

# [The importance of telecommunication marketing essay](https://assignbuster.com/the-importance-of-telecommunication-marketing-essay/)

Communication plays very chief role in the life of human beings. Since the moment we born, we communicate our desires and needs. Telecommunication is the science and practice of transmitting information by the mode of electronic. Telecommunication, however, is talking through technology meaning phones, Internet, radio etc…

Telecommunication is the exchange of information over considerable distances by the means of electronic. A absolute, single telecommunications circuit consists of two location, each outfitted with a transmitter and a receiver. The transmitter and receiver at any location may be united into a single device called a transceiver. The intermediate of signal transmission can be electrical wire or cable (also known as “ copper”), optical fiber or electromagnetic fields. The simplest form of telecommunications takes place between two locations. However, it is frequent for numerous transmitting and receiving stations to swap over data among themselves. Such a collection is called a telecommunication network.

In earlier times, telecommunications mixed up with the exercise of illustrated signals, such as  smoke signals, beacons, signal flags, semaphore telegraphs,  and optical heliographs, or audio messages such as coded drumbeats, loud whistles , and lung-blown horns.

Now a days, telecommunications engages the work out of electrical instruments such as the telephone, telegraph, and teleprompter and as well as the use of radio, as well as fiber optics and their connected electronics, plus the utilize of the orbiting satellites and the Internet.

## Need of telecom industry

Use of several modes of telecommunication has now becomes a vital part of civilization. Information found to be one of the most significant elements for the resourceful expansion of an economy. With efficient use of telecommunication one can remove various constraints of all the sectors in the economy resulting into increased output and better administration. Effective controlling mechanism can be possible only through better communication and with better use of telecommunication equipments.  In the developing countries earlier telecommunication was a big problem because all the means of communications were confined to the rich people only. But with the revolution in this sector now all the means are also available to middle and lower class people who play vital role in the growth of economy of any country.

## Importance of telecommunication

Society today has made itself so used to telecommunication that the world would crumple if it was taken away. The reason for the marvelous expansion of telecommunications is because we needed a better way to communicate messages to each other.

Communication is a immensely significant aspect, not only for people around the world, but also for minute and huge businesses. With the passage of time, methods such as horns became a way of communication. But with the growing time there has been a bundle of expansion and with that came the more superior technologies such as radio, phone, television and the Internet.

Businesses would be vanished without the current technological progression and a lot of companies would come to an end. But this is not the only advantage that telecommunications can bring. Without telecommunications, we would be powerless to fly on planes and helicopters or effectively find the way in the seas. Besides this, space travel would be nearly unfeasible.

A world exclusive of telecommunications would not be possible, society has made itself so addictive to this form of technology that the world would end up in danger if it was taken away. The reason for the incredible growth of telecommunications is because, as people and cities throughout the planet grew, we desired a improved way to relay messages between one another.

The supreme scientific progression that we could have possibly got from this is the manufacture of phone and the Internet. The phone was a most important instrument of communication, whereby you could right away communicate with another person that was on the other side of the world. Almost every domestic now has at least one phone, with most having several.

Telecommunication makes us communicate with every spot of the earth to resolve problems and make the world a much safer place to live.

## A concise channels to innovative technologies and new networks in telecommunication industry:

Asymmetric Digital Subscriber Line (ADSL)

Asynchronous Transfer Mode (ATM)

Bluetooth

Cellular

Digital Subscriber Line Lite (DSL Lite)

Extended-rate Single-pair High-speed DSL (ESHDSL)

Fixed Radio Access (FRA)

Frame Relay

General Packet Radio System (GPRS)

High speed Digital Subscriber Line (HDSL)

Integrated Services Digital Network (ISDN)

Internet

Internet Protocol (IP) Networks

Intranet

IP Multimedia Subsystem

Local Area Network (LAN)

Mesh systems

Metropolitan Area Network (MAN)

Multipoint Video Distribution Systems (MVDS)

Next Generation Access

Next Generation Networks (NGN)

Optical fibre

Personal Communications Networks (PCN)

Power Line Telecommunications (PLT)

Super JANET

Synchronous Digital Hierarchy (SDH)

Ultra Wide Band (UWB)

Universal Mobile

Telecommunications Systems (UMTS)

Very high speed Digital Subscriber Line (VDSL)

Wave Division Multiplexing (WDM)

Wide Area Network (WAN)

Wi-Fi

Wi MAX

Wireless Application Protocol (WAP)

World Wide Web (WWW)

x Digital Subscriber Line (xDSL)

Zig Bee

## Establishment of telecom industry in India

History :

Telecommunications is the broadcast of signals over extended distances. It began with the discovery of the telephone in 1876, then lingering to radio broadcasts in the late 1800s and to television in the early 1900s.

In 1851 , it was opened for the use of the British East India company. Subsequently construction of telegraph throughout India. A separate department was opened to the public in 1854. Dr. william O’shaughnessy, who pioneered the telegraph and telephone in India.

1851 – first operational landlines were laid by government near Calcutta.

1881 – telephone services introduced into India.

1883 – merger with postal system.

1923 – Indian radio telegraph company formed.

1932 – merger of ETC and IRT Indian radio and cable communication company.

1947 – nationalization of foreign telecom companies to form posts, telegraph and telephone.

1985 – department of telecommunication established.

1986 – conversion of DOT into two wholly state owned companies VSNL for international telecommunications and MTNL for services and metropolitan areas.

1989 – the telecom commission was constituted.

1994 – national telecom policy created.

1995 – entry of GSM in India triggering telecom revolution. BPL mobile services launched.

1997 – telecom regulatory authority of India formed in the month of January.

1999 – NTP-99. National telecom policy with reformed goals set.

2000- BSNL was created. A new entity to operate services in different parts of the country as a public sector unit.

2004 – broadband policy launched.

2005 – ILD and NLD annual license fees reduced from 15% to 6%.

2008 – 3G guidelines issued, spectrum allocation through auction, foreign players allowed to bid.

2009 – TRAI announces rule and regulations to be followed for mobile number portability .

2010 – completed the auction of 3G and BWA spectrum.

2013 – proposed auction of 4G.

## Chief companies of Indian telecom industry and year of establishment

New technologies, new regulation, new services, and new customer demands: there is no doubt that the telecom sector is in chaos. Following are the major companies which are ruling the Indian telecom market :

Bharti airtel – 1985

BSNL – 2000

Vodafone essar – 2007

Reliance communications – 1999

Idea cellular – 1995

Tata communications – 1986

Tata teleservices – 1996

Aircel – 1999

MTNL – 1986

TTML -1998

TATA DOCOMO

UNINOR – 2009

Videocon telecommunications ltd – 2008

## Pie chart Companies with their market share in 2012-

Companies and their market share in 2012

MTNL

0. 60%

Videocon

0. 60%

Uninor

4. 20%

Aircel

6. 90%

TATA DOCOMO

9. 20%

BSNL

10. 80%

Idea cellular

11. 90%

Vodafone

16. 40%

Reliance communications

16. 70%

Bharti Airtel

19. 50%

Nutshell conclusion of the pie-chart

There are four major companies in telecom industry. Airtel, reliance, vodafone, idea and BSNL.

Airtel is a market leader with 19. 50% market share and reliance on the 2nd place with 16. 40% market share.

## Major players in the Indian telecom market

Since the liberalization and the privatization of the Indian telecom market, public telecom operators as well as domestic and foreign private telecom operators have invested in various submarkets of the Indian telecom market.

Though the Indian telecom market has an vast number of telecom operators.

The major telecom players discussed are from the following categories:

Public telecom operators

ii. Domestic private telecom operators

Public telecom operators add upto a large number in the county. However, following are some of the most vital public telecom operators:

Bharat Sanchar Nigam Limited (BSNL) was formed on October 1, 2000 by corporatization of the former Department of Telecom Services and Department of Telecom Operations. BSNL is a government of India owned Public Sector Undertaking (PSU). It is the largest PSU in the country and serves the entire length and breadth of India. The main functions of BSNL include planning, engineering, installation, maintenance, management and operation of voice and non-voice telecommunications services all over the country. It has launched a nationwide mobile phone service under the brand ‘ CellOne’ and internet telephony services under the brand name ‘ Webfone’. BSNL provides fixed, internet and cellular services in the country.

