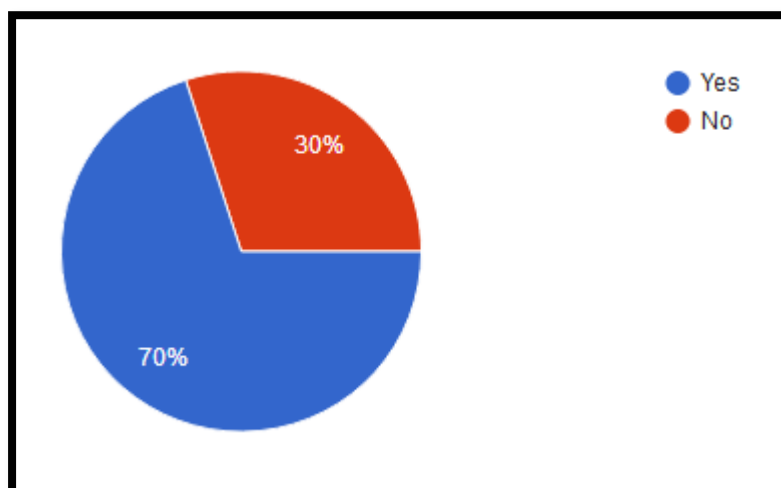
This data shows that consumer feel their service providers has/had improved post Jio's entry and the services have been improved at a large rate.

6. Do you think promotional activities of other service providers have increased post JIO's entry?
- ☐ Yes
 - ☐ No



This data shows that most people think the promotional activities of the other service providers have been increased post JIO entry in the telecom industry.

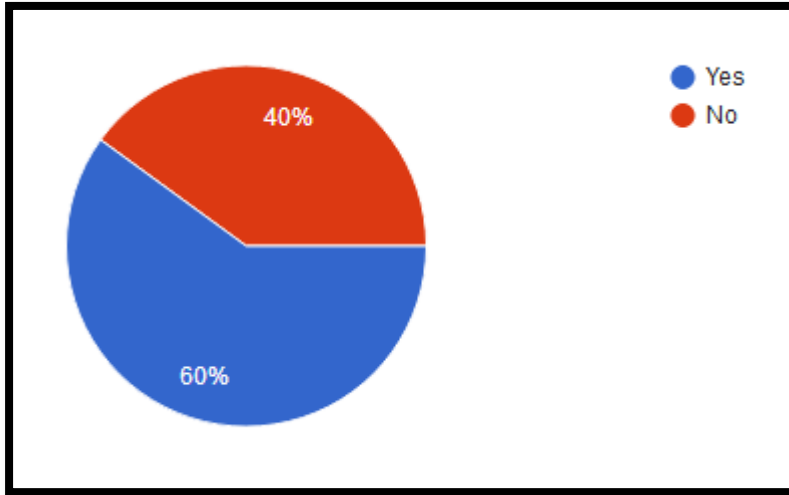
7. Do you think JIO is providing better services than other service providers?
- ☐ Yes
 - ☐ No



This data provides info that 70% people believe JIO is providing better services than other service providers.

8. Do the promotional and other marketing activities of a company affect your buying decision?

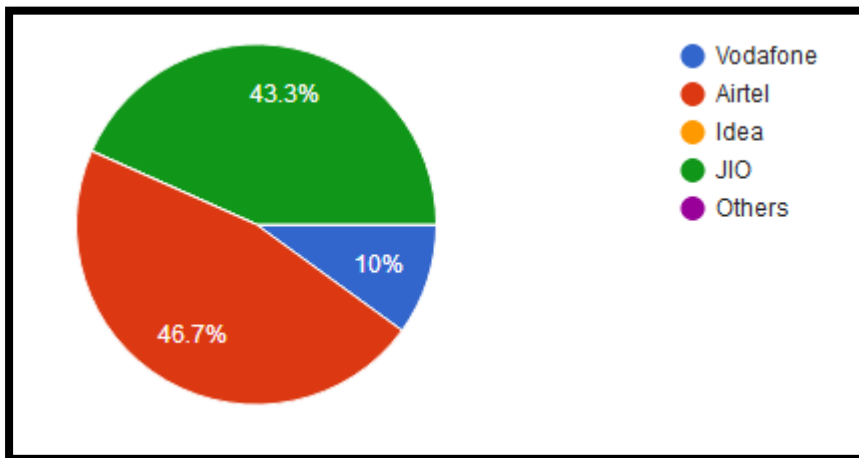
- Yes
- No



This states that advertisements do help in promoting the services of the telecom service providers and they do influence consumer behaviour.

