

## INDIAN TELECOM SERVICES: NATIONAL POLICIES AND GROWTH

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### Abstract

The Indian Telecommunications network with 996.49 million connections (as on 30 September 2015) is the third largest in the world. This rapid growth is possible due to various proactive and positive decisions of the Government and contribution of both by the public and the private sectors. India telecom sector has emerged as one of the fastest growing economies in the world today. One of the sectors that has shown the signs of profitability and contributed significantly to the country's economy is the telecom industry. In fact, the Indian telecom market has gained recognition as one of the most lucrative markets globally. The telecom industry has been divided into two major segments, that is, fixed and wireless cellular services. for this report In the backdrop of all these developments the present paper makes an attempt to: knowing the telecom policies, to understand the growth of telecom services.

**Key Words: Telecom, Growth, Services and Policies.**

### 1. INTRODUCTION

The telecom services have been recognized the world-over as an important tool for socio-economic development for a nation. It is one of the prime support services needed for rapid growth and modernization of various sectors of the economy. Indian telecommunication sector has undergone a major process of transformation through significant policy reforms, particularly beginning with the announcement of (National Telecom Policy) NTP 1994 and was subsequently re-emphasized and carried forward under (National Telecom Policy) NTP 1999. Driven by various policy initiatives, the Indian telecom sector witnessed a complete transformation in the last decade. It has achieved a phenomenal growth during the last few years and is poised to take a big leap in the future also.

#### 1.1 Status of Telecom Sector

The Indian Telecommunications network with 996.49 million connections (as on 30 September 2015) is the third largest in the world. This rapid growth is possible due to various proactive and positive decisions of the Government and contribution of both by the public and the private sectors. The rapid strides in the telecom sector have been facilitated by liberal policies of the Government that provides easy market access for telecom equipment and a fair regulatory framework for offering telecom services to the Indian consumers at affordable prices. Presently, all the telecom services have been opened for private participation. The Government has taken following main initiatives for the growth of the Telecom Sector:

#### 1.2 Indian Telecommunications at a glance

(Data As on 30<sup>th</sup> September, 2015)

Telecom Subscribers (Wireless + Wire line)	
Total Subscribers	996.49 Million
Urban Subscribers	577.18% Million
Rural Subscribers	422.75 Million
Wired internet Subscribers	319.42% Million
Mobile devices users	300.20 Million

Source: www.Trai.gov.in

### 2. OBJECTIVES

- To knowing the telecom policies
- To understand the growth of telecom services.

**3. METHODOLOGY:** This study is based on the analysis of the secondary data published in the magazines and various websites.

### 4. REVIEW OF LITERATURE

Dr.R.Srivastava, Dr.Jatin Bhangle, K.J.Somaiya , Dr.R.Srivastava, Dr.Jatin Bhangle, K.J.Somaiya<sup>1</sup> in their work on “Role of Competition in Growing Markets: Telecom Sector”. This paper studies the booming service sector. The focus is on the cellular service providers in the country. As the topic suggests ‘the role of competition in growing markets’ an industry,



which is in the growth stage, has been identified. The theory of product life cycle is explained with emphasis on the growth stage. It then studies the marketing strategies adopted by the major players like Bharti, Reliance, Orange, Tatas etc.. It also tries to show how in the product life cycle the various service providers are trying to fit in their products and services

Dr.S.K.Sinha, Ajay Wagh<sup>2</sup> in his work on The Indian telecom sector has emerged as the fastest growing telecom market in the world. With more affordable services, increased penetration and a supportive government along with regular fall in tariffs in the sector has brought significant changes in number of consumers and usage of cellular telecom services. However, with galloping achievements, there are few challenges too, to be overcome by the Indian telecom industry to ride high on the next growth wave.

Gamie<sup>3</sup>(2008), undertook a research to explore the challenges of reaching low-income customers in developing markets. The whole study is just one interview based in which Anderson is asking question from Gurdeep Singh Operations Director with Hutchison Essar India. Now that discussion concludes that managers need to go beyond traditional approaches to serving the poor, and innovate by taking into account the unique institutional context of developing markets. In most cases, MNOs have served the poorest consumers through shared-use models such as Grameen Phone's Village phone concept in Bangladesh, due to the commonly held belief that reaching these consumers is difficult due to two key challenges – affordability and availability.

1. Dr.R.Srivastava, Dr.Jatin Bhangle, K.J.Somaiya, Dr.R.Srivastava, Dr.Jatin Bhangle, K.J.Somaiya, Role of Competition in Growing Markets: Telecom Sector, Indian journal of marketing, Volume XXXVI • Number 9 • September 2006.
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Dr. (Mrs) S.Banumathy and S.kalaivani<sup>4</sup> (2006) in their thought “Customers’ Attitude Towards Cell phone in Communication System” Communication plays an indispensable role in promoting effective, social, economic, political and personal developments. Cellular telephone services have achieved great commercial success, because the users recognize that mobile telephone access can improve productivity and enhance safety. Increase in demand and the poor quality of existing telecommunication services led mobile service providers to find out ways to improve the quality of service and to support more users in their systems. The present study has been made to identify the customers’ attitude towards cell phone services in communication system. Many private service providers have entered in this line, which has brought heavy competition in the market. Hence, it is necessary to find out the customers’ attitude in communication services, which could be useful to formulate new strategies, policies and market the communication services in a better way. The data was collected from 300 respondents to find out the reasons for choosing the cell phone service, viz., prepaid/postpaid scheme, and landline connection/disconnection, knowledge about the facilities of cell phone, SMS, changing service providers and its position. The level of satisfaction of customers in communication services have also been measured and analyzed. The survey indicates that the customers are satisfied with the services and there exists some problems, which deserve the attention of the cell phone service providers.

Shankar<sup>5</sup> (2006) This article examines the emergence of innovation and value creation for enhancing customers' experience, as a result of increasing competition in the Indian telecom industry during the late 1990s and early 2000s. The report provides a detailed account of the evolution of the Indian telecom industry. It traces various developments in the industry before, during and after the liberalization of the Indian telecom sector. It also provides information about the increasing popularity of cellular services, which led to the emergence of several private telecom operators like Bharati Tele Ventures, Hutchison Telecom, Idea Cellular Ltd, Reliance Telecom Ltd, etc.

1. Dr. (Mrs) S.Banumathy and S.kalaivani in his thought Customers’ Attitude Towards Cell phone in Communication System, journal of marketing, **Volume XXXVI • Number 3 • March 2006.**
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## **5. GROWTH OF TELECOM SERVICES**

### **5.1 Rural Telephony – Connecting the Real India**

With the urban markets fast reaching their saturation points for telecom services, especially the voice telephony services, the vast rural market holds a huge potential to drive the future growth of the telecom companies. In fact, the teledensity in rural areas is just about 15%, which reflects the extent of opportunity left untapped for telecom companies, going forward. Further, the government initiatives for increasing telecom connectivity in rural areas are also likely to aid the telecom service providers to extend their services in the unconnected rural areas. Initiatives such as USO Fund and infrastructure sharing would be instrumental in increasing the coverage of telecom services in the far-flung areas. Penetration in rural areas will not only support the growth of telecom service providers but also boost demand for equipment and telecom infrastructure.

### **5.2. 3G and 4G Services – Potential Growth Driver**

The 3G services will not only facilitate business through provision of high-speed data and content rich services but also will play a pivotal role in bridging the urban-rural divide by facilitating faster mobile deployment in rural areas. Introduction of 3G will be beneficial to the Indian BPO industry by increasing their competitiveness. The inherent benefits of economies of scale and faster time to market of 3G services will benefit service providers. The high-end customers may get attracted to these services and provide a first-mover advantage to the initial entrants in the 3G space. The launch of 3G is also likely to facilitate introduction of various VAS such as video calling, gaming, high-speed Internet access and other data services, which in turn might provide some support to the falling ARPU.

The Indian government has planned to sell the spectrum for 3G services through an auction and thereby create a competitive environment that offers better services to consumers. Auction of 3G and broadband spectrum will be done through e-auctioning which shall be executed by a specialized agency to ensure transparency in the selection process. Bids would be invited from domestic, as well as foreign players. New players would also be allowed to bid which in turn is likely to usher technology innovation, increase competition, lead to prompt roll out of services and provide more choices to customers at competitive prices.

With the allotment of the 3G spectrum, the pressure on the 2G spectrum is likely to ease especially in the heavy traffic areas. Moreover, freeing 2G bandwidth might help the operators to cater to additional subscribers without significant additional investments. Given the comparatively high cost of handsets and 3G services, the deployment of 3G services is likely to be limited to high-end customers. Thus, initially the 3G spectrum is expected to be used for voice services, whereby the wireless subscribers might experience improvement in service quality. Going forward, the 3G spectrum is expected to attract major investments and open new growth avenues for the telecom sector.

### **5.3. Worldwide Interoperability for Microwave Access (WiMAX)**

In the wireless communication arena, WiMAX technology has emerged as one of the most significant developments. Deployment of WiMAX would not only enable the provision of high-speed internet services through high bandwidth spectrum but also prove to be a useful mode of communication in inaccessible terrains. WiMAX could be used as an alternative to cable and DSL for providing broadband access in rural areas and hence could be a major factor driving the growth of Indian telecom services, especially the wireless services. Moreover, it is likely to facilitate the propagation of the e-governance services such as telemedicine, e-learning et al through broadband, particularly in the rural areas. Given the fact that WiMax deployment does not require significant resources, it will also be an economically-feasible option to cater to rural communication needs.