Videsh Sanchar Nigam Limited (VSNL) was the exclusive international telephony provider of India till the government opened the international long distance service market for private players on 1st April 2002, two years ahead of schedule. On 13th of February 2002 VSNL was privatized by the drop of government equity to 26% percent and the transfer of the management to the original business corporation Tata group. VSNL provides international telecom services and value added services.

Mahanagar Telephone Nigam Limited (MTNL) provides fixed, internet and cellular services in the metropolitan cities of Mumbai and Delhi. It provides cellular service in the metros of Delhi and Mumbai under the brand ‘ Dolphin’. However, there is a high prospect of merger of MTNL with BSNL in the future.

Indian Telecom Industry Limted (ITI) was formed in 1948 and was among the first public sector undertakings to be set up by the government of India. It has seven manufacturing units spread across the country, which produce a broad range of equipment including electronic switching equipment, transmission equipment, VSAT equipment and telephone instruments of various types.

Telecommunications Consultants of India Limited (TCIL) undertakes projects in all the fields of telecommunications in India and abroad. The centre capability of the company is communication network projects, software support, switching and transmission systems, cellular services, rural telecommunications and optical fibre based backbone network. It has plans to enter the basic services market abroad through joint ventures and the internet services segment in India. There are several domestic private telecom operators in the Indian telecom market.

Some of the most important domestic private operators are discussed as follows.

Bharti Group is the largest private communication service provider in the country, across all types of licensed communication services. It focuses on different areas of business through independent joint venture companies: Bharti Cellular for cellular operations, Bharti Telenet for fixed services, Bharti-BT Internet for Internet services, Bharti BT for VSAT and WAN consultancy, Bharti Telesoft for telecom software development, Bharti International for joint ventures in global markets, Bharti Televentures for projects, and Bharti Telecom for telecom equipment development. It is the second largest player in terms of total number of subscribers from cellular and fixed services. The cellular service offered by Bharti group under the brand name ‘ AirTel’ is rated one of India’s best cellular service operator. It was also the first Indian company to provide wide-ranging telecom services outside India. It should not be surprising therefore that it is the fastest growing VSAT company in India, and its first multinational internet service provider.

BPL Group too is a service provider as well as an equipment manufacturer. The BPL Group is widely regarded as a successful, energetic business house with more than two decades of successful consumer marketing expertise. It occupies the top slot in terms of market share in all its areas of operation. The Group has five focus areas: telecom, consumer electronics, home appliances, components and power. BPL group has three companies-BPL Mobile, BPL Cellular and BPL Telecom. BPL Mobile is a joint venture between the BPL Group and France Telecom. BPL Cellular Limited is the licensee to provide cellular mobile services in the States of Maharashtra (excluding Mumbai but including Goa), Tamil Nadu (excluding Chennai but including Pondicherry) and Kerala. BPL Cellular Limited is a joint venture between, BPL, India’s number one consumer durable giant and AT&T Broadband. BPL Telecom manufactures, designs and markets high quality telecom and information technology products and solutions.

Tata Group holds leadership position in emerging markets. Tata group is the industrial corporation group in India functioning business in seven key industry sectors – Materials, Engineering, Energy, Chemicals, Consumer products, Telecommunication and Information Technology and Services.

Hutchison Whampoa, which is a unit of Hong Kong’s Hutchison Whampoa Limited, has a joint venture with the native Essar group and is one of the major cellular service provider in India’s industrial capital Mumbai under the brand name Orange. Besides Mumbai, Hutchison also provides cellular services in the Delhi region too. It is rated one of the best next to the domestic group Bharti. The Hutchison group ranks fourth in the country and the major companies under it are Hutchison Max, Sterling Cellular, Fascel and Usha Martin Telekom, all providing cellular services in different regions. In 2007 Vodafone purchased stake in hutch (Hutchison telecom international) for USD 11. 08 billion.

Reliance communication is the India’s largest private sector information and communications company, with over 100 million subscribers. It has established a pan- India, high capacity, integrated, convergent, digital network, to offer services spanning the entire infocomm value chain.

Idea Cellular is a part of the aditya birla group and has bagged fifth position in the Indian telecom market. It is a leading GSM mobile services operator in India with 67 million subscribers. Idea was the first cellular services provider to launch GPRS and enhanced data rates for GSM evolution (EDGE) in the country.

