

“Service Industry-Mobile Network Service Providers: A Holistic Approach”

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Abstract: Many and varied kinds of structural changes are taking place on several fronts in India’s socio-economic systems in pace with the changes in the global economy. Economic changes with its essential purpose on globalization, free trade and rivalry has changed the whole mechanism and promoting maps of India. The services sector, a mainfactor of India’s economic progress, has endowed 55.65 percent to the Gross Domestic Product (GDP) in Q1 2018-19, (India world rank is 11 in service sector and GDP is \$1185.79 billion (2017 has made speedy walk in the earlier decade and a half to develop as the major and one of the quickest rising areas of the country. In India, more people (customers) have cell phones than access to electricity, roads, computers or television. The telecom sector is considered as the epicenter for innovation & growth for virtually any Industry. The entire sum of telephone subscribers in the country positioned at 1168.8 Million, whereas the complete tele density has amplified to 89.72% as on 30th June 2018 from 81% in the year 30th November 2015. In the wireless segment, 1146.49 million subscribers were found on 30th June 2018. The cable line sector subscriber base erected at 22.40 Million as on 2018. Continuous momentum around telecommunication business as well as innovation of internet and business models will pose both challenges and opportunities for telecommunication companies. As the development of number of mobile manufacturers with installed devices that require portable availability, media senders have the ability to earn income through their hub organization such as: By networking and turning off system devices and devices. A major forthcoming influx of progress for the broadcast communications division will be the rise of fifth era versatile systems (5G). The Smartphone market will keep on being hearty with proceeded with adaptability for ordinary gadget redesigns. In this regard, secondary data were used for the study and made an attempt to describe the major mobile network service providers operating in India and also find out their positions, market share and the customer opinion towards them.

Key Words: Service Industry, Mobile Networks.

Introduction: Many and varied kinds of structural changes are taking place on several fronts in India's socio-economic systems in pace with the changes in the global economy. Financial changes with its essential purpose on globalization, unhindered commerce and rivalry has changed the whole mechanism and promoting maps of India. Both are becoming highly heterogeneous and complex with unprecedented expansions. On the other hand, the customers are becoming more informed and demanding due to the 'information explosion'. Due to the outcomes of economic reforms, the country's GDP composition is getting rapidly diversified in more than one way besides the age-old rural-urban dichotomy. In the past, productivity led technological innovations provided avenues for employment in manufacturing while the current trend indicates the rapid expansion of jobs (both high & low end) in services sector like IT, ITES, Telecom, banking, insurance etc. They are thus forming a new segment of customers with unique routines and affordability.

Introduction to Service Industry

The service sector is the main driver of India's financial performance, contributing 55.65 percent of gross domestic product (GDP) in the first quarter 2018/19 (India's global position is 11 in the administrative unit and GDP 1185.79) Billion dollars (2017) has made rapid progress over the past decade and a half, becoming one of the largest and fastest growing economies. The administrative division is not only the dominant region of India's GDP and also uses 28.6% of the total population. Their tariffs remain at \$ 18.7 billion in the first quarter of 2018/19 and also attracts famous long-distance business flows, which make a significant contribution to trade and do a lot of work GDP developed at a CAGR (Compounded yearly development rate) of 6.93 percent to US \$ 1,266.1 billion in the FY 2018 from US \$ 846.8 billion in FY 2012. The India offers the board market is required to develop at 17 percent CAGR some where in the range of 2015 and 2020.

IT and IT are the driving forces behind management in the economy. The Indian innovation segment and BPM (Equipment Counting) are estimated to have generated revenue of \$ 146 billion in the 15th fiscal year, up from the 23.72 percent level. The IT segment's commitment to India's GDP rose from 1.2 percent in 98 (January 2016) to around 9.5 percent in AP15. The telecom sector is considered as the epicenter for innovation & growth for virtually any Industry. Continuous momentum around telecommunication business as well as innovation of internet and business models will pose both challenges and opportunities for telecommunication companies. The entire volume of telephone subscribers in the nation is positioned at 1168.8 Million, whereas the completetele density has increased to 89.72% as on 30th June 2018 from 81% in the year 30th November 2015 . In the wireless segment, 1146.49 million subscribers were found on 30th June 2018. The wire line segment subscriber base stood at 22.40 Million as on 2018.

Because the number of devices that require the availability of portable has evolved, broadcasters have the opportunity to earn income through their hub organization, such as: By networking and turning off hardware and system devices. The most important development and development of the broadcasting department is the

development of a fifth generation portable system (5G). The Smartphone market will continue to grow strongly by adjusting the redesign of standard gadgets.