9. Who do you think is currently ruling Indian telecom market?

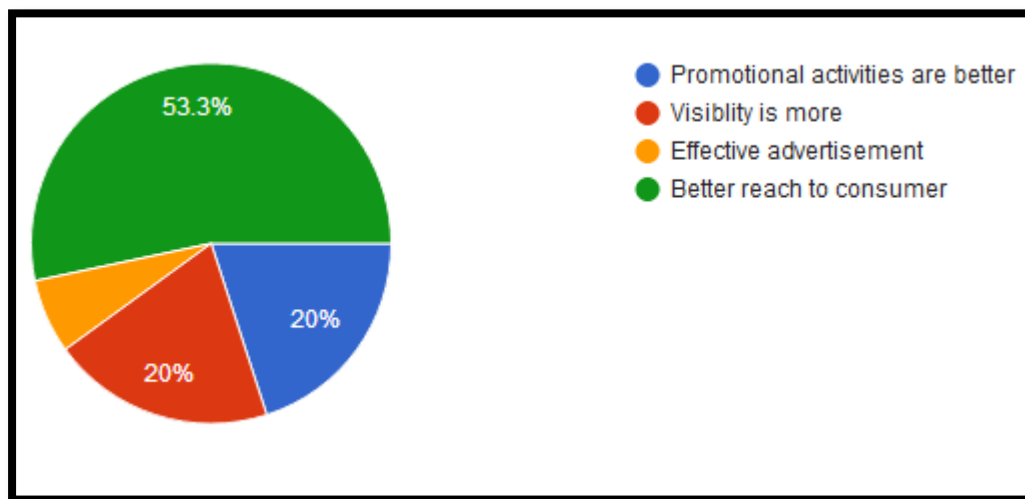
- Vodafone
- Airtel
- JIO
- Idea
- Others



People according to data think that even today Airtel is ruling the Indian Telecom market.

10. Why the particular company is doing good in this sector?

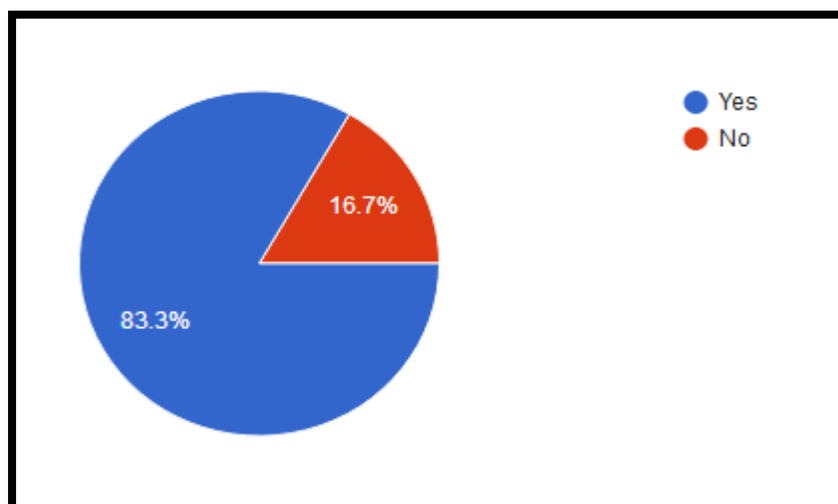
- Promotional activities are better
- Visibility is more
- Effective advertisement
- Better reach to consumer



This states that people believe Airtel is still ruling telecom industry because of its better reach to the consumers.

11. Have you seen abrupt increase in the advertisement and marketing of telecom service providers?

- Yes
- No



This data says that people believe there is abrupt increase in advertisements post JIO.

12. FOR EACH THE FOLLOWING DIMENSIONS, PLEASE INDICATE YOUR PERCEPTION BY **CIRCLING ANY ONE NUMBER** (1 FOR LOWEST RATING AND 5 FOR HIGHEST RATING) FOR EACH DIMENSION.