Aircel recorded highest growth of 37. 2% among operators in 2009-10. It is a joint venture between maxis communications of Malaysia and sindya securities investment pvt limited. Aircel commenced operations in 1999 and became the leading mobile operator in tamil nadu.

(References – www. bharti. com , www. Videocon. com , www. Tatadocomo. com , www. Vodafone. com , www. bsnl. co. in , www. ideacellular. com , www. tatacommunications. com , www. tatadocomo. com , www. mtnl. net. in

www. uninor. com)

## Position of Indian Telecom Sector

The Indian Telecommunications network with 621 million connections (as on March 2010) is the third leading in the world. The telecom sector is rising at a speed of 45% during the recent years. This speedy growth is possible due to diverse active and positive decisions of the Government and input of both by the public and the private sectors.  The speedy steps in the telecom sector have been make possible by liberal policies of the Government that provides simple market access for telecom equipment and a fair regulatory framework for offering telecom services to the Indian consumers at reasonable prices. Currently, all the telecom services have been opened for private contribution. The Government has taken following main initiatives for the enlargement of the Telecom Sector:

## Liberalization

## The process of liberalization in the country began in the right intense with the announcement of the New Economic Policy in July 1991. Telecom equipment manufacturing was delicensed in 1991 and value added services were declared open to the private sector in 1992, following which radio paging, cellular mobile and other value added services were opened steadily to the private sector. This has resulted in large number of manufacturing units been set up in the country. As a result most of the equipment used in telecom area is being manufactured within the country. A major step forward was the clear enunciation of the government’s intention of liberalizing the telecom sector in the National Telecom Policy resolution of 13th May 1994.

National Telecom Policy 1994

In 1994, the Government proclaimed the National Telecom Policy which defined definite chief objectives, including availability of telephone on demand, provision of world class services at rational prices, improving India’s competitiveness in global market and promoting exports, attractive FDI and stimulating domestic investment, ensuring India’s emergence as major manufacturing export base of telecom equipment and universal availability of basic telecom services to all villages. It also announced a series of specific targets to be achieved by 1997.

For more details, visit National Telecom Policy 1994

Telecom Regulatory Authority of India (TRAI)

The entry of private service providers brought with it the expected need for independent regulation. The Telecom Regulatory Authority of India (TRAI) was, thus, established with effect from 20th February 1997 by an Act of Parliament, called the Telecom Regulatory Authority of India Act, 1997, to regulate telecom services, including fixation/revision of tariffs for telecom services which were earlier vested in the Central Government.

TRAI’s mission is to create and cultivate circumstances for enlargement of telecommunications in the country in manner and at a pace, which will enable India to play a leading role in emerging global information society. One of the main objectives of TRAI is to provide a reasonable and transparent policy environment, which promotes a level playing field and facilitates fair competition. In pursuance of above objective TRAI has issued from time to time a large number of regulations, orders and directions to deal with issues coming before it and provided the required direction to the evolution of Indian telecom market from a Government owned monopoly to a multi operator multi service open competitive market. The directions, orders and regulations issued cover a wide range of subjects including tariff, interconnection and quality of service as well as governance of the Authority.

The TRAI Act was amended by a rule, effective from 24 January 2000, establishing a Telecommunications Dispute Settlement and Appellate Tribunal (TDSAT) to take over the adjudicatory and disputes functions from TRAI. TDSAT was set up to adjudicate any dispute between a licensor and a licensee, between two or more service providers, between a service provider and a group of consumers, and to hear and dispose of appeals against any direction, decision or order of TRAI.

For more details, visit, http://www. trai. gov. in/  http://www. tdsat. nic. in

## New Telecom Policy 1999

The most important landmark and instrument of telecom reforms in India is the New Telecom Policy 1999 (NTP 99). The New Telecom Policy, 1999 (NTP-99) was approved on 26th March 1999, to become effective from 1st April 1999. NTP-99 laid down a clear roadmap for future reforms, contemplating the opening up of all the segments of the telecom sector for private sector participation. It clearly recognized the need for strengthening the regulatory regime as well as restructuring the departmental telecom services to that of a public sector corporation so as to separate the licensing and policy functions of the Government from that of being an operator. It also recognized the need for resolving the prevailing problems faced by the operators so as to restore their confidence and improve the investment climate.