Theoretical Framework - Service, Consumer behavior, Factors influencing CB and Customer perception: An important aspects must understand to provide the service.

The service Industry is made up of vocations that provide services, or indiscernible goods, to consumers. Services are deeds and performances, whose output is not a construction involving simultaneous production and consumption and is purely invisible. The service business is made up of several companies. The binary chief kinds of service firms are equipment based and people based service Industry.

In India, more people (customers) have cell phones than access to electricity, roads, computers or television. Understanding buyer behavior is an integral part of advertising. Buyer behavior is the study of how people decide what to buy, need or act on a product or service. Three factors affect consumer behavior such as Psychological Factors which includes perception of a need, situation and an individual attitude. Personal factors include how a person makes decision, their habit, interest & opinions and their demographics. Social factors include persons family, social interaction, community, social strata, income, education and living conditions. Marketing a product or service is more than just creating an impressive expression or sound. As marketers of a product or service, must understand customer perception.

Perception can be referred to as the intellectual process which mainly includes choosing, uniting and inferring the stimuli. As indicated by Robbins, "Observation is characterized as a procedure by which people sort out and decipher their tangible impressions so as to offer importance to the earth." Customer discernment is the procedure of how clients see administrations, how they comprehend, their sentiment, regardless of whether they have encountered what they have anticipated the quality administration or not.

Client observation is straightforwardly worried about client desire. Because of the differed degrees of desire, view of one individual will likewise move after some time, individual, spot and culture. Clients see benefits as far as the quality (5 quality measurements: Reliability, affirmation, sympathy, physical assets and responsiveness) and how fulfilled they are by and large with their encounters.

Three fundamental highlights:

- Intellectual procedure: Customer recognition is a scholarly procedure through which an individual chooses the information from nature, arranges it and acquires significance from it.

- Cognitive and mental procedure: Perception is the essential subjective and mental procedure. The way where an individual sees the earth influences his conduct. In this manner impression of encompassing of a client additionally influences client's activities, feelings and emotions.

• Intellectual and Psychological procedure: Perception is an abstract methodology which varies from individual to individual and time to time and as indicated by evolving circumstances.

Problem statement: Telecommunication is the booming sector of the service industry growing at a rapid phase. During recent days it has become a trend in marketing to use Cellular phone/Mobile phones as a major means to reach the target audience. The problem of poor mobile quality came to as a headache in recent days. The study is an attempt to describe the emergence and the growth of various network service providers, mobile user's opinion towards various service providers. However, the study gives an insight into mobile network providers in the industry in terms of market share, no of subscribers. In turn it contributes an intimation and information to network service providers to better understand the customer opinion and expectation of the service.

Objectives:

1. To have an insight into the service industry, in specific to major telecom network service providers.
2. To understand the changing scenario of the spectrum and the mobile users opinion towards the network services.

An Insight into mobile network providers:

These are the top most telecom network service providers in India.

Sl. No	Name of the service provider	Area of operation
1	M/s Tata Teleservices Ltd.	All India except Assam, NE & J&K
2	M/s Reliance JIO Infocomm Limited	All India
3	M/s Reliance Telecom Limited	Kolkata, MP, WB, HP, Bihar, Odisha, Assam & NE
4	M/s Reliance Communications Ltd	All India (except Assam & NE)
5	M/s Mahanagar Telephone Nigam Ltd.	Delhi, Mumbai
6	Vodafone Idea Ltd.	All India
7	M/s Bharat Sanchar Nigam Ltd.	All India (except Delhi & Mumbai)
8	M/s. Bharti Airtel Limited	All India
9	Aircel Limited	All India (except Gujarat, Haryana, HP, MP, MH, UP (W))

Source: <https://en.wikipedia.org/wiki>

Tata Teleservices Ltd. It operates throughout India, with the exception of Assam, J&K and northeast districts. Reliance jio infocomm ltd. Reliance Telecommunications Ltd Operates throughout India. Works in Kolkata, MP, WB. HP. Bihar, Odisha, Assam, and Northeast Circle. M/S reliance communications ltd. works throughout India except Assam and North East Circles, MTNL operating in Delhi & Mumbai, Vodafone Idea Ltd. operating all over the country, BSNL operating all over the country except Delhi & Mumbai. Bharti Airtel is operating all over India, Aircel is operating all over India except Gujrat, Haryana, HP,MP,MH& UP (has declared to shut down its services in 6 circles in Mar,2018)

