

A Comparative Study on Performance of Public Sector and Private Sector Telecommunications With reference to wireless Services in India

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Abstract

Purpose – This paper seeks to explore the similarities and differences in terms of market penetration effectiveness between Public-Privateand Telecommunication sector from the dimensions of Intramural and Extramural motivation and constraints.

Design/methodology/approach-

Much national and International data is collected on a periodic basis over time. Applied Analytical research for using facts and information already available and analyse these to make a critical evaluation. It will be difficult to find exactly the kind of data needed; there is a vast amount of secondary data out there.

Findings – There are a number of common themes applicable to both sectors. Several constraints can be resolved through the provision innovative and creative techniques. The differences identified between the two sectors might indicate a possible development direction for the effectiveness of public sector.

Research limitations/implications – This research was conducted at one point in time, making it difficult to draw robust conclusions when the selected Public Sector Units and MNCs are in the developing or transitional phase of their company policies and practices. Therefore, it would be valuable to consider a longitudinal study.

Originality/value – The twoparameter approach of Intramural -Extramural motivation and constraints used in this study has previously been exclusively examined in the performance comparison study of public and private sector. Consequently, the paper makes a contribution valuable to the literature of market penetration effectiveness as well as to Indiarelated Telecom Sector research.

Key Words: TRAI, BSNL, MTNL, TTO, FDI, NTP, ISP, BWA, MNP and SSI

Introduction

Over the past decade, Indian telecom industry has witnessed many positive developments. India has attained the second largest subscriber network after China with the total number of subscribers scaling up to about 900 million and claiming an urban tele-density in excess of 140 and rural tele-density of 40. With an estimated base of 67 million Smartphone users in 2013,

India also ranks fifth amongst the top countries in this category. With an increasing Smartphone penetration in the country, subscribers accessing internet through mobile devices stand at 176.50 million.



The Indian telecom industry is one of the fastest growing in the world and is projected that India have 'billion plus' mobile users by 2015.

"A 10% increase in mobile and broadband penetration increases the per capita GDP

by 0.81% and 1.38% respectively in the developing countries."World Bank

WIRELESS SERVICES IN INDIA

The Mobile telecommunications system in India is the second largest in the world and it was thrown open to private players in the 1990s. The country is divided into multiple zones, called circles (roughly along state boundaries). Government and several private players run local and long distance telephone services. Competition has caused prices to drop and calls across India are one of the cheapest in the world. The rates are supposed to go down further with new measures to be taken by the Information Ministry. The mobile service has seen phenomenal growth since 2000. In September 2004, the numbers of mobile phone connections have crossed fixed-line connections. India primarily follows the GSM mobile system, in the 900 MHz band. Recent operators also operate in the 1800 MHz band. The dominant players are Airtel, Aircel Uninor, Reliance Info comm., Vodafone, Idea cellular and BSNL/MTNL.

TELECOM POLICY ENIVIRONMENT IN INDIA

Liberalization

Telecom equipment manufacturing was de-licensed 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 gradually to the private sector.

National Telecom Policy 1994

In 1994, the Government announced the National Telecom Policy which defined certain important objectives, including availability of telephone on demand, provision of world class services at reasonable 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.

Telecom Regulatory Authority of India (TRAI)

The entry of private service providers brought with it the inevitable 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.

New Telecom Policy 1999

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.

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 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 (Details) for grant of license of Internet services on non-exclusive basis. Any Indian company with a maximum foreign equity of 74% is eligible for grant of license.

Broadband Policy 2004

Recognizing the potential of ubiquitous Broadband service in growth of GDP and enhancement in quality of life through applications including telesocietal education, telemedicine, 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. Broadband connectivity has been defined as "Always On" with the minimum speed of 256 kbps. It is estimated that the number of broadband subscribers would be 20 million by 2010.

Tariff Changes

The Indian Telecom Sector has witnessed major changes in the tariff structure. The Telecommunication Tariff Order (TTO) 1999, issued by regulator (TRAI), had begun the process of tariff balancing with a view to bring them closer to the costs. This supplemented by Calling Party Pay (CPP), reduction in ADC and the increased competition, has resulted in a dramatic fall in the tariffs. ADC has been abolished for all calls w.e.f. 1st October 2008.

Foreign Direct Investment (FDI)





In Basic, Cellular Mobile, Paging and Value Added Service, and Global Mobile Personal

Communications by Satellite, Composite FDI permitted is 74% (49% under automatic route) subject to grant of license from Department of Telecommunications subject to security and license conditions.

FDI up to 100% permitted in respect of the following telecom services: -

- Infrastructure Providers providing dark fiber (IP Category I);
- ➢ Electronic Mail; and
- > Voice Mail

3G & Broadband Wireless Services (BWA)

The 3G will allow telecom companies to offer additional value added services such as high resolution video and multi media services in addition to voice, fax and conventional data services with high data rate transmission capabilities. BWA will become a predominant platform for broadband roll out services. It is also an effective tool for undertaking social initiatives of the Government such as eeducation, telemedicine, e-health and e-Governance. Providing affordable broadband, especially to the suburban and rural communities is the next focus area of the Department.

Mobile Number Portability (MNP)

Mobile Number Portability (MNP) allows subscribers to retain their existing telephone number when they switch from one access service provider to another irrespective of mobile technology or from one technology to another of the same or any other access service provider.

Literature Review

The Government approved National Telecom Policy-2012 (NTP-2012) on 31st May 2012 which addresses the Vision, Strategic direction and the various medium term and long term issues related to telecom sector. The primary objective of NTP-2012 is maximizing public good by making available affordable, reliable and secure telecommunication and broadband services across the entire country. The main thrust of the Policy is on the multiplier effect and transformational impact of such services on the overall economy.

The objectives of the NTP-2012, inter-alia, include the following:

- Provide secure, affordable and high quality telecommunication services to all citizens.
- Strive to create One Nation One License across services and service areas.
- Achieve One Nation Full Mobile Number Portability and work towards One Nation -Free Roaming.
- Increase rural tele-density from the current level of around 39 to 70 by the year 2017 and 100 by the year 2020.

Telecommunication basically is the transmission of signals over a distance for the purpose of communication, though the technology involved in communicating has changed significantly over the years. Like telecommunications it self. the telecommunications industry is broader than it was in the past. Telecommunication has a significant social, cultural and economic impact on the modern society. In



2008, estimates placed the telecommunication industry's revenue at \$3.85 trillion or just under 3 percent of the gross world product (Plunkett Research Limited, 2010).

Politics and economics of Telecom liberalization in India" by Chowdary T.H. published in the Journal of Telecommunications Policy in 1998. describes the ideological background to more than 40-year monopoly of the Department of Telecommunications over Indian telecommunications. It traces how the monopoly was eased between 1986 and 1991 and the government had to give up its policy of central planning and control (Chowdary, 1998).

The analysts' report published by Ernst and Young in collaboration with FICCI titled,

"Enabling the next wave of telecom growth in India - Industry inputs for National Telecom Policy 2011" is a comprehensive report about the evolution of the telecom sector in India over the past decade. This report tracks the changes in terms of technological advancements, business dynamics and socioeconomic environment over the years. The research program studies in detail all the key segments of the telecom landscape ---wireless. wire line. broadband. infrastructure, NLD, ILD, value-added services (VAS), equipment manufacturing, infrastructure and convergence. Moreover, it also identifies and evaluates critical success factors that are applicable across all telecom segments such as spectrum, USOF. licensing framework, FDI. security, consumer affordability and the role of the regulator (Ernst and Young, FICCI, 2011). Last but not least, it also includes comprehensive interviews conducted with senior executives in the Indian telecom sector, which provides a firsthand perspective about various stakeholders involved in the telecom sector.

In emerging markets, established multinationals typically take the early lead in the high-end consumer and highperformance industrial segments, whereas local companies do so in the low-end and low-performance segments. However, as the economy develops, both customers and competitors evolve (Pankai and Thomas,2008). Developing countries are pulsating with companies that think of themselves as the next multinationals, pushing outward from their home bases to establish global presence if not dominance (Pankaj and Thomas, 2008).

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.

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).China's successful reform on the other hand, is now often called another East Asian miracles, has been attributed to policy changes to take advantage of comparative advantages in labor-intensive goods (Lin et al., 1996).

The changing demographic profile of China and India has also contributed to the growth of number of subscribers. A large young population, a burgeoning middle class, with growing disposable incomes, and also urbanization, which is increasing literacy levels and higher adaptability to technology, characterizes the changed profile. The urbanization rate in China reached 48.2% in 2010 (National Bureau of Statistics of China, 2012), and the respective number in India was 41%, with an increase of 17.25 million in urban population (Ministry of Statistics of India, 2012).