Key features of the NTP 99 include:

Strengthening of Regulator.

National long distance services opened to private operators.

International Long Distance Services opened to private sectors.

Private telecom operators licensed on a revenue sharing basis, plus a one-time entry fee. Resolution of problems of existing operators envisaged.

Direct interconnectivity and sharing of network with other telecom operators within the service area was permitted.

Department of Telecommunication Services (DTS) corporatized in 2000.

Spectrum Management made transparent and more efficient.

All the obligations made under NTP 99 have been fulfilled; each one of them, in letter and spirit, some even ahead of schedule, and the reform process is now accomplish with all the sectors in telecommunications opened for private competition.

For more details, visit New Telecom Policy 1999

## National Long Distance

National Long Distance opened for private participation. The Government announced on 13. 08. 2000 the guidelines for entry of private sector in National Long Distance Services without any restriction on the number of operators. The DOT guidelines of license for the National Long Distance operations were also issued.

Highlights – NLD Guidelines

Unlimited entry for carrying both inter-circle and intra-circle calls.

Total foreign equity (including equity of NRIs and international funding agencies) must not exceed 74%. Promoters must have a combined net worth of Rs. 25 million.

Private operators will have to enter into an arrangement with fixed-service providers within a circle for traffic between long-distance and short-distance charging centers’.

Seven years time frame set for rollout of network, spread over four phases. Any shortfall in network coverage would result in encashment and forfeiture of bank guarantee of that phase.

Private operators to pay one-time entry fee of Rs. 25 million plus a Financial Bank Guarantee (FBG) of Rs. 200 million. The revenue sharing agreement would be to the extent of 6%.

Private operators allowed to set up landing facilities that access submarine cables and use excess bandwidth available.

Licence period would be for 20 years and extendable by 10 years.

## For more details, visit National Long Distance

## International Long Distance

In the field of international telephony, India had agreed under the GATS to review its opening up in 2004. However, open competition in this sector was allowed with effect from April 2002 itself. There is now no limit on the number of service providers in this sector. The licence for ILD service is issued initially for a period of 20 years, with   automatic extension of the licence by a period of 5 years. The applicant company pays one-time non-refundable entry fee of Rs. 25 million plus a bank guarantee of Rs. 250 million, which will be released on fulfillment of the roll out obligations. The annual licence fee including USO contribution is @ 6% of the Adjusted Gross Revenue and the fee/royalty for the use of spectrum and possession of wireless telegraphy equipment are payable separately. At present 24 ILD service providers (22 Private and 2 Public Sector Undertaking) are there. As per current roll out obligations under ILD license, the licensee undertakes to fulfill the minimum network roll out obligations for installing at least one Gateway Switch having appropriate interconnections with at least one National Long Distance service licensee. There is no bar in setting up of Point of Presence (PoP) or Gateway switches in remaining location of Level I Taxes. Preferably, these PoPs should conform to Open Network Architecture (ONA) i. e. should be based on internationally accepted standards to ensure seamless working with other Carrier’s Network.

For more details, visit International Long Distance

Universal Service Obligation Fund

Another major step was to set up the Universal Service Obligation Fund with effect from April 1, 2002. An administrator was selected for this reason. Subsequently, the Indian Telegraph (Amendment) Act, 2003 giving constitutional status to the Universal Service Obligation Fund (USOF) was passed by both Houses of Parliament in December 2003.  The Fund is to be utilized exclusively for meeting the Universal Service Obligation and the balance to the credit of the Fund will not lapse at the end of the financial year. Credits to the Fund shall be through Parliamentary approvals. The Rules for administration of the Fund known as Indian Telegraph (Amendment) Rules, 2004 were notified on 26. 03. 2004.