### **5.4 Mobile Value Added Service (MVAS) – An Opportunity to Increase the ARPU**

The value added services segment is rapidly emerging as a potential revenue generator for the telecom services industry. Given that a substantial part (around 60%) of the total VAS revenue goes into the kitty of the service providers, the development of this segment is likely to offer them an opportunity to support their falling ARPU. The increasing acceptance and usage of mobile commerce services is also likely to boost the VAS segment. Mobile banking is likely to emerge as a major growth driver in the near future given the issuance of M-banking guidelines (June 30, 2008) issued by the RBI and increasing demand for this service.

The demand for new VAS services is likely to surge given that increasing number of younger generation has started using mobile services and are more inclined to adopt the VAS services. With the implementation of mobile number portability, the service providers would be encouraged to constantly develop new VAS as a service differentiator and retain their existing customers and attract new ones. The introduction of the Next Generation Networks would help in bringing down the cost

and roll out time of new MVAS and provide impetus to the growth of the VAS, going forward. Further, with reduction in prices of the feature rich handsets capable of accessing many of the VAS services the demand for the MVAS is set to increase in the future.

### 5.5 Infrastructure Sharing – A Profitable Proposition

The rapid expansion in subscriber base has brought to the fore the challenge of increasing and upgrading the telecom infrastructure to maintain quality of services. In the recent years, infrastructure sharing has emerged as a profitable proposition for both the parties involved, as for the tenant it lowers capex and opex, and for the owners, it is an additional source to earn revenue. It would lead to considerable reduction in initial set-up costs for new service providers and existing service providers planning to enter new service areas. Infrastructure sharing might assist the service providers to reduce their operating costs. The cost saving through infrastructure sharing could be passed on to the customers thereby augmenting their affordability. Further, with infrastructure sharing, the companies can reduce the time required to roll out the telecom services in the rural areas. The sharing of telecom infrastructure by companies could lead to optimum utilisation of these resources and thereby improve efficiency.

A step forward in infrastructure sharing is the proposal of TRAI to include those rural and remote areas in its purview that are not covered by wireless signals with assistance from the USO Fund.

### 5.6 Managed Service – Outsourcing in Telecom

Managed Services typically involve the outsourcing of a specific technical function or capability to a Managed Service Provider (MSP). It is an alternative to in-house management or traditional outsourcing since firms/enterprises do not have to transfer complete control over assets/operations to the MSP but rather can contract or outsource specific management challenges for a shorter period of time.

With the rapidly-growing subscriber base, managing infrastructure and networks is becoming increasingly difficult for the service providers. Therefore, many service providers have been outsourcing their infrastructure or network management operations completely or partially. Given the increasing demand for the managed services, the telecom equipment vendors could have an opportunity to take up more roles in the value chain by entering into managed service contracts.

Managed Services are fast-emerging as an attractive proposition for many enterprises that do not want to dedicate human resources and capital toward acquiring and administering technology infrastructure. It also allows the telecom service providers to focus on their core activities, to develop new and innovative products and services so as to distinguish themselves from other players in this highly-competitive market.

The service providers can gain significantly in terms of cost reduction and improved efficiency in operations from the economies of scale that an MSP can offer.

## 6. INDIAN TELECOM POLICIES

### 6.1 National Telecom Policy 1994

The **National Telecom Policy 1994** drafted by the Department of Telecommunication (DOT), Government of India, resulted from the fast change in the overall scenario of the Indian telecommunication industry. Further, the National Telecom Policy 1994 of India made a number of amendments to the preceding telecommunication policy of India. This was affected to compliment the stupendous growth of the Indian telecommunication industry. The 'Telecom Regulatory Authority of India' (TRAI) and 'Department of Telecommunication' (DOT) are the two main governing bodies of the Indian telecommunication industry.

### 6.2 The highlights of the National Telecom Policy 1994 of India are as follows

- To facilitate telecommunication for all
- Ensuring quick availability of telephone connectivity through efficient service networks
- Achieve universal service access at reasonable cost, connecting all Indian villages
- Providing world class telecommunication services
- Solving consumer complaints, resolve disputes, and special attention to be given to public interface
- To provide the widest possible range of products and services at affordable price, to all Indians
- To emerge as a major manufacturing industry and major exporter of telecommunication equipment
- To protect the defense and security interests of India

### 6.3 Some notable points of the Indian National Telecommunication Policy 1994 are as follows

- Creating world class telecommunication infrastructure to meet the communication requirements of IT, ITES, media and other IT based industry
- Easy and affordable access to basic telecommunication services across all the states of India
- Affordable and efficient basic telephony facility to each and every applicant
- Provision for world class service to all uncovered and rural areas of India
- Establishment of modern and efficient telecommunication infrastructure to meet the requirements of modern India
- Continual up gradation of the Indian telecommunication sector and provide an equal opportunity for all the telecommunication service providers doing business in India
- Strengthening R&D on telecommunication hardware and software
- Efficient and unbiased spectrum management
- Facilitating protection of the Indian defense and security systems
- Facilitating the Indian telecommunication companies to reach global standards
- Facilitate world class products and services at affordable prices
- Institutionalize the Department Of Telecommunication (DOT), Government of India and help it function as a corporate body
- To make telephone available within 48 hours of such demand
- To reach tele-density of 9.91 by the end of 31st March 2007 (which has been achieved)
- Facilitate reliable communication relay media to all telephone exchanges
- Provide high-speed data and multimedia connections using technologies like ISDN across all towns, having population strength of two lakh or more

### 6.4 The main contributing factors for the tremendous success of the Indian National Telecom Policy 1994 are as follows

- Investor friendly TRAI telecommunication policies
- Low operational cost of telecommunication industry in the domestic market
- Access to world class infrastructure at cheap cost
- Availability of huge English speaking workforce
- Availability of strong technical education amongst the majority of Indians
- Access to huge number of science and engineering graduates
- Assurance of high quality output
- Access to highly skilled workforce
- Use of innovative technologies
- High entrepreneurship skills
- Good relationship with client and expansion of existing relationships
- Huge success in overseas markets and easy creation of global brands
- Huge untapped market, across all industries especially, in IT and ITES industries
- Ever growing domestic market, especially the market in rural India offers tremendous scope
- Increased manufacturing of electronics and hardware components in India
- Aggressive of R&D in telecommunication domain
- Increased penetration of computers across all sections of Indian society
- Increased utilization of Internet
- Steady growth of the domestic software market
- Development of local language software, especially for the use of rural mass of India
- Increased use of Information Technology to increase productivity
- Increased use of Information Technology as a means of generating employment
- Increased number and quality of training facilities across India

### 6.5 The highlights of the basic telecommunication policy of India are as follows

- To facilitate telecommunication for all
- Ensuring quick availability of telephone connectivity
- Achieve universal service access at affordable price covering all Indian villages, as early as possible
- Providing world class telecommunication services



- Solving consumer complaints, resolve disputes, and special attention to be given to public interface
- To provide widest possible range of services at reasonable prices
- To emerge as a major manufacturing base and major exporter of telecommunication equipment
- To protect the defense and security interests of the country

**6.6 The tenth plan meets the need for new telecom policy of the Indian communication industry, which is as follows**

- Creating world class telecommunication infrastructure to meet the communication requirements of IT, ITES, media and other IT based industry
- Easy and affordable access to basic telecommunication services across all the states of India
- Affordable and efficient basic telephony facility to each and every applicant
- Provision for world class service to all uncovered and rural areas of India
- Establishment of modern and efficient telecommunication infrastructure to meet the requirements of modern India
- Continual up gradation of the Indian telecommunication sector and provide an equal opportunity for all the telecommunication service providers doing business in India
- Strengthening R&D on telecommunication hardware and software
- Efficient and unbiased spectrum management
- Facilitating protection of the Indian defense and security systems
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- Institutionalize the Department Of Telecommunication (DOT), Government of India and help it function as a corporate body
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- Facilitate reliable communication relay media to all telephone exchanges
- Provide high-speed data and multimedia connections using technologies like ISDN across all towns, having population strength of two lakh or more

**6.7 The Achievements of National Telecom Policy 1994 and Need for New Telecom Policy initiated the following developments,**

- Friendly Government of India economic and telecommunication policies
- Low operational cost
- Availability of world class infrastructure at a much cheaper cost
- Availability of huge English speaking workforce
- Prevalence of strong technical education amongst the majority of educated Indians
- Large number of science and engineering graduates
- Assurance of high quality output
- Highly skilled workforce
- Usage of innovative technologies
- Effective and efficient entrepreneurship skills
- Good client and service provider's relationships
- Creation of global brands
- Huge scope of business across all industries especially, in IT and ITES industries
- Expansion of existing relationships
- Ever growing domestic market, especially the rural market
- Huge success in overseas markets
- Increased electronics and hardware manufacturing in India
- Aggressive promotion of R&D in telecommunication
- Increased penetration of computers
- Increased utilization of Internet
- Growth of domestic software market
- Development of local language software, especially for the use in rural- India
- Use of Information Technology to increase productivity
- Use of Information Technology as a means of generating employment



- Increased number and quality of training facilities across India

## CONCLUSION

The Telecom services providing a lot of opportunities, emerging new trends but at the same time a lot of risk also there in telecom sector. With its ongoing all round efforts in building up the economy, the country is touch the figure of 996.49 million total telecom subscribers by 30 September 2015 which is good sign to make Indian telecom network, the third largest in the World.

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