Rating 1: **Very Poor Quality** (Service falls far short of my expectations **OR** Service does not exist)

Rating 2: **Poor Quality** (Service slightly falls short of my expectations)

Rating 3: **Satisfactory Quality** (Service just matches my expectations)

Rating 4: **Good Quality** (Service slightly exceeds my expectations)

Rating 5: **Excellent Quality** (Service greatly exceeds my expectations)

Providing service as promised	1	2	3	4	5
Readiness to respond to customers' requests	1	2	3	4	5
Informing customers of the nature and schedule of services	1	2	3	4	5
Providing service as per promised time Schedule	1	2	3	4	5
Use of customer feedback to improve service standards	1	2	3	4	5
Service delivery time (activation)	1	2	3	4	5
Diversity and range of services – especially value-added services	1	2	3	4	5
Intensity and depth of service – more options in every scheme	1	2	3	4	5
Service innovation – (SMS, Mail, etc.)	1	2	3	4	5
Airtime hours / charges	1	2	3	4	5
Customer delight – giving customers more than what they expect	1	2	3	4	5
Quality service at a reasonable cost	1	2	3	4	5
Connectivity (cell to cell, cell to land-line)	1	2	3	4	5
Accuracy in billing	1	2	3	4	5
Geographical coverage	1	2	3	4	5
Effective utilisation of personal details (offers, mailers, etc.)	1	2	3	4	5
Corporate / Brand Image	1	2	3	4	5
Visually appealing signs, symbols, advertisement boards, pamphlets and other displays	1	2	3	4	5

Effectiveness of employees' skills and ability when a problem arises (critical incident)	1	2	3	4	5
Prompt service to customers	1	2	3	4	5
Willingness to help customers	1	2	3	4	5
Courtesy shown by staff	1	2	3	4	5
Confidentiality maintained regarding personal details	1	2	3	4	5
Provision of reliable information	1	2	3	4	5
Standardised & simplified delivery process	1	2	3	4	5
Adequate personnel for good customer Service	1	2	3	4	5
Adequate facilities for good customer Service	1	2	3	4	5
Equal treatment to all customers	1	2	3	4	5
Location of offices / outlets at more and convenient locations	1	2	3	4	5
Ethical practices (no pressurising tactics)	1	2	3	4	5
Response to suggestions / complaints / Feedback	1	2	3	4	5
Staff's knowledge in answering	1	2	3	4	5
Permitting change of scheme (pre-paid and post-paid)	1	2	3	4	5
Physical layout (Counters, Seating, waiting area, etc.)	1	2	3	4	5

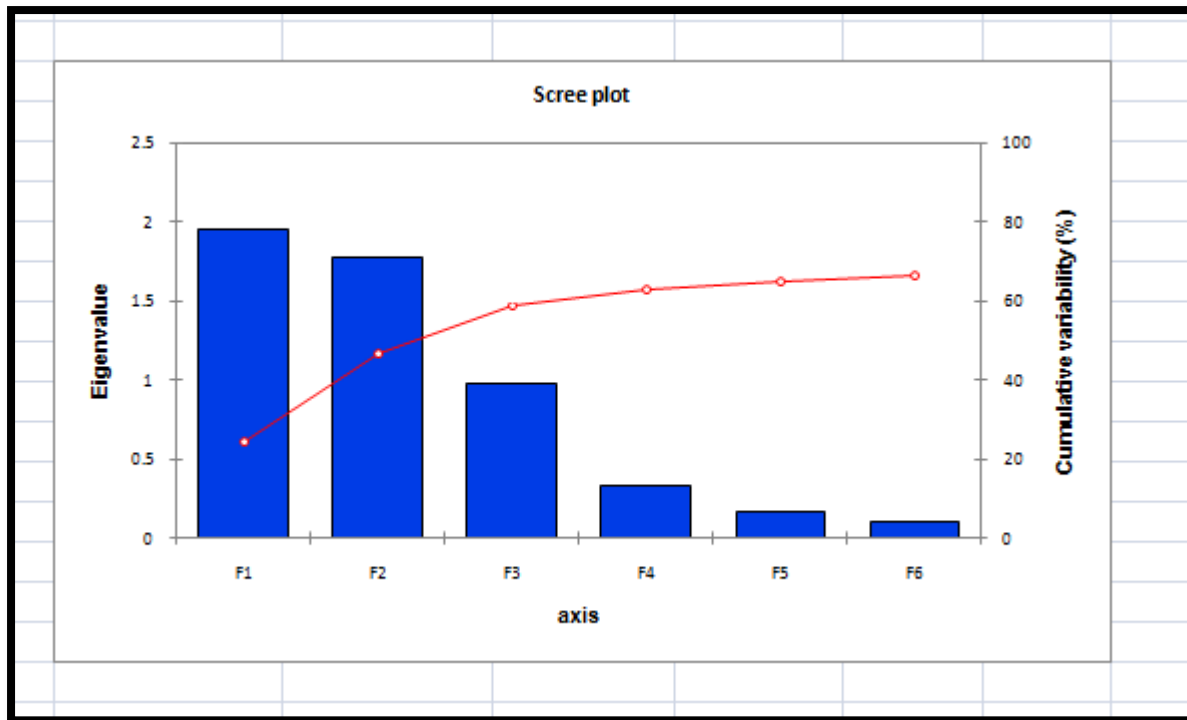
5.2 Analysis and Interpretation of Primary Data from Market Research:

For the market research, we collected data from **80 users**. The questionnaire was framed in a way to get customers response in each of the 8 qualities namely- **Call Quality, Data Quality, Flexibility of Plans, Price, VAS, Advertisements, Network, Customer care**. The customers were asked to rate the above qualities from 1 to 5 with 1 being the lowest and 5 the highest.

The primary data thus collected was compiled and tabulated according to the qualities mentioned above. This data was then run in XLSTAT software and factor analysis was done to get an inference.

Factor analysis is also called **data reduction technique** as the number of variables is reduced to a certain number of factors or dimensions. In our example we have reduced the original **8 qualities into 2 factors**. **Principal component analysis** is the most frequently used technique. Using this technique, the main components/factors are extracted wherein the factor scores will be uncorrelated. One of the criteria of extracting these factors is the minimum eigenvalue which is generally equal to one. Eigen value indicates the number of variables whose variance is shared in the factor. The main components are extracted in the decreasing order of the eigenvalues. Therefore the **first component** extracted explains the **maximum variance**.

Eigenvectors:							
	F1	F2	F3	F4	F5	F6	
Call Quality	-0.186	-0.216	-0.351	0.455	0.410	0.200	
Data Quality	-0.197	-0.292	-0.150	0.047	-0.062	-0.802	
Plans flexibility	-0.389	0.208	0.777	0.129	-0.120	-0.045	
Price	0.278	0.621	-0.274	-0.357	-0.084	-0.200	
Services	-0.329	-0.018	-0.281	-0.061	-0.581	0.465	
Advertisements	-0.269	0.391	-0.002	-0.125	0.649	0.121	
Network	0.553	0.236	0.103	0.680	-0.112	0.013	
Customer Care	0.460	-0.479	0.292	-0.406	0.187	0.207	



Rotated Factor Pattern

Rotation is used to bring clarity in the contribution of common variance of individual variables to the factors obtained i.e. whether the original variable has high correlation (factor loading) with one of the factors only. The most popular rotation used is the **orthogonal varimax** which ensures that the overall communality (that is the common variance contribution of each of the original variables to the factors obtained does not change). The factor scores obtained as a result of rotated factor structure are still uncorrelated as in the case of unrotated factor solution. In this rotation technique, the factor loadings will be adjusted by **transferring the position orthogonally (90degrees) in such a way that the overall communality will remain the same.**

Factor pattern after Varimax rotation:				
	D1	D2	D3	D4
Call Quality	-0.057	0.600	-0.163	0.148
Data Quality	-0.294	0.412	-0.033	-0.069
Plans flexibility	-0.069	0.084	0.963	0.246
Price	0.259	0.777	-0.393	0.418
Services	0.381	-0.231	-0.053	0.330
Advertisements	-0.151	0.243	0.192	0.568
Network	0.968	0.171	-0.148	-0.106
Customer Care	0.034	0.124	-0.122	0.984

Varimax rotation is orthogonal rotation which is done to shift the factor loadings in such a way that it is clearly evident that certain original variables belong to certain factors without changing the communality estimates. Here it is clear that the variables

Factor 1 Services and network

Factor 2 Call Quality, Data Quality and Price

Factor 3 Plans Flexibility

Factor 4 Advertisements and Customer care

Note that the Variance explained by each factor has changed but the Communality of individual variables remains the same as before rotation.