Wireless operators as on 31st August,2018

Rank	Operator	Technology	Subscribers (in millions)	Market Share	Ownership
1	Vodafone Idea Limited	GSM-900/1800 (EDGE) 2100 MHz UMTS, HSPA+ LTE Band 3 (1800 MHz) ^[2] LTE Band 40 (2300 MHz) LTE Band 41 (2500 MHz) VoLTE	(224.51+217.16) 441.67	(19.24+18.61)% 37.85%	Vodafone Group(45.1%) Aditya Birla Group (26%) Axiata Group Berhad Providence Equity(28.9%)
2	Airtel Tata DoCoMo	GSM-900/1800 (EDGE) 2100 MHz UMTS, HSPA+. LTE Band 3 (1800 MHz), LTE Band 40 (2300 MHz), LTE Advanced VoLTE	(345.86+22.98) 368.85	(29.64+1.97)% 31.61%	Bharti Enterprises(64%) SingTel(36%)
3	Jio	LTE Band 5 (850 MHz), LTE Band 3 (1800 MHz), LTE Band 40 (2300 MHz), LTE Advanced VoLTE WiFi	252.30	20.50%	Reliance Industries Limited
4	BSNL MTNL	GSM-900/1800 (EDGE) 2100 MHz UMTS, HSPA+ WiMAX WiFi LTE Band 1 (2100 MHz)	(113.53+3.50) 117.04	(9.73+0.30)% 10.03%	State-Owned

Source: <https://en.wikipedia.org/wiki>

The above table indicates that Vodafone Idea Ltd having 38% market share, Airtel & Tata D ocomo have acquired 32% of the market share, jio acquired 21% of the market share and the BSNL & MTNL together having 10% of the market share.

Wireline operators as on 31st August,2018

Rank	Operator	Subscribers (in millions)	Market Share	Ownership
1	BSNL	11.71	52.79%	State-owned
2	AirTel	3.78	17.93%	Private
3	MTNL	3.29	14.86%	State-owned
4	Tata	1.87	8.43%	Private
5	Reliance	0.84	3.80%	Private
6	Vodafone	0.25	1.13%	Private
7	Quadrant	0.23	1.06%	Private

Source: <https://en.wikipedia.org/wiki>

The above table indicates the rankings of the wireline telecom network providers operating in India. BSNL have acquired 53%, Airtel 18%, MTNL 13%, Tata 8.43%, reliance 4%, Vodafone 1.13% & others Have got 1% of the market share respectively.

Largest mobile network operators in the world

Rank	Company	Total subscribers (in millions)
1	China Mobile	851.2
2	Vodafone	469.7
3	Airtel	348.1
4	América Móvil	280.6
5	Telefonica	276.5
6	China Unicom	265.1
7	MTN group	234.7
8	China Telecom	216.8

9	Telenor	214.0
10	Vimplecom	205.5

Source: <https://www.worldatlas.com/articles> (April 25th, 2017)

The above table describes the top ten mobile phone network operators in the world with respect to their subscribers.

About Major players

Vodafone was founded in 1984 as a backup by Racal Electronics Plc. At that time, known as Racal Telecom Limited, in October 1988, nearly 20% of the organization's capital was offered to the entire population. Then it was fully established by Racal Electronics Plc and was changed to a free capital organization in September 1991. It changed its name to Vodafone Group Plc. The merger was ended by Air Touch Communications, Inc. The organization changed its name to Vodafone Air Touch Plc on June 29, 1999, and changed its name to Vodafone Group Plc after approval from investors.

Vodafone is one of the world's largest telecoms operators, operating in 26 countries in which they have fixed operations in 19 Partner Markets, in 49 country they have mobile operations, 59.1m Internet of things connections, 100 countries are connected by the companies submarine cables and have also acquired £59bn market capitalization. The company does have 212 m mobile customers in India alone. Vodafone Global Enterprise provides services for 1,400 of the world's largest businesses. It is also the World's No 1 provider of IoT services according to multiple industry analyst houses and World's No 1 carrier of international voice minutes. Cloud & Hosting services provided to 1,200 private sector and enterprise businesses.

Recently Vodafone and Idea have merged and had become largest telecom company in India. Both the service providers will continue their own operation of 3G and 4G mobile services as an independent brands till the merger and are expected to be completed by March 2019. Vodafone and Idea websites are functioning even today in their old domain. Companies are perceiving that the merged capital and increased reach will result in more benefits to mobile subscribers /users than before through better network, new technology and competitive offers.

Vodafone India and Idea Cellular are now Vodafone Idea Limited. The new company has taken the top position in the Indian telecom industry and has beaten the Bharti Airtel for the first time in 15 years and also expected to give the benefits to the customers as well.

