Major causes of falling arpu of telcos in india essay sample

Telecommunication is one of the prime-support services needed for rapid growth and modernisation of various sectors of the economy. Telecom services have been recognised as an important tool for socio-economic development of a nation. In recent years, it has become more important because of the enormous growth of information technology and its significant potential for impact on the rest of the economy. The sector is experiencing rapid development due to FDI inflows in the form of international players entering the market. Today, telecom is the fifth-largest sector attracting FDI inflows after the chemicals, services sector, drugs & pharmaceuticals, and construction activities. In FY12, the Indian telecom sector received FDI equity inflows of Rs 90. 12 bn amounting to around 5. 2% of the total FDI equity inflows into the country.

The sector saw cumulative FDI equity inflow of Rs 457. 2 bn over FY08-FY12 registering a five-year CAGR of around 15. 3%. The industry has seen consistent growth during the last year on the back of rollout of newer circles by operators, successful auction of third-generation (3G) and broadband wireless access (BWA) spectrum, network rollout in semi-rural areas, launch of mobile number portability, and increased focus on value added services (VAS). The future progress of the telecom industry in our country is also very encouraging, as rolling out the wireless broadband networks in the country has been started.

India is the second-largest wireless network in the world after China with 952. 91 mn strong telephone network (including 921. 02 mn wireless telephony network) as on Apr 30, 2012. This rapid growth in telecom network resulted in overall tele-density of 78. 71% as at Apr 30, 2012. The target of

600 million connections by end of the Eleventh Five Year Plan has already been achieved by Feb 2010. This growth in the telecom sector is attributable to proactive and positive policy initiatives of the government and to the entrepreneurial spirit of various telecom service providers in public and private sectors. Some policy initiatives taken by the department of telecom (DoT) in FY12 that will help growth of telecom sector include: Government policy initiatives

• In Nov 2011, approval of a project for National Optical Fiber Network for providing broadband connectivity to all 250, 000 Gram Panchayats at a cost of Rs 200 bn.
• Release of Draft National Telecom Policy in Oct 2011 with have an objective to provide secure, reliable, affordable, and high quality converged telecommunication services anytime, anywhere to every citizen in India.

Gross revenue and adjusted gross revenue of the telecom sector for FY12 was Rs 1, 954. 4 bn and 1, 345. 9 bn. Gross revenue increased 13. 8% and adjusted gross revenue increased 10. 7% compared with FY11. Of the gross revenue of Rs 1, 954. 4 bn in FY12, around 87. 27% was contributed by private sector companies and the balance 12. 73% by public sector companies.

Compared with subscriber base, which increased at a five-year CAGR of 33. 4%, revenue increased only at 11% CAGR during FY08-FY12. Even if the subscriber base grows, revenue output is less because of cheaper call rates and intense competition in the market. In FY12, subscriber base grew 12. 4% y-o-y whereas gross revenue grew 13. 8% y-o-y.

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Gross Revenue of telecom sector from fy08 to fy12

Source: TRAI

Trend in Telephone subscribers and tele-density in India

The number of telephone subscribers in India increased from 300. 49 mn as at end-March 2008 to 951. 34 mn as at end-Mar 2012 registering a five-year CAGR of 33. 4%. In the past four years, subscriber base grew robustly at more than 35% each year. However, in FY12, the growth in telephone subscribers slowed down to 12. 4% y-o-y. As on Mar 31, 2012, overall tele-density in India reached 78. 66 as against 26. 22 in Mar 2008, registering five year CAGR of 31. 6% during FY07-FY12.

Subscription in urban areas grew from 564. 08 mn as at end-Mar 2011 to 620. 53mn as at end-Mar 2012, taking urban tele-density from 157. 32 to 169. 55. Rural subscription increased from 282. 23 mn to 330. 82 mn as at end-Mar 2012 and the rural tele-density increased from 33. 79 to 39. 22. As of Mar 2012, the share of rural subscribers increased to 34. 8% of total subscription from 33. 35% as at end-Mar 2011. Subscriber base and tele-density in India from fy08-fy12

Source: TRAI

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Public and Private players in the Telecom market

Before the opening up of the telecom sector to private players, growth in

telecom services was primarily driven by public sector monopoly, leading to marginal growth. GoI’s liberalisation policies encouraged private players to enter the telecom industry. This is evident from the growing share of private sector in total telephone connections, which increased to 86. 09% as on Dec 2011 from a mere 5. 35% in 1999. Although private players enjoy a big share in total telephony, they have only 19. 1% share in the wireline segment.

State-owned telecom companies are gradually losing market share to private sector telecom companies. Private companies have grown phenomenally since 2004. In FY12, till Dec 2011, private sector network registered growth of 10. 7% compared with FY11, whereas during the same period public network grew at 2. 3%. Segments of Telecom

The Indian telecommunication sector is classified into four segments: fixed line telephony (wireline), mobile telephony (wireless), telecom equipment and other telephone services, namely VSATs, Internet and broadband services, public radio mobile trunked services, and broadcasting and cable services. Subscriber base of Indian telecom sector (wireless and wireline)

Source: TRAI

India’s wireless subscriber base is accelerating rapidly. The structure and composition of the Indian telecom industry has changed substantially in terms of wireless and wireline segments and public-private share. Over the years, the wireless segment is growing rapidly and has outgrown the wireline segment. Market share of the wireless segment increased from 46. 5% in Mar 2004 to 96. 6% in Mar 2012. On the contrary, the share of fixed wireline declined steadily over the years. The wireless segment grew at 50. 1% CAGR

over FY04–FY12 whereas the wireline segment de-grew at a compounded average of 3% over the same period. The subscriber base of the wireless segment increased on the back of reduction in tariff rates due to innovation and government intervention.