Naming the Factors

Factor 1 can be renamed as Core Benefits

Factor 2 can be renamed as Value for money

Factor 3 can be renamed as Influence

Factor 4 can be renamed as Relationship Maintenance

Since the second component has the highest proportion of variance (31.64%), we can say that Value for money is the most important criteria for customers while choosing service provider in the market.

LIMITATIONS AND FUTURE SCOPE

In our study of the project, we have taken into consideration people in urban areas are the heavy users of internet. Rural area is not covered in this study. Moreover we have limited the study on the people who are active users of 4G services.

The study focuses only on the impact on customers from the entry of Jio and their behavioral change, with the satisfaction on the particular age group.

The study can be taken over from here in terms of categorizing people in age group, as many teenagers are heavy users and people above 30 are using the services according as per their usage.

We can also focus on the people who are not active users of 4G services on why they are not using even after the significant null to very low cost of the service.

We only taken the customers into consideration but there are many group of population affected by the sudden entry of Jio. The competitor analysis can be taken from the point that how much market share has decreased of a particular company and the abrupt consolidation of many service providers. The impact on the telecom sector as a whole and what government is doing and measures taken by TRAI to save and keep the competition in the industry.

Since it has been more than an year Jio has been in market, there has been many changes in the cost structures of companies, most of them dancing in the tune on Jio prices and have focused on competitive pricing strategy. Many other strategies can be taken over to understand the industry better.

Lastly there has been more than 10,000 layoffs from the telecom sector, which has not been discussed here the impact on employees and the economy as a whole can be considered and taken for future purposes.

CURRENT SCENARIO

7.1 Possible effects of Jio on other telecom companies:

Jio has completely revolutionized the telecom industry with its penetration strategy. Jio has successfully penetrated into Indian market and currently have great market share in India. Due to the dynamic entrance of Jio, other major players in industry have started struggling. There is some of the panicked decision also being taken by these companies in order to combat the new entrant Jio. Companies are now adopting Skimming techniques to combat Jio in order to retain their customer base. For some of the companies it has even become difficult to sustain in market due to the present condition. Jio has started a fierce competition in the industry, companies are not leaving even a single chance for marketing their products and attracting new customers. Social media like Twitter, Facebook and many other means have become a new place to compete and promote your product for every company. It can be observed by the recent Twitter war between Jio and Vodafone Twitter page. When Mr. Amitabh Bachchan took Twitter to complaint against some services Vodafone was providing, seeing the opportunity Jio's Twitter page immediately responded offering services to Mr. Bachchan. So one can observe the level of competition going on in the industry. There has been a number of mergers and even shutting operations has been observed post Jio's entry. Companies are now marketing their products heavily in order to increase their market share and at the same time they are increasing their manpower to provide better services to their existing customers. We have collected data in the study keeping these factors into the mind. We have discussed some of the possible effects of Jio on other telecom players in this paper. They are as following:

Idea- Vodafone merger:

Vodafone India and Idea Cellular merger deal is expected to be completed by April this year, as all regulatory approvals are likely to be obtained by that time, a source privy to the deal said. One of the greatest example of disturbance occurred into telecom industry after Jio's entry is the merger of Idea and Vodafone. Both the companies had good market share and are established companies. Post the transaction, the British firm will own 45.1 per cent stake in the merged entity, while the Aditya Birla group, Ideas parent, will have 26 per cent after paying Rs 3,874 crore cash for a 4.9 per cent stake. The remaining 28.9 per cent will be held

by other shareholders. The merged entity will have over 410 million users, nearly 42% customer market share (CMS) and nearly 37% revenue market share (RMS) leaving it stronger placed to taken on competitive pressures triggered by JIO with 160 million subscriber and over 16% CMS and 15.3% RMS. Airtel has a CMS of 29.5% and an RMS of 31.5%. This merger has been approved by NCLT, SEBI and CCI. They have been operating in India since decades, so what forced them into collaborations. Following factors can be taken as the probable reasons of the merger:

- The combined entity of Vodafone India and Idea Cellular, which are currently India's number 2 and 3, respectively, would dislodge Bharti Airtel to counter the fierce price war in the world's second-largest telecom market.
- The deal gives Vodafone India an implied enterprise value of Rs 82,800 crore and Idea Rs 72,200 crore.
- Idea has better accessibility in rural areas and remote locations in India the merger will help in acquiring better market share and reduce operational costs.
- Due to the dynamic entry of Jio into the market and due to it's penetration strategy, the market shares of both the companies have affected drastically. So on a long run if companies want to sustain into the market they will have to work on the strategies which will help them in acquiring better market share.
- To combat Jio and Airtel's pricing, it is very important for Idea and Vodafone to provide economical plans to their customers. If the companies are failing in doing so, they will not be able to satisfy their customers ultimately leading to reduced market share.
- The two telecom giants are also planning to increase the number of towers to connect and cover rural India also. Both the players have good market share in urban India but lacks behind in case of rural where Bharti Airtel is the prominent player and rural India's a part of share is shared by government organization BSNL. So the merger can be a game changer for both the organization as they will become the market leader in terms of market share.
- The merged organization will be able to provide better services with comparatively economical pricing. One of the most important reason of Jio's success in Indian market is its pricing. The company is providing better services with comparatively cheaper prices which gives it an edge over its competitors. We have included this factor in our study as well and findings are also the same. So to combat the pricing of

Jio and Airtel, the merger will serve the purpose. Because it is always been perceived that Idea provides better services but much costlier than other companies while Vodafone is known for its economical pricing. So the merger can result in better services with average pricing, which will benefit both the companies.

R Com and Aircel merger:

Both the companies have been in talks for a long time but finally they have dropped the plan. Analysts are relating this decision of merger to the Jio. According the Financial Express report, Aircel has been fighting since very beginning for acquiring better market share but due to the poor network and services, the company cannot achieve it's target. After the entry of Jio in the market it became difficult for the company to even sustain into the market. This resulted into the discussion of merger with R Com so that they can at least be into the business.

The discussion over the merger has been going for a long time but the plan has been dropped and The reason given was "Inordinate delays caused by legal and regulatory uncertainties, various interventions by vested interests, policy directives impacting bank financing for telecom and changed industry dynamics," When Aircel is facing the problem of low market share it is becoming very difficult for the R Com as well to sustain into the business because of the liabilities company has to pay. The merger with Aircel had started on a troubled note from the start. Three of RCom's main lenders — China Development Bank, Standard Chartered Bank and HSBC — had objected to a petition seeking approval for the merger from being admitted in the NCLT. But looking at the poor financial status of the firm, they eventually gave their consent but creditors in the form of Indus Towers, Ericsson, Department of Telecommunications (DoT), Bharti Infratel and GTL Infrastructure's Chennai Network Infrastructure objected, saying they had not been taken into confidence and their dues needed to be cleared.

On the other hand Mr Ambani assured shareholders that they have number of backup options available with them. He added that RCom, like the industry, is in severe stress due mainly to intense competition and said local and foreign banks have stopped lending to the sector (probably because of Jio. Banks now do not want to invest into the sector seeing the growth

of Jio), which is aggravating the troubles of a capital-hungry industry which needs Rs100,000 crores a year in capex.

The merger with Aircel and its tower sale to Brookfield was expected to bring down the company's debt by 60%. It was also beneficial for Aircel as well looking at the poor market share of the company. But the merger has been canceled because of some legal issues.

TATA and Bharti Airtel:

Ever since Jio has been launched every company has faced some of the issues in operating their business. Whether it is market leaders like Airtel, Idea, Vodafone or the companies with limited market share like TATA Docomo, Aircel or Rcom. Jio has completely changed the face of telecom industry in India and it has endangered the companies with low market shares to sustain into the market. Now it has become very difficult for companies to sustain into the market. Tata teleservices is another example of fierce competition Jio has caused in Indian telecom industry.

Bharti Airtel has started Tata Teleservices customers transition to the Airtel mobile network under an Intra Circle Roaming (ICR) arrangement. Both companies have recently announced an agreement to merge the Consumer Mobile Businesses of Tata Teleservices Limited and Tata Teleservices Maharashtra Limited into Airtel. Tata is handing over its telecom business to Airtel.

The merger is going through regulatory clearances and recently received the competition commission of India's (CCI) approval. The deal will also require the approval of Securities and Exchange Board of India (SEBI), stock exchanges, National Company Law Tribunal (NCLT), and Telecom Department among others and the permission is yet to come.

The deal will bolster 4G capacity of the Mittal owned telco. TTSL's business, along with its around 40 million customers, majority of 5,000 employees, and around 178.5 MHz of airwaves with almost 40% of it 4G ready will be transferred on a cash free, debt-free basis. Here we need to understand what made a company with customer base of 40 million to merge with another company. Various researchers are claiming that Jio is probably the reason for the merger. Because Jio has made it so difficult to sustain in the market with its competitive pricing. Tata which was already considered to have poor network connectivity in various

place, was surviving on the economical pricing strategy only. After the entrance of Jio the customers of Tata was shifting rapidly towards Jio because it came with economical pricing and better services. So to sustain into the market and to save itself from liquidating in near future, Tata has taken this decision of merger.

Airtel is looking at it as an opportunity to increase its market share. Also looking at the merger of two giants of telecom industry i.e. Idea and Vodafone, this merger can be a combat strategy for Airtel. In an official statement, Airtel said that the first batch of the transition is being effected in UP (West), Bihar, and West Bengal. Over the coming weeks, all consumer mobile customers of Tata Teleservices across all circles will gradually transition to the Airtel network. Also the company is getting a well-established batch of 40 million customers so it is a win-win situation for both the companies.

These customers will be able to enjoy uninterrupted services on the Airtel network with their existing SIMs and will also be billed as per their existing plans/pack benefits.

Ajai Puri, Chief Operating Officer, Bharti Airtel said, —We are delighted to welcome the Tata mobile customers on to India's largest network and look forward to serving them with our world-class services. The transition will be fully seamless and nothing changes for Tata customers, who will continue on the same SIM and plan.¶ So Tata customers will also be happy since Airtel is considered too be the best network provider in India, but here it would be interesting to see if any of these customers move to the other service providers like Jio or the merged entity of Idea and Voda. Because they will also be coming with new plans and strategies to lie these customers.

Videocon Shutting operations:

Videocon Telecom, among the smallest telcos in India, has already shut down operations bringing to an end its mobile services in the country. The company has asked its 3 million customers to switch to other operators to ensure continuity of services. This can be taken as the worst effect of Jio on the Videocon. The company has to sop it's operation as they were incurring continuous losses. Quadrant Telventures had discontinued mobile services with effect from feb 15 2017.

Analysts are saying that Jio is the probable reason for this. Although some of the researchers believe that the company has to stop its operations sometime because of the low market share of the company. The company was continuously going into losses. But post Jio's entry, the company market share got reduced drastically which resulted into facing more trouble and ultimately shutting down the business.

The move will affect number of employees in the mobile service business in the state, who are likely to be absorbed in Videocon's other divisions in the state, according to people familiar with the company's plans. The company has incurred losses and was not keen to invest further in the business because it was not sure whether the validity of its spectrum holdings in the circle would be extended till 2027.

Videocon Telecom did not comment on the reasons for closure of services, but CEO Arvind Bali confirmed to ET that it was exiting the spectrum-oriented businesses.

We're going in non-spectrum businesses because spectrum is expensive. We have started 14 new businesses including surveillance and security, enterprise and broadband, which needs less investment and provides quicker returns, he said. The company also has bulk SMS and international and national long-distance calling business.

REFERENCES

- Available from [online]
[http://shodhganga.inflibnet.ac.in/bitstream/10603/70551/10/10_%20chapter%201.p df](http://shodhganga.inflibnet.ac.in/bitstream/10603/70551/10/10_%20chapter%201.pdf)
- Available from[online] [http:// dot.gov.in/about-us/telecom-glance](http://dot.gov.in/about-us/telecom-glance)
- Available from[online] <http://www.mckinseyonmarketingandsales.com>
- Available from[online]
<http://www.livemint.com/Companies/r1AGgKSE4GWvfMsS7nAhrI/Reliance-Jios-entry-will-impact-voice-revenues-of-other-tel.html>
- Available from[online] <http://www.pwc.in/industries/telecom.html>
- Available from[online] <http://www.businesstoday.in/sectors/telecom>
- Available from[online] <http://www.gizmodo.in/indiamodo>
- Documented research papers and journals from the company intranet.
- Official data from company records.