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). Some of the key objectives set during the Eleventh Plan period are:

- To make India a hub for telecom equipment manufacturing by facilitating establishment of telecom specific SEZs.
- To reach a telecom subscriber base of 600 million.
- To provide 200 million rural telephone connections by 2012, that is to reach a rural tele-density of 25%.
- To provide telephone connection on demand across the country at an affordable price.
- To provide broadband connection on demand across the country by 2012.
- To facilitate introduction of mobile TV.
- To provide broadband connectivity to every secondary school (SS) and health centre on demand in two years.

Research Methodology:

Applied Analytical research for using facts and information already available and analyse these to make a critical evaluation. It will be difficult to find exactly the kind of data needed; there is a vast amount of secondary data out there. This study is done using secondary data. Secondary data related to industry was collected from articles, News papers, TRAI Reports, working papers and Annual Reports of the cellular service providers, various journals, magazines and reports for generating awareness on the topic and for satisfying objectives of the study.



Objectives of the study:

a) To review the performance of the Private and Public telecommunication sector individually.

b) To make a comparative study on the performance of these telecommunication players.

Basis of comparison I. Network Coverage

Today network service providers follow a strategy of building a network of outlets and Towers with effective penetration so that they can continue to enlarge their geographical coverage with a greater potential for growth. The network service providers try to deeply entrench across the country with significant density in areas conducive to the growth of their businesses.

The tower companies in India are of 3 types.

 Tower companies formed through joint ventures like Indus tower which is a joint venture by Airtel, Vodafone and Idea
Tower companies formed though demerger like Reliance Infratel which is a wholly owned subsidiary of RCom
Independent tower companies (pure play operators) like GTL etc

Tower company	No of towers		
Indus	100,000		
Bharti Infratel	30,000		
WTTIL Quippo	25,000		
Reliance Infratel	48,000		
BSNL / MTNL	45,000		
GTL Infra	32,000		
Others	50,000		
Total	330,000		
Source: Indiatelecomonline			

The others include small Telecom Tower companies like Tower Vision, Aster Infrastructure, KEC International, and India Telkom Infra etc

Plans and Pricing

All the Public and Private Service providers are creating innovative specific plans for various value added services. Analysis of the latest numbers released by the Telecom Regulatory Authority of India (TRAI) and it reveals a landmark shift in India's telecom sector: GSM incumbents-Bharti Airtel, Vodafone and Idea Cellular—have jointly crossed 70% in revenue market share. This shift is mainly because of the corporate strategy of providing innovative products (i.e., various value added services) to the customers by this telecom.

Customer Services

The telecom industry has witnessed significant growth in subscriber base over the last decade, with increasing network and competition-induced coverage а decline in tariffs acting as catalysts for the growth in subscriber base. Companies are providing valuable services to customers as Voice Mail Service, Short Message Service (SMS), Roaming, Call Forwarding(within same Service Area), Call Conferencing, Call Waiting and Call holding facility, Wireless Application Protocol(WAP), Unified Messaging Services. Private Companies are also leading in this area.

Brand Wise Position

Simplify360 is the leading social business intelligence conducted a research on social media and created a index SSI.



Simplify360 Social Index (SSI) is arrived at after considering the performance and engagement of each brands on, Facebook, Twitter and online buzz.

Rank	Company name	SSI Score
1	Airtel	83
2	Vodafone	77
3	Idea Cellular	72
4	Aircel	68
5	Tata DoCoMo	62
6	Reliance Communications	59
7	MTS India	50
8	BSNL	40
9	Videocon	30
10	Uninor	22

Source: Telecom Regulatory Authority of India.



Market Share

Private operators have a share of 87.76% in the wireless segment. Overall, Bharti Group with 21.69% of the total telephones, both landlines and mobiles taken together, in the country has the largest share followed by Vodafone Group (17.56%), two PSUs BSNL & MTNL put together (11.71%), Reliance (14.17%) and Idea (14.02%) etc.

Revenue Growth

Telecom service providers recorded annual increase of 10.46 per cent in gross revenue

Table 3.3: Access S	Services -	Service	Provider	wise	Adjusted
	Gross	Revenu	e		

			(₹ in Crore)
Service	QE Sep-13	QE Dec-13	% Change
Bharti	8655.57	9009.60	4.09
Vodafone	6452.15	6609.90	2.45
Idea	4633.65	4857.83	4.84
BSNL	3228.61	3279.38	1.57
Tata	2188.95	2291.72	4.70
Reliance	2068.55	2208.66	6.77
Aircel	1551.97	1635.18	5.36
MTNL	746.38	601.67	-19.39
Telewings	480.27	555.41	15.65
Sistema Shyam	200.63	212.19	5.76
Loop	113.06	97.10	-14.12
Quadrant	33.39	25.96	-22.25
Videocon	*	21.93	-
Grand Total (Access)	30353.17	31406.54	3.47



at Rs 58,385 crore in the October-December quarter, as per a report by telecom regulator Trai.