The resources for implementation of USO are raised through a Universal Service Levy (USL) which has presently been fixed at 5% of the Adjusted Gross Revenue (AGR) of all Telecom Service Providers except the pure value added service providers like Internet, Voice Mail, E-Mail service providers etc. In addition, the Central Govt. may also give grants and loans. An Ordinance was promulgated on 30. 10. 2006 as the Indian Telegraph (Amendment) Ordinance 2006 to amend the Indian Telegraph Act, 1885 in order to enable support for mobile services, broadband connectivity, general infrastructure and pilot project for new technological developments in rural and remote areas of the country. Subsequently, an Act has been passed on 29. 12. 2006 as the Indian Telegraph (Amendment) Act 2006 to amend the Indian Telegraph Act, 1885.

USFO has initiated action to bring mobile services within the ambit of Universal Service Obligation Fund (USOF) activities. Under this initiative, 7387 mobile infrastructure sites are being rolled out, in the first phase, across 500 districts and 27 states of India. This scheme will provide mobile services to approximately 0. 2 million villages which where hitherto deprived of the same. As on 30th June 2010, 7183 shared towers have been set up under the First Phase of the scheme. The USOFof DOT has proposed to set up about 10, 128 additional towers in order to extend the mobile coverage in other uncovered areas under the Second Phase of the Scheme.

For more details, visit Universal Service Obligation Fund

## Unified Access Services

Unified access license regime was introduced in November 2003.  Unified Access Services operators are free to provide, within their area of operation, services, which cover collection, carriage, transmission and delivery of voice and/or non-voice messages over Licensee’s network by deploying circuit, and/or packet switched equipment. Further, the Licensee can also provide Voice Mail, Audiotex services, Video Conferencing, Videotex, E-Mail, Closed User Group (CUG) as Value Added Services over its network to the subscribers falling within its service area on non-discriminatory basis. The country is divided into 23 Service Areas consisting of 19 Telecom Circle and 4 Metro Service Areas for providing Unified Access Services (UAS). The licence for Unified Access Services is issued on non-exclusive basis, for a period of 20 years, extendable by 10 years at one time within the territorial jurisdiction of a licensed Service Area. The licence Fee is 10%, 8% & 6% of Adjusted Gross Revenue (AGR) for Metro and Category `A, Category `B and Category `C Service Areas, respectively. Revenue and the fee/royalty for the use of spectrum and possession of wireless telegraphy equipment are payable separately. The frequencies are assigned by WPC wing of the Department of Telecommunications from the frequency bands earmarked in the applicable National Frequency Allocation Plan and in coordination with various users subject to availability of scarce spectrum.

For more details, visit (CMTS & Unified Access Service)

## Internet Service Providers (ISPs)

Internet service was opened for private participation in 1998 with a view to encourage growth of Internet and increase its penetration. The sector has seen tremendous technological advancement for a period of time and has necessitated taking steps to facilitate technological ingenuity and provision of various services. The Government in the public interest in general, and consumer interest in particular, and for proper conduct of telegraph and telecom services has decided to issue the new guidelines for grant of licence of Internet services on non-exclusive basis. Any Indian company with a maximum foreign equity of 74% is eligible for grant of licence.

## Broadband Policy 2004

Recognizing the potential of ubiquitous Broadband service in growth of GDP and enhancement in quality of life through societal applications including tele-education, tele-medicine, e-governance, entertainment as well as employment generation by way of high-speed access to information and web based communication; Government has announced Broadband Policy in October 2004. The main emphasis is on the creation of infrastructure through various technologies that can contribute to the growth of broadband services. These technologies include optical fibre, Asymmetric Digital Subscriber Lines (ADSL), cable TV network; DTH etc. Broadband connectivity has been defined as with the minimum speed of 256 kbps. It is estimated that the number of broadband subscribers would be 20 million by 2012. With a view to encourage Broadband Connectivity, both outdoor and indoor usage of low power Wi-Fi and Wi-Max systems in 2. 4 GHz-2. 4835 GHz band has been delicensed. The use of low power indoor systems in 5. 15-5. 35 GHz and 5. 725-5. 875 GHz bands has also been delicensed in January 05.  The SACFA/WPC clearance has been simplified.  The setting up of National Internet Exchange of India (NIXI) would enable bringing down the international bandwidth cost substantially, thus making the broadband connectivity more affordable.

The prime consideration guiding the Policy includes affordability and reliability of Broadband services, incentives for creation of additional infrastructure, employment opportunities, induction of latest technologies, national security and brings in competitive environment so as to reduce regulatory interventions.

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