APPENDIX

Annexure I: Questionnaire for consumer

1. Do you have a 4G smartphone?
 - ☐ Yes
 - ☐ No
2. Which network are you using currently as primary network?
 - ☐ Vodafone
 - ☐ Airtel
 - ☐ Idea
 - ☐ BSNL
 - ☐ JIO
 - ☐ Others
3. What type of service do you use?
 - ☐ Prepaid
 - ☐ Postpaid
4. How long have you been using your current network?
 - ☐ Less than 1 year
 - ☐ 1-2 years
 - ☐ 2-3 years
 - ☐ More than 3 years.
5. Do the services provided by your service provider has/had improved post JIO's entry?
 - ☐ Yes
 - ☐ No
6. Do you think promotional activities of other service providers have increased post JIO's entry?
 - ☐ Yes
 - ☐ No
7. Do you think JIO is providing better services than other services than other services provider?
 - ☐ Yes
 - ☐ No

8. Do the promotional and other marketing activities of a company affect your buying decision?
- ☐ Yes
 - ☐ No
9. Who do you think is currently ruling Indian telecom market?
- ☐ Vodafone
 - ☐ Airtel
 - ☐ JIO
 - ☐ Idea
 - ☐ Others
10. Why the particular company is doing good in this sector?
- ☐ Promotional activities are better
 - ☐ Visibility is more
 - ☐ Effective advertisement
 - ☐ Better Reach to customer
11. Have you seen abrupt increase in the advertisement and marketing of telecom service providers?
- ☐ Yes
 - ☐ No

12. FOR EACH THE FOLLOWING DIMENSIONS, PLEASE INDICATE YOUR PERCEPTION BY **CIRCLING ANY ONE NUMBER** (1 FOR LOWEST RATING AND 5 FOR HIGHEST RATING) FOR EACH DIMENSION.

Rating 1: **Very Poor Quality** (Service falls far short of my expectations **OR** Service does not exist)

Rating 2: **Poor Quality** (Service slightly falls short of my expectations)

Rating 3: **Satisfactory Quality** (Service just matches my expectations)

Rating 4: **Good Quality** (Service slightly exceeds my expectations)

Rating 5: **Excellent Quality** (Service greatly exceeds my expectations)

Providing service as promised	1	2	3	4	5
Readiness to respond to customers' requests	1	2	3	4	5
Informing customers of the nature and schedule of services	1	2	3	4	5
Providing service as per promised time Schedule	1	2	3	4	5
Use of customer feedback to improve service standards	1	2	3	4	5
Service delivery time (activation)	1	2	3	4	5
Diversity and range of services – especially value-added services	1	2	3	4	5
Intensity and depth of service – more options in every scheme	1	2	3	4	5
Service innovation – (SMS, Mail, etc.)	1	2	3	4	5
Airtime hours / charges	1	2	3	4	5
Customer delight – giving customers more than what they expect	1	2	3	4	5
Quality service at a reasonable cost	1	2	3	4	5
Connectivity (cell to cell, cell to land-line)	1	2	3	4	5
Accuracy in billing	1	2	3	4	5
Geographical coverage	1	2	3	4	5
Effective utilisation of personal details (offers, mailers, etc.)	1	2	3	4	5
Corporate / Brand Image	1	2	3	4	5
Visually appealing signs, symbols, advertisement boards, pamphlets and other displays	1	2	3	4	5

Effectiveness of employees' skills and ability when a problem arises (critical incident)	1	2	3	4	5
Prompt service to customers	1	2	3	4	5
Willingness to help customers	1	2	3	4	5
Courtesy shown by staff	1	2	3	4	5
Confidentiality maintained regarding personal details	1	2	3	4	5
Provision of reliable information	1	2	3	4	5
Standardised & simplified delivery process	1	2	3	4	5
Adequate personnel for good customer Service	1	2	3	4	5
Adequate facilities for good customer Service	1	2	3	4	5
Equal treatment to all customers	1	2	3	4	5
Location of offices / outlets at more and convenient locations	1	2	3	4	5
Ethical practices (no pressurising tactics)	1	2	3	4	5
Response to suggestions / complaints / Feedback	1	2	3	4	5
Staff's knowledge in answering	1	2	3	4	5
Permitting change of scheme (pre-paid and post-paid)	1	2	3	4	5
Physical layout (Counters, Seating, waiting area, etc.)	1	2	3	4	5