Conclusion

As the market matures and competition intensifies, operators will have to differentiate their corporate strategies with respect to customer focus, personalization, marketing and delivering tailored offers. It can be concluded that during last few years most of the private telecom service providers have shown better performance than their public sector rivals:

- For enhancing network coverage private telecom service providers are more focused towards effective towers penetration with the tie up with third parties and Airtel with Vodafone and Idea is leading in this area.
- Private telecom service providers are continuously introducing innovative and individualized plan i.e. Bharti Airtel, Vodafone and Idea Cellular have jointly crossed 70% in revenue market share.
- Public as well as Private Telecom Service Providers are more concentrated to wards value added services for consumers like money transfer, roaming, 3G, Billing and Booking etc.
- As per as Brand is concerned Private Telecom Sector is moving ahead. Airltel is leading whereas BSNL is having 8th position.
- Private Operators have a share of 87.76% in the wireless segment. Two PSUs BSNL & MTNL put together (11.71%).
- Private Telecom Sector have increased their revenue share in QE

13 specially Telewings have a substantial growth of 15.36 along with it's private counterparts on the other hand BSNL have only 1.57% revenue growth and MTNL's revenue declines up to 19.36%.

Suggestions

As discussed above, it has been witnessed that the major area of concern for any Telecom Company is the customer service and customer satisfaction, thus just like the Private Sector Telecom Companies it is high time that the Public Sector Telecom Companies also start concentrating more on the customers and the services provided to them. Top most rank held by a Private Sector Telecom Companies is a clear indicator of the better performance of the Private Sector Telecom Companies due to their higher concern towards customer feedback, their efficient management and thus yielding to higher productivity and networks throughout India. To strive the cut throat competition given to the Public Sector Telecom Companies by the Private Sector Telecom Companies, the Public sector will have to pull up their shoes to be at the better half part of the race else the time is very near which can make these Public Sector Telecom Companies just a memory or a history for everyone.

References

Arun Prabhudesal, 2011, "Top 20 Mobile Operators in World", [Online] Available from:<u>http://trak.in/tags/business/2011/05/2</u> <u>7/top-20-mobile-operators-world-bhartiairtel-5-17</u>

Annual Report (2012-13) Department Of Telecommunications Ministry Of Communications & Information Technology Government Of India New Delhi

Chowdary T.H., 1998, "Comment: Politics and economics of Telecom liberalization in

India", Telecommunications Policy, Vol. 22, No. 1, pp. 9 22.

Ernst and Young, FICCI, 2011, "Enable the next wave of Telecom growth", [Online],

Available at:

http://www.ey.com/Publication/vwLUAss ets/Enabling_the_next_wave_of_Telecom _gr

owth_inIndia/\$FILE/Enabling%20the%20 next%20wave%20of%20Telecom%20gro wth%20in%20India.pdf>

Lin J., Cai F., Li, Z., 1996, "The China Miracle: Development strategies and economic reform", Chinese university press, Hong Kong

Ministry of Statistics India, 2012,"Statistical Data-Urbanization", [Online] Available from:http://mospi.nic.in/mospi_new/site/P ublications.aspx?status=1&menu_id=22

National Research Council, 2006, "The Importance of Telecommunications and

Telecommunications Research", Renewing U.S. Telecommunications Research, Washington, DC: The National Academies Press.

National Telecom Policy-2012 (NTP-2012)

Pankaj Ghemawat and Thomas Hout, 2008, "Tomorrow's Global Giants? Not the Usual

Suspects", Harvard Business Review, The Magazine.

Planning Commission, Government of India, 2008, "Eleventh Five Year Plan (2007-2012): Agriculture, Rural Development, Industry, Services and Physical Infrastructure", Volume III, New Delhi, Oxford University Press

Plunkett Research Ltd., 2010, "Telecommunications Industry Overview", Internet Engineering Task Force

Websites

http://www.indiatelecomonline.com/teleco m-tower-industry-in-india/ http://economictimes.indiatimes.com/news /news-by-company/earnings/earningsanalysis/telcos-gross-revenue-up-10-46-atrs-58385-crore/articleshow/34478985.cms

http://simplify360.com/blog/most-socialtelecom-companies-india/

http://www.telecomlead.com/wpcontent/uploads/2013/08/10-operatorsbased-on-average-gross-revenue.png