In the total subscription, urban wireless and rural wireless subscription accounted for 62. 6% and 33. 9% share and stood at 595. 9 mn and 323. 27 mn as at end-Mar 2012. On the other hand, urban wireline and rural wireline subscription contribute only 2. 59% and 0. 79% to total subscription and the contribution is constantly declining. Rural wireline declined at a faster rate of 13. 2% in FY12 than urban wireline, which declined 5. 4%.

Market Share (In Terms Of Subscriber Base)

fixed Line Telephony (wireline)

The share of wireline telephony in total telephone connections decreased from 4. 1% at the end of March 2011 to 3. 4% in March 2012. As on Mar 31, 2012, the total subscriber base of fixed (wireline) lines stood at 32. 17 mn. PSUs dominate the wireline segment of the Indian telecom industry and private companies have a small share as their focus mainly remains on the wireless segment. Market share of companies in the wireline segment as on Mar 2012

Note: Others include HFCL Infotel Ltd, Sistema Shyam Telelink, Vodafone and Tata Teleservices Source: TRAI

Mobile Telephony (wireless)

Mobile services are one of the major driving forces in the Indian telecom industry. The Indian mobile market continues to boom due to various factors

like cheap call rates, low handset prices, and rising incomes of the middle class population. The share of wireless telephony in total telephone connections increased from 95. 9% at the end of March 2011 to 96. 6% in March 2012. As on Mar 31, 2012, the total subscriber base of wireless segment stood at 919. 17 mn. Private service providers dominate the wireless segment as wireless telecom services are easy to roll out. Wireless phones increased because of their convenience and affordability.

Market share of companies in wireless segment as on Mar 2012

Note: Others include MTNL, Loop Telecom, HFCL Infotel, Sistema ShyamTelelink, Unitech, S Tel, Videocon and Etisalat Source: TRAI

Technology-wise wireless market share

The Indian cellular industry is dominated by two technologies: 1. Global System for Mobile Communication (GSM)

2. Code Division Multiple Access (CDMA)

GSM was developed to accommodate more calls with a limited amount of radio spectrum. CDMA is considered a superior and faster technology compared with GSM. The addition of new operators, entry of new brands, and expansion of existing players are driving CDMA growth in India.

Subscriber base growth of GSM and CDMA from fy08 to fy12

Source: TRAI

Due to lower tariffs and decline in cost of telecom equipment, the CDMA and GSM segments recorded large-scale growth. GSM dominates the Indian market due to a major reason: CDMA is a new technology and is not as

mature as GSM. Moreover, besides having the first-mover advantage that gives it high market share, GSM offers international roaming services that CDMA cannot. The total subscriber base of the wireless segment was 811. 59 mn in FY11, which increased to 919. 17 mn in FY12. GSM technology dominates with 88. 6% share in the wireless market and CDMA shares the rest. GSM subscribers consist of both prepaid and postpaid subscribers of which prepaid subscribers dominate with 96. 87% share. As at end-Mar 2012, GSM subscriber base stood at 814. 06 mn registering y-o-y growth of around 16. 6% whereas CDMA subscriber base stood at 105. 11 mn registering a y-o-y decline of around 7%. The GSM market grew at a five-year CAGR of 43. 4%, surpassing growth in CDMA, whose market grew at 11. 4% CAGR during FY08-FY12.

Trend of Average Revenue Per user (ARPu) and Minutes of usage (MOu)

Source: TRAI

Minutes of usage are rising due to decline in prices; nevertheless, ARPU continues to be anaemic. Despite high penetration in urban areas, ARPU is quite low. The growth of Indian telecom industry is largely driven by subscriber additions since ARPU is declining. Falling ARPU reflects growth in the number of subscribers and the cost-sensitivity of the Indian market. The introduction of 3G in India will promote data-driven applications used by subscribers, which would drive ARPU. Minutes of usage (MOU) of GSM and CDMA declined from 349 and 263 to 346 and 229 as at end-Mar 2012. ARPU per month of GSM also declined from Rs 100 to Rs 97 whereas of CDMA it increased from Rs 66 to Rs 75 as at end-Mar 2012. Decline in ARPU of the

GSM segment was a result of decline in both prepaid and postpaid ARPU, which declined from Rs 84 and Rs 564 per month to Rs 83 and Rs 554 per month at end-Mar 2012. Telecommunication in Rural Areas

Rural telecom is an emerging market. With growth in urban areas beginning to plateau, players are focusing more on rural areas. To promote telecom in rural areas, GoI is providing incentives under schemes such as the Universal Service Obligation Fund (USOF). As saturation has reached the urban areas, private service providers are also exploring opportunities in rural areas. All these factors led to increasing trend in rural tele-density. Subscriber base in Rural Areas from fy08 to fy12

Source: TRAI

Rural telephone connections increased from 282. 23 mn at end-March 2011 to 330. 82 mn at end-Mar 2012 registering high y-o-y growth of 17. 2%. In rural telephony as well, the wireless segment is growing rapidly whereas the wