

Strategies and Customers' Response in Telecommunication Industry

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Abstract

The Telecommunications industry today is a key enabler of productivity across economies and societies. The Telecom industry is not only a significant contributor towards the economic activities of countries, but also towards the growth of other industries. In recent times, developing nations have witnessed significant transformation within this sector due to the impact it has had on their economies. The booming and emerging economies of India have been impacted the most by the rapid growth of the Telecom industry in the past decade. The aim of this paper is to research the strategies and customer's response affecting the Telecommunication industry growth, by analyzing data for Indian Telecom industries. Factors such as "Number of Subscribers", "Technology Innovation" and "Government Regulation and Policies" were found to be the most influential and contributing factors towards the growth of the Telecom industry in India. Analysis based on historical statistics revealed that, there is no direct impact on the industrial revenue from the "number of Subscribers" factor, unlike the "Technology Innovation" factor.

Key Words: Telecommunications, Telecom Industry, Competitiveness, Telecom revenues Telecom Subscribers, Telecom Industry Policies and Regulations

Introduction

In today's information age, the telecommunication industry has a vital role to play. Considered as the backbone of industrial and economic development, the industry has been aiding delivery of voice and data services at rapidly increasing speeds. The telecom industry is an interesting industry to study, not only due to its volatile nature in terms of technological breakthrough and its policies, but also due to the high growth rate of this industry over the past few decades and the significant contribution of the industry to the economies of this nation. India has become the most competitive and one of the fastest growing telecom markets with an expected growth rate of over 26% and generated employment opportunities for about 10 million people (PTI, 2007). The number of subscribers were added at a rapid pace, which adds to the growth and importance

of the industry. Though it has made the telecom one of the most lucrative sectors today, it has also had a negative effect on the other hand. For instance, India recently witnessed a scandal in the telecom ministry that has changed the nature and environment of foreign investment flowing into the country (Kate and Leila, 2012). No doubt the government has taken certain policy initiatives, which include the creation of the

Universal Service Obligation Fund, for improving rural telephony. These measures are expected to improve the rural tele-density and bridge the rural-urban gap in tele-density.

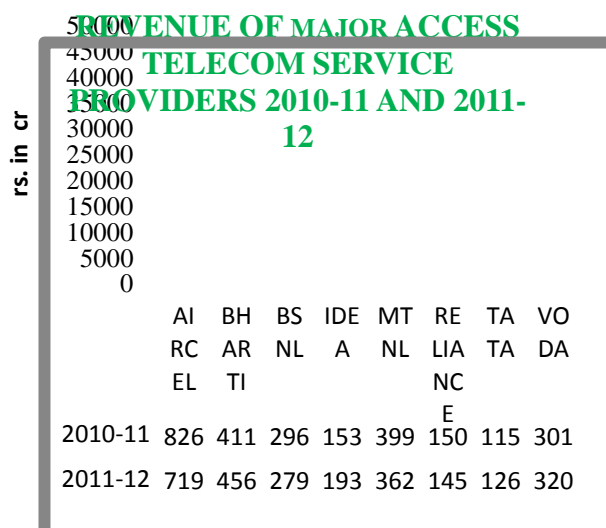


Figure:1 Source: TRAI (Annual Report-2011-12) Factors Affecting the Growth of the Telecom Industry and Their Current State :

Innovation was the key factor for the revenues of the telecom industry in the western countries. Today, however, new wireless applications, low-cost manufacturing innovations, and handset design are some of the areas in which the Asian countries are out-investing the United States and are seen resulting bottom-line impacts to their economies (National Research Council, 2006). In emerging markets, factors such as customer service, regulations and policies are some of the main factors that are shaping the industry.

1. Performance of Operators

Roma Mitra Debnath and Ravi Shankar (2008) discuss the methodology used to benchmark the performances of service

providers in order to create a loyal customer base as well as to retain it, and they claim customer service is one of the factors that influences the revenue growth of the telecom industry.

2. Market Liberalization .

India has taken the privatization path in the telecommunications sector and the market is now mainly dominated by private companies with two state-run operators only.

3. Policy and Regulation Issues

The Government of India aims to develop the nation as a global telecommunication hub and provides regulatory support to the industry to achieve the goal and to propose infrastructure' status to telecom (IBEF, 2011).

4. Future of the Telecommunication Industry

Telecommunications has been and will continue to be an important foundation for innovative new industries that use telecommunications as a primary technological enabler and foundation (National Research Council, 2006). That being said, one should know that "not everything that glitters is gold". For example, the emerging markets face lacking of talented resources and intense competition in order to sustain the growth that has been observed over the past few years (Ken, 2007). The importance of regulatory and policy changes are stressed upon in order to adapt to the future and maintain the growth rate of the telecom industry in India (Manas, 2011 and USCC, 2011).

Relationship between the factors and the revenue generated by the telecom industry :

1. Role of Number of Subscribers in the Telecom Industry

From an industrial point of view, an increased number of subscribers would also stimulate the development of its related industries. An example would be the growing number of mobile phone users, which results directly on the demand for both hardware and software products. According to Porter's Five Forces theory, the growth of subscriber numbers can be related to the strength required to compete with existing competitors. Another potential benefit that results from the steady growth of number of subscribers in the telecom industry is that, it gathers crucial customer related information. Operators maintain databases with personal information and choice, which is collected during the registration and cancellation processes. Customers are normally obliged to provide personal information as well as personal opinions on the product or service. This information is valuable for the company and the industry to understand better their customer's behaviors, preferences, and segmentations, which provides necessary statistics in order to improve the efficiency in marketing analysis.

2. Reasons for Increased Number of Subscribers

The dramatic increase in number of subscribers in Indian telecom industries is due to a combination of factors. The most significant factor is the technology innovation factor. For example, with the emergence of smart phones and high-speed networks, consumers are more and more attracted towards mobile devices and at the same time moving away from personal computers. Other factors contributing towards the increase in subscribers are - increasing affordability of mobile handsets and services that has lowered the entry level, and also the changing demographic profile in developing economy, which has diversified the market population.

3. Aggressively Declining Tariffs - Liberalization of

the telecom industry fuelled intense competition, which eventually resulted in price war to keep market share. Increased competition and the subsequent tariff war have acted as major catalysts for attracting more subscribers. At the same time, companies, confronted with a saturated market, had to also reduce tariffs in order to retain customers. Couple of years back, India had six major operators, but the number today grow to over fifteen. with more players waiting to enter the market. Despite the high growth of subscribers, the competition firmly has put pressure on the tariff structure. The mobile sector has experienced a sharp decline in the service rates over the years. When cellular phones were introduced, call rates were at Rs. 16 per minute in India, the tariff till end of 2010 had lowered to only Rs. 1 in (TRAI, 2010). Besides the decreased charge for incoming calls, the introduction of one-way toll waved charges for incoming calls too has led to the sharp decline in Average Revenue Per User (ARPU) and Average Margin Per User (AMPU) and this has had a negative impact on the overall revenue of the industry.

Apart from the market competition, the cost savings achieved from - continuous technology innovations, the lowering of termination charges by the Governments and the fine-tuning of operation costs (The economic times, 2009) was eventually passed on to the consumer to enjoy cheaper rates. But this placed a negative impact on the revenue of telecom industry on the other hand.

4. Revenue Structures of Telecom Services - In the

current service prices, the increased number of subscribers are mainly from those services that generate lower revenues to the industry. In general, the revenue of telecommunication can be broken up into two services, one is the traditional voice based service represented by phone calls where the tariff is declining, and the other is non-voice services such as data service that provides much higher margin. According to Credit Suisse (2011), data services provide 80% more revenue per unit capacity than that of voice services, at current pricing level with India having less than 18% of its industry revenues coming

from non-voice services. MIIT (2010) also claimed the trend for low-end telecommunication customer is still obvious. In emerging economic like India, it exhibits a marked dichotomy in terms of subscriber adoption of new services in urban markets compared to the rural markets. Therefore, not all customers are yet diving into the new higher margin data and content-based services. The rural population is not keen to pay premium charges for data and IP-based services. But in urban areas, there is an approved significant uptake. From revenue perspective, this is arguably an unsustainable position and data revenues have to start picking up to sustain the industrial revenue.

5. Implications of 'Number of Subscribers' Factor

Regardless of the high growth of subscribers' volume, the challenge for Indian telecom sectors to retain positive revenue growth is to handle the market dynamics that are driving down ARPU. This manifests in many forms - first, the policy makers need to increase better economics of scale and develop regulations to foster the industrial development and secondly, operators need to shape their strategy of market segmentation through targeted up-sell or cross-sell. In addition, rollouts of new technology like 3G services as well as increase in Internet penetration across the country is needed to boost the revenues of the industry.