Idea Cellular Ltd was founded in 1995 under the name Birla Communications Ltd. contracted. In 2002, the organization changed its name to Idea Cellular Ltd, bringing the brand to market. In 2005, the organization won the "Bill Flash" management of the GSM Association Awards in Barcelona, Spain. In 2006, this organization

became part of the Aditya Birla group. This organization has a letter of intent from DoT for other UAS licenses for the Mumbai Circle and also for the Bihar Circle through Aditya Birla Telecom Ltd. receive.

On 14 September 2017, Idea Cellular reported that they have accomplished a noteworthy achievement in its system development venture and has quickly extended system to 2,60,000 locales the nation over, setting up it as India's Big 4G organize'. It has included almost 50,000 broadband locales during the new year time frame finishing August 2017. It has achieved about 105,755 towns, connecting with 45% populace of the nation. The independent telecom tower organizations of Idea Cellular and Vodafone India are dish India inactive media transmission framework organizations, containing a consolidated arrangement of around 20,000 towers with a joined tenure proportion of 1.65x as at 30 June 2017. On 12 January 2018, Idea Cellular reported that the National Company Law Tribunal Bench at Ahmedabad vide its request dated 11 January 2018 has endorsed the Composite Scheme of Amalgamation and Arrangement among Vodafone Mobile Services Limited and Vodafone India Limited and Idea Cellular and their separate investors and leasers.

Airtel - Bharti Airtel Limited, part of Bharti Enterprises, is a leading provider of media communications services in India. Organization at Bharti Airtel has three vital specialty units, for example, versatile administrations, Tele media ATS and business administration. The Mobile Administration Collection provides multifunctional GSM administration in 23 telecommunications lines in India, while the B&T Business Collection provides broadband and telephone services in 94 urban communities. Gathering Administration The Company has two departments, such as a transportation company and company administration, all of which are available under the Airtel brand.

Airtel India is the second largest administrator and communications specialist for portable systems in India. Airtel is active in all telecommunications circles and is known as the second most profitable brand for portable systems in India. Airtel is the motto that connects India with many people around the world. Today, Mammoth Telecommunications is one of the most trusted media brands in the world. The inconspicuous journey of the organization from being a Delhi-based administrator to being the second largest universal administrator in the Asia-Pacific region is a touching story.

The company was founded in 1986 in the Indian telecommunications industry and has its base in Bharti Telecom Limited. Founded in 1986 by Sunil Bharti Mittal. In the same way, capturing a telephone is offered to the parent organization, while others use a flip phone. The main association, which includes Siemens AG from Germany, began sending various telecommunications advances to the Indian market today and is also developing. In 1992, Bharti Telecom Limited established the basis for the organization's portable activities as part of granting permission to regulate cells in Delhi. Delhi Mission was founded in 1995 as Bharti Tele-Ventures. Administration has been expanded to various countries through various acquisitions and organizations.

Tata Docomo TTL spreads the goodbye bunches nearness in the telecom segment, which was joined in the year 1996 and furthermore the pioneer of the cdma1x innovation stage in India. Goodbye Docomo is part of the

Tata Group, which provides administration for communication transmission via GSM and CDMA. The organization operates in 19 telecommunications circuits in India with more than 450,000 cities and communities throughout the country and has also been recognized as the first private telecommunications organization to transmit 3G benefits to India. Goodbye Docomo is a complete TV farewell aide, released in November 2008. In July 2018, he was the fifth largest administrator in the country, measured by subscribers (26.62 million, June 2018).). This organization will reclassify telecommunications participation in India by presenting sophisticated creative and administrative elements that enable clients to reorganize their lives and increase their attention.

TTL offers integrated telecommunications agreements with brand name goodbye Docomo. It is one of the top 10 brands in the government and among the 100 most trusted brands in the country. TTL has a marketing initiative in the broad field of information on the screen with parting from the 3G photonics group and Wi-Fi elements. It also offers a variety of non-voice administration, such as: E-administration, machine-to-machine and M-settlement to improve original administration, open welfare and administration. It has the largest and heart fiber optic system with a range of more than 100,000 km and a system that can be reached at 25,000 km that includes large urban communities. With 2000 participants, solid efforts are available in more than 60 urban communities across the country, 750 affiliates and more than 1,600 broadcast groups.

