

TELECOM SERVICES: EMERGING TRENDS, OPPORTUNITIES AND RISK

Dr.M.Prasanna Kumar

Associate Professor, Department of MBA, Sri Revana Siddeshwara Institute of Technology, Bangalore.

Abstract

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: understand with the good opportunities in the telecom services, how to face the risk in the telecom services, the emerging trends that are being followed in present scenario in telecom services.

Key Words: Service Marketing, Opportunities, Risk, Emerging Trends.

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.

Status of Telecom Sector

The Indian Telecommunications network with 931.95 million connections (as on 28 February 2014) 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:

Indian Telecommunications at a Glance

Data As on 28th February, 2014)

Telecom Subscribers (Wireless + Wireline)	
Total Subscribers	931.95 Million
Urban Subscribers	556.99% Million
Rural Subscribers	374.96 Million
Overall Teledensity	75.23 % Million
Urban Teledensity	146.47 % Million
Rural Teledensity	43.67 % Million
Total Wireline Subscribers	37.96 Million
Urban Wireline Subscribers	27.38 Million (72.13 %)
Rural Wireline Subscribers	10.58 Million (27.87 %)

Total Broadband Subscribers	56.90 Million
Wired Subscribers	14.80% Million
Mobile devices users	42.81 Million
Fixed wireless	0.39 Million

Source: www.Trai.gov.in

Objectives

1. To understand the opportunities in telecom services.
2. To understand the risk in telecom services
3. To knowing the emerging trends in telecom services

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

Review of Literature

Dr.R.Srivastava, Dr.Jatin Bhangle, K.J.Somaiya , Dr.R.Srivastava, Dr.Jatin Bhangle, K.J.Somaiya¹ 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 Wagh² 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.

Gamie³ (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.**
 2. Dr.S.K.Sinha and Ajay wagh, Analyzing Growth of Cellular Telecom Sector and Understanding Consumer's Preferences and Choices on the Use of Cell phone, Indian journal of marketing, **Volume XXXVIII • Number 9 • September 2008.**
 3. Anderson, Gamie, “Developing a route to market strategy for mobile communications in rural-India” 2008 (<http://www.emeraldinsight.com/Insight/viewContentItem.do?jsessionid=236E2B6B45CF101465D540FD4401AE B9?contentType=Article&hdAction=lnkhtml&contentId=1747159&history=true>) [Viewed 10/3/09]

Dr. (Mrs) S.Banumathy and S.kalaivani⁴ (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.

Shankar⁵ (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.**
 2. Shankar, Ravi, “Innovation in the Indian Telecom Industry”, Feb,2006(<http://www.emeraldinsight.com/Insight/viewContentItem.do;jsessionid=41283861473947BDB028FACA82763465?ContentId=873964&history=true>) [Viewed 28/3/09].

1. Emerging Trends in Telecom Services

Telecom is a booming industry. GSM alone (which is about 85% of world-wide wireless market) contributes about \$ 3 Billion revenue every day. While all sectors of economy are getting badly impacted by the economic recession and liquidity crunch, impact on telecom is a little less severe, at least in countries like India & China. Some people even argue that as the organizations tighten their belts and reduce their expenditures, it may possibly lead to accelerated growth in some segments of telecom industry. Tightening economic conditions are likely to make ‘work from home’ preferred option – both for employers as well as employees. At the same time, video conferencing is becoming preferred mode of communication & relation building with customers. All this is resulting in need for better & reliable communication leading to accelerated up-gradation to IP networks, further penetration of Fibre in the access network and rapid development & deployment of other associated technologies..

Keeping the above discussion as the back-drop, this article looks at the emerging trends in Telecom industry in medium term horizon (3-5 years) from the perspective of 3 key players – Customers (end-users) who buy the services, Operators who sell these services and Equipment **vendors** who make these services technically feasible and available.

1.1 Customers

Customers are always looking for value for money – high quality services & abundant choice at a minimal cost! Key attributes are:

1. **Quality:** Crystal clear quality in all modes of communication, at all times
2. **Quantity:** Variety of services – Voice, Data, Video & Mobility – available at the same time, from the same device and at high data speeds
3. **Cost:** Customers have got used to the declining rates of telecom services and expect the trend to continue in future as well.

1.2 Operators

Some of the key challenges/opportunities for the operators are

1. **Customer care** – Provide pleasant user experience and abundant choice in technologies and product packages
2. **Outsourcing:** Outsource Network and IT functions to focus on core aspects of their business and strategic initiatives
3. **Inside building coverage** – Ensure good coverage inside buildings even if it means sharing network resources with competitors as nearly 70% of the voice & data calls are expected to originate inside the buildings in the coming years
4. **Coverage/Penetration in Rural areas** – Adapt technology to make communication in rural areas profitable
5. **Fuel bill reduction** – Fuel & Power contribute about 25% of operator's OPEX. Operators have great interest in technologies which reduce this expense as it improves their bottom line as well as earns approval from environmental considerations.

1.3 Network Vendors & Technologies

Technology advancements are driven by the applications which customers find appealing and solve the operational issues faced by operators. Some of the key ones are:

Triple Play, Mobility & Coverage: Customers want to be able to use the triple play services (Voice, Data and Video) all the time and everywhere – indoor or outdoor. Multi-billion dollars are being invested in development and enhancement of mobile technologies like 3G, WiFi, WiMax & LTE. Enhanced need for Indoor coverage is leading to development of Femto cells. Fixed Mobile Convergence (FMC) is also gaining increased importance as it makes sense to switch from Mobile access to wire line access as soon as wire line access becomes available

IP Technology: Development of MPLS technology which provides differentiated and assured Quality of Service (QoS) has overcome the best effort nature of IP telephony. Advancements in IP technology have also opened up new modes of communications like web-collaboration, intelligent call-centre applications etc. High quality video conferencing which provides almost a real interaction experience is likely to become killer application. DWDM enables very high bandwidth over fibre. Since high bandwidth needs to be available at the customer premises as well, Fibre is going to penetrate deeper in the access network as well.

Machine to Machine Communications: There are physical limits to the number of telephone connections that can be sold to human beings! Machine to machine communication can potentially increase it in the order of billions! For this to be commercially successful, it requires standardization of protocols & simplicity of operation.

2. Opportunities in Telecom Services

2.1 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.

2.2. 3G Services – Potential Growth Driver

Currently the 3G deployment in India is at a very nascent stage. In fact, 3G services have been launched very recently (February 2009) in India. The 3G services will be instrumental in stimulating future growth of the telecom industry. 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. In India, where mobile cellular penetration is much higher than that of fixed telephone lines (nearly 30 mobile cellular subscriptions per 100 inhabitants as compared with less than 4 fixed telephone lines per 100 inhabitants in 2008), mobile broadband through 3G will drive broadband penetration. 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.

2.3. 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.

2.4 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.

2.5 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.

2.6 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.

3. Risk in Telecom Services

There are various risks in telecom service those are:

3.1 Failure to Shift the Business Model from Minutes to Bytes

As value shifts from minutes of usage to volumes of data, operators need to move away from their legacy strategies focused on customer retention, which have had the effect of commoditizing the value of minutes and bandwidth in customers' eyes.

3.2. Disengagement from the Changing Customer Mindset

With global technology brands now top of mind for consumers, and technology cycles quickening, operators need to understand and respond to fast-changing customer expectations and behaviors if they are to fight off the competitive threat from over-the-top providers.

3.3. Lack of Confidence in Return on Investment

While operators have proved adept at managing capital investment and balancing it flexibly with free cash flow and dividends, it is increasingly clear that tight capex control can limit their ability to grow new services quickly. So they need to maintain their commitment to investing in growth opportunities, while tracking technology and consumer developments closely to ensure they target their money at the right areas at the right time.

3.4. Insufficient Information to Turn Demand into Value

To drive profitable customer propositions and improve their time-to-market for new services, operators need accurate, timely and comprehensive business intelligence and customer analytics, underpinned by aligned and integrated operational support and billing systems.

3.4. Lack of Regulatory Certainty on New Market Structures

It is increasingly crucial for governments and regulators to adopt pro-investment policies to sustain the sector's momentum and for operators to form workable stances on a range of issues, including the increasing relationship between fixed and mobile policies. At the same time, all these groups must work together to achieve greater clarity over regulatory approaches.

3.5. Failure to Capitalize on New Types of Connectivity

New types of connectivity such as machine-to-machine (M2M) are redefining the concept of connectivity, requiring operators to adopt new strategies. Instead of continuing to think of connections in human terms, operators need to develop new understandings of connectivity and target new growth areas.

3.6. Poorly Formulated M&A and Partnership Strategy

Though M&A activity has accelerated through 2010–11, its nature and risks have changed. Footprint control increasingly takes precedence over footprint growth, and political, macroeconomic and regulatory risks are increasing. But acquisitions and partnerships are essential for success in emerging market segments such as mobile advertising and cloud computing.

3.7. Failure to Define New Business Metrics

The metrics and key performance indicators (KPIs) that operators use to manage their operations internally and communicate their performance and prospects externally have not kept pace with the shift in business models from minutes to bytes. Operators urgently need to define a new and different set of metrics that puts the customer first.

3.8. Privacy, Security and Resilience

Customers place more trust in operators than in social networks, regarding operators as security guarantors across a range of services. Yet they still hold operators responsible for threats from third parties even for mobile malware attacks and rogue apps. Operators should work closely with governments to clarify their responsibilities in areas such as anti-terrorism and content for children, and collaborate with suppliers and partners to tackle privacy and security issues in new service areas such as cloud security and mobile apps.

3.9. Lack of Organizational Flexibility

With their organizational structures subject to forces such as the shift to data services, the rise of partnering and the rising imperative for speed-to-market, operators have already made significant changes to their organizations. But more are needed. Operators now need to align their business units to maximize the economies of scale and scope in their geographic footprints while reconciling the competing forces of geographic sensitivity and global strength.

Conclusion

The Telecom services providing a lot of opportunities, emerging new trends but at the same times a lot of risk also there in telecom sector. In spite of rapid growth, the tele-density is still 75.23% millions which is very good when compared with the previous year population. With its ongoing all round efforts in building up the economy, the country is touch the figure of 93.1.95 million total telecom subscribers by 28 February 2014 which is good sign to make Indian telecom network, the third largest in the World.

Reference

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.
2. Dr.S.K.Sinha and Ajay wagh, Analyzing Growth of Cellular Telecom Sector and Understanding Consumer's Preferences and Choices on the Use of Cell phone, Indian journal of marketing, Volume XXXVIII • Number 9 • September 2008.
3. Anderson, Gamie, “Developing a route to market strategy for mobile communications in rural-India”2008.
4. 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.
5. Shankar, Ravi, “Innovation in the Indian Telecom Industry”, Feb 2006.

Web Sites

1. <http://traai.gov.in/>.
2. <http://www.consultingnetwork.co.in/emerging-trends-in-telecom-by-ashutosh-madan/416/>.
3. <http://www.dnb.co.in/IndianTelecomIndustry/issues.asp>.
4. <http://www.ey.com/GL/en/Industries/Telecommunications/Top-10-risks-in-telecommunications-2012>.