6. Regulations and Policies in Telecom Industry

All industries, irrespective of the product or service, depend heavily on the support they receive from the government to survive in the market. The role of the government is seen as an essential supporter of the industry, employing a host of policies to contribute directly to the competitive performance of strategic or target industries (Porter, 1990). The telecom industry similarly enjoys the support from the Indian governments in terms of various policies and regulations that help the sector to thrive.

6.1 Policy Makers and Their Inputs

India over the last few decades shifted from a state run monopolistic structure to a market-oriented oligopolistic model. In 1999, the Indian Government established the National Telecom Policy 1999, which played a key role in shaping the sector and later in 2000 introduced the Communications Convergence Bill that setup the autonomous commission called the Communications Commission of India (CCI) that acts as the super/regulatory body to regulate telecommunications, Internet and Broadcasting sectors. The Planning Commission of India in its eleventh five-year plan for the period 2007 till 2012 stated that the approach would be towards achieving faster, broader and inclusive growth, with special attention to enhance the rural connectivity (Planning Commission, 2008).

6.2 Key Regulations

According to the report released by Ernst and Young, and FICCI (2011), The Telecom Regulatory Authority of India (TRAI) established as an independent statutory regulatory

authority is one of the key powers that advise the government in matters related to the development of telecommunication technology and the telecom industry in general. The key feature of India's regulatory regime is "transparency in industry information, an open approach and encouragement of consultation with stakeholders."

Some important regulations affecting the growth of the Indian telecom industry are:

Licensing –The Government of India in 2003 introduced the Unified Access Service (UAS) licensing regulation, which allows the service provider to offer both mobile and/or fixed services within the same license, using any technology. This regulation ensured that licenses were issued without any restriction on the number of entrants in a circle and applications were to be processed within 30 days of submission. Also, allocation of spectrum and grants for wireless licenses was subject to availability and, in case UASL was not allocated spectrum due to non-availability, the licensee had to ensure to rollout services using fixed line technology (Ernst and Young, FICCI, 2011).

6.3 Teldensity – In India, the Universal Service Obligation Fund (USOF), which came into effect in 2002, was introduced to provide access to telegraph services to people in rural and remote areas at affordable prices. The USOF was estimated to hold around \$ 3.6 billion at the end of FY10 (IANS, 2010). However, rural teldensity was at 28.4%, whereas urban teledensity was about 137.3%, resulting in a huge digital divide (Ernst and Young, FICCI, 2011). The USOF has a long way to go to improve the rural telephony connectivity.

6.4 Consumer Affordability - For any developing nation, the affordability of products and services is a key factor for the growth of the industry. Indian telecom markets have some of the lowest tariffs in the world, with a large majority of people using low-cost mobile handsets.(Ernst and Young, FICCI, 2011).The telecom industry managed to introduce low costs due to the increase in subscriber base and teledensity. Factors such as transparent regulation, easy market entry, lower tax burden, and low risk enable the creation of policy and a regulatory approach that helps to drive down tariffs (Ernst and Young, FICCI, 2011).Affordability should not however compromise on the quality of the service or the product and is driven by policy and regulatory approach and operator strategies.

7. Technological Innovations

7.1 Technology as a Growth Factor

The telecom-equipment market in India is growing at a rapid pace and competing globally for market share. The telecom infrastructure in India has seen tremendous advancement in the past few decades. Echoing the market growth, most of the global leading telecom-equipment manufacturing firms have started their operations in India. This has facilitated the growth of infrastructure; however, it has a long way to go before the

benefits of these technologies can reach every remote place in this country.

7.2 The Future of Technology and its Contribution to the Growth of the Industry

Technological innovations in 3G mobile technology is capable of delivering broadband content that includes rich multimedia services such as video calling, video on demand, location based services and remote access / VPN applications. Also next generation technologies such as LTE (Long Term Evolution), Mobile WiMAX or 4G networks are expected to drive the wireless services in the future. Applications such as IPTV and Mobile TV will be the beneficiaries of such technological innovations. Investments in Broadband by the telecom companies are growing rapidly in India. The Department of Telecom in the Indian government has formulated the Broadband Policy 2004, which envisions the creation of a framework through various access technologies such as optical fiber, digital subscriber lines (DSL) on copper loop, cable television networks, satellite media, terrestrial wireless and future technologies (Ernst and Young, FICCI, 2011). According to Booz & Company (2010), it is estimated that a 10% increase in broadband penetration translates to a 1.5% increase in labor productivity in a country. Also, a 10% increase in broadband penetration leads to a 1.3% increase in GDP (INTUG, 2010). This shows that an investment in technology does translate to the growth of the revenues in the telecom industry.