Reliance Communications provides portable, DTH, GSM, broadband and leased line management. Dependency Jio Info COMM Ltd, a backup copy of Reliance Industries Limited (RIL), the largest private equity company in India, and a leading telecommunications administrator with India Unified License capabilities. Addiction Jio Infocomm Limited is owned by Reliance Industries and is the main administrator of Voice over LTE in India. This allows the remote management of 4G LTE in each of the 22 Indian telecommunications circuits. The organization also establishes telecommunications systems in India to provide the Indian market with in-depth statements, fast internet access, extensive correspondence management and various computerized benefits of containers in India used in key fields such as education, medical services, security, related administration money, state and entertainment interface. This organization also means providing access to creative, attractive and modern substances, applications and administration at all times to make India a global leader in the computer industry.

The organization also received an improved package system to maintain a very limited avant-garde framework to meet a great interest in information and language. Jio Dependency is part of the Sound Of Bengal Gateway Cable System, which aims to ensure availability between Southeast Asia, South Asia and the Middle East, Europe, Africa and the Far East by connecting with current and other Indian interconnections, the Middle East and the Far East Asia.

BSNL CellOne was previously the name CellOne, a state-owned special media communication cooperative that offers prepaid and postpaid and postpaid administration in India. Also near 21 telecommunications lines in India with Meander and International Wandering Office.

The BSNL began on September 15, 2000. This relates to the provision of telecommunications administration and the Administrative Council of the former Central Government for Telecommunications Services (DTS) and Telecommunications Operations (DTO) which took effect on October 1, 2000, provided it is one of the largest and most widely used. India's most mobile open space company, offering a variety of telecommunications benefits. The organization offers a wide variety, the most common cost plans have been developed for each client. This organization is interested in regulating, managing, coordinating and maintaining the distribution and transmission of systems, so as to get a world-class ISO 9000 that is recognized by the Telecommunications Training Institute.

It introduces high-quality telecommunications networks in the country and also focuses on equal improvements, expanding systems, introducing new telecommunications administration with ICT applications in cities, and also improving customer security. There are currently 36.42 million linear telephone restrictions, 7.13 million WLL restrictions, 95.96 million GSM restrictions, 34,727 fixed agreements, 1,17,090 GSM BTS, 9,594 CDMA towers and 102 satellite stations.

The organization also seeks to make joint efforts and organize network activities in rural and urban areas with an expanded section of the ICT department. BSNL offers its customers a variety of telecommunications benefits, including wire line, Universal CDMA, Portable GSM, Internet, Broadband, Operator Administrator, MPLS-VPN, VSAT, VoIP, IN, FTTH services and more.

Mobile user's opinion towards the networks.

According to Ookla statistics conducted on Jan 12, 2018, Airtel has been identified as the fastest mobile network, offers the best 4 speeds in India followed by Vodafone & Idea. According to Trai, Jio has been moving towards the fastest 4G network but the slowest speeds.

(According to open signal a popular wireless coverage mapping company)

According to the survey conducted by TRAI, telecom workers botched to see client satisfaction standard in different circles. Customers are dissatisfied with call drop issue, network signal, data speediness, customer care service, whole telecom service by their service providers.

Airtel system increased most astounding fulfillment score to address call drop issue in couple of urban areas and furthermore scored most noteworthy for clearness in charging data, client care administration, information speed and system signal. Jio was additionally evaluated most noteworthy in couple of urban areas.

RCom scored low on certain considers such client care administration, voice quality during call, by and large administration, versatile number transportability preparing, information administration and system signal.

Tata Teleservices was positioned top in Karnataka for its push to fathom call drop issue. In by and large telecom administration, Tata has most astounding score in Delhi and Reliance Jio in MP and Karnataka.

Mobile network service providers must adopt the strategies for influencing customer perception such as encourage spontaneity, plan for effective service recovery, should be flexible and adaptable, measure and manage the satisfaction of quality service and aim for service quality at each & every service encounter.

Conclusion

The study is an attempt to understand the Indian telecom industry, the major players who are currently operating in the country, their area of the operation, technology used, number of mobile subscribers of various network services, market share owned by the individual players of the network service providers. It also assesses the customer opinion towards the service offered by the operators through the results shown or report published by the various agencies and market research firms, who have conducted the survey pertinent to mobile network service providers. It has been observed that a drastic change has happened in the telecommunication industry from past couple of years. The number of players of the industry are becoming less due to mergers and acquisitions, the aggressive product and promotional offerings of few companies and also due to lack of funds or financial problems of certain companies. Telenor formerly known as Uniron, is been acquired by the Airtel, Vodafone and Idea have been merged, Aircel has closed its operations in many locations, they are yet to close their services /operations due to bankruptcy in the recent days. In this regard it can be concluded that there are major changes happening in the sector, major services have also been offered to the customer but still there are certain service quality issues mainly with regard to Call drops, Trai has also been set many standards, policies and penalties Service providers to improve the quality of their services to ensure customer satisfaction.

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