

EVOLUTION OF INDIAN TELECOMMUNICATION SECTOR

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ABSTRACT

The paper deliberates on expansion of telecommunication sector in India which has witnessed unprecedented growth in last two decades. It is an attempt to look into the evolution of the sector, its structure and how the government policies supported the growth. The paper also provides present scenario of the sector.

KEYWORDS: *Telecommunication Services, Electronic Devices, Telecom Service Providers.*

Introduction

Today telecommunication sector of India has taken an important place in economy of the country. It not only contributes to GDP but also it acts as a catalyst to boost Indian economy. Over the period of time, due to increasing demand of the telecommunication services coupled with technological advancements, the sector has moved from luxury sector to essential sector. Communication has been the essential feature of human beings. In earlier days, people use to communicate messages or information through face to face talk. After that distant communication started by using messengers. In later days, written messages were passed on through the messengers such as pigeons, postman etc. However, the method of communication got revolutionized over the period of time when electric signals were discovered and electronic devices were invented. Initially, telegraphy came into existence to pass on messages in coded electrical signals. Then telephony came to transmit voice over electric wire and many technological advancement were taken place for fast, clear, & transmission of voice over a long distance. The telecommunication sector was growing at a very slow rate till last decade of 20th sanctuary. However, every estimation of growth in this sector was proved miniscule after the invention of wireless technology in the last mile connectivity which made Indian telecommunication sector as the world's one of the fastest growing sector.

After opening the sector for private investor in 1990s, various organizational, regulatory reforms were made to facilitate the growth of the sector. All this resulted in tremendous expansion of the sector. In 1990s, telephone density (i.e. number of telephone connections per 100 population) was very less. At that time, only wire line technology was available for provisioning of the telephone connections. Later on wireless technique came into existence, which is relatively easier and less capital intensive, and after taking about 5-7 years in establishing infrastructure by private telecom service providers (TSPs) the number of telephone connection in the country started increasing rapidly. By liberalization of the sector all the stack holders, i.e., the consumers, investors, government etc got benefited. Today telephone connection is very much affordable to everybody. Investors are getting fair rate of return for their investment as there are immense market opportunities. Government is also earning revenue from licensing etc. Today telecom sector contributes about 3% of GDP.

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Policy Framework

Telecommunication sector of India is primarily governed by the Indian Telegraph Act, 1885 and its subsequent amendments. Prior to 1990s, telecommunication services could only be provided by the government of India through Department of Telecommunications. It was serving whole country directly except Delhi and Mumbai where it was serving through the state own Public Sector Undertaking, Mahanagar Telephone Nigam Limited (MTNL). Later, in 2000, Bharat Sanchar Nigam Limited (BSNL) was created out of Department of Telecommunication to provide services in rest of the country.

In early 1990s, the telecommunication sector was opened for private participation by the government of India which means private companies were allowed to establish infrastructure and provide telecom services in the country after getting license from the government. This was the emergence of licensing era in telecommunication sector in India. The licenses for operating telecom services in India are given by Department of Telecommunication. These are given circle wise. Initially, the licenses were given service-wise in service area. The telecommunication circles are called Licensed Service Area (LSA). For the purpose of telecom services, the country has been divided into 22 LSAs. Government of India is giving licenses to TSPs circle-wise. Private companies are given three licenses for three categories, Basic license for Fixed Line service, Cellular Mobile Telephone System (CMTS) License for mobile services, and Unified Access Service License (UASL) for both mobile and fixed line service.

Initially government charged investors for providing licenses and provided fixed block of spectrum for providing services. Later this was changed to revenue sharing model to increase government revenue. Government of India makes National Telecom Policy (NTP) time to time. In 1994 such telecom policy was issued and later NTP 1999, NTP 2004 and NTP 2012 were issued. The policies were issued with the clear vision of expansion of telecom services in terms of area and reach of general public. Moreover, these were focused to provide telecom services at affordable rates.

Once the telecom sector was opened for private players, a need was felt to protect interests of all its stack holders such as users, telecom service operators, the government etc. To address this issue, an independent entity was needed and this resulted into formation of Telecom Regulatory Authority of India (TRAI) in 1997. The basic function of TRAI is to ensure growth of telecom sector while protecting interests of service providers and consumers. It functions to take care of technological improvement, interconnectivity, efficient utilisation of spectrum, quality of services to the consumers etc. TRAI regularly advises the government to make policy for the benefit of all the stack holders.

In order to further strengthen the policy framework of the telecom sector by protecting the interests of service providers and consumers, Telecom Dispute Settlement and Appellate Tribunal (TDSAT) was setup in 2000. It was setup to adjudicate disputes and dispose of appeals. Prior to TDSAT, this function was being done by TRAI. Besides above, government is making policies time to time for auction of spectrum, providing licenses, monitoring of service providers, national security aspect, telecom equipment suppliers, Foreign Direct Investment etc. All the conducive environment resulted in tremendous growth of Indian telecom sector which became one of the fastest growing telecom sector in the world.

Present Scenario

In the year 2000, the teledensity of the country was around 2.8 telephone connections per 100 population which has risen to 91.22% in 2017. The total number of telephone connections in 2000 was mere 3 crores which has reached to 120 crores in 2017. Telecom sector of India has witnessed a growth rate of 10-20% per year in first decade of 21st century. Today, telecom sector contributes more than 3% of GDP with revenue about 3 Lac crores per annum. Telecom sector has worked as catalyst to the economy of India. Today, telecom services have contributed to a large extent for growth of other sectors/industries. In year 2000, the major share in connections and revenue was contributed by fixed line connections. It was 90%. However, after expansion of wireless technology, the share of fixed line connections is now 2% and 98% of wireless connections.

Clearly, telecom sector has got revolutionized due to technological advancements, particularly in last mile connectivity and supported by regulatory framework. This sector is highly technology sensitive. The availability of commercially viable technology has made the sector lucrative to private players. As a result, so many operators have stepped into the sector. Presence of many operators has resulted into cut throat competition to increase market share which is benefitting consumers in terms of economy and quality of service. Government is also providing telecom services through its public sector undertakings, Bharat Sanchar Nigam Limited (BSNL) and MTNL. The market share between PSUs and private sector is, 10% PSU and 90% Private Sector. The market share among the service providers is 24% Bharti Airtel, 18% with Vodafone Essar, 16% with Idea, 12% Jio and 9% with BSNL.

Conclusion

Technologic advancement coupled with proper policy changes and adequate regulatory arrangements have resulted explosive growth in Indian telecom sector in last two decades. Today, India has the world's second largest mobile phone users with over 120 million users (Oct, 2017). It has world's third largest internet users with over 121 million as of Dec, 2011. India has become world's most competitive and one of the fastest growing telecom markets with an addition of 10 million subscribers every month and contributing to nearly 3% of GDP. Driven by wireless communication, the telecom industry is recognized as a key to the rapid growth and modernization of the economy and an important tool for socio-economic development of a nation. This sector would generate employment opportunities for about 10 million people. The total revenue of the Indian telecom sector grew by 7% to about Rs. 3 Lac crores in 2011.

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