Conclusion :

Today's telecommunications industry is one of the biggest contributors to the growth of the economy, more so in the developing countries. Apart from contributing in terms of revenue, it also influences the growth and progress of many other sectors such as Health, Education, E-Governance, Rural development, etc. Government of India have recognized the influence and the importance of this industry, which is evolving at a rapid pace. Though India has been, and is, continuously trying to help the industry by bringing in reforms and adapting their policies and regulations, there is still a long road ahead before the nation benefit to the fullest extent from the telecom industry.

This Paper, while understanding and analyzing the contributing factors towards the growth (revenue) of the telecom industry in India, has also compares the competitiveness of these factors. Some of the findings such as the contribution of Government policies and regulations to the revenue generated by Indian telecom companies were not only interesting observations but also thought provoking. In the end, there is no "one best solution" that exists to improve the growth and revenues of telecom industry. The Indian government is focusing on the reach of this

industry to rural and remote areas within the country to help improve the connectivity and basic infrastructure. The future of the telecom industry is one filled with excitement and constant evolution. With all the new technologies and their applications that are coming in, "this is just the beginning". Gadgets such as

smart phones are today taking over PCs and entering the daily lives of people around the globe. It will be interesting to watch and observe the industry's contribution to developing country such as India.

REFERENCES:

- i. Arun Prabhudesal, 2011, "Top 20 Mobile Operators in World", [Online] Available from: <http://trak.in/tags/business/2011/05/27/top-20-mobile-operators-world-bharti-airtel-5-17/>
- ii. Booz & Company, 2010, "Bringing Mass Broadband to India: Roles for Government and Industry"
- iii. C114, 2006, "Marketization of Telecom tariff is accelerating"
- iv. Charles Baer and Terry Brown, 2006, "Location Quotients: A Tool for Comparing Regional Industry Compositions," *Advanced Economic and Market Analysis Group, Strategic Research and Development, Indiana Department of Workforce Development.*
- v. Chowdary T.H., 1998, "Comment: Politics and economics of Telecom liberalization in India", *Telecommunications Policy, Vol. 22, No. 1, pp. 9-22.*
- vi. D&B, 2011, "Benefits of Telecom Industry", [Online], Available at: <http://www.dnb.co.in/>
- vii. Ernst and Young, FICCI, 2011, "Enable the next wave of Telecom growth", [Online], Available at: [http://www.ey.com/Publication/vwLUAssets/Enabling_the_next_wave_of_Telecom_growth_inIndia/\\$FILE/Enabling%20the%20next%20wave%20of%20Telecom%20growth%20in%20India.pdf](http://www.ey.com/Publication/vwLUAssets/Enabling_the_next_wave_of_Telecom_growth_inIndia/$FILE/Enabling%20the%20next%20wave%20of%20Telecom%20growth%20in%20India.pdf)
- viii. IBEF, 2011, "TELECOMMUNICATIONS", *Indian Brand Equity Foundation*
- ix. Kate Holton and Leila Abboud, 2012, "License scandal rattles India's Telecom nirvana", *Reuters*
- x. Manas Bhattacharya, 2001, "Telecom Sector in India: Vision 2020", submitted to the Planning Commission of India as a part of the series - Background Papers: Vision 2020
- xi. Ministry of Statistics India, 2012, "Statistical Data-Urbanization", [Online] Available from: http://mospi.nic.in/mospi_new/site/Publications.aspx?status=1&menu_id=22
- xii. Venkatram Rahul, *An analysis of factors influencing the Telecommunication Industry growth.*
- xiii. *The Economic Times*, 2009, India, "Reason behind India's lowest tariffs in the world", [Online]. Oct 2009, Available from: http://articles.economictimes.indiatimes.com/2009-10-25/news/28402469_1_outsourcing-deal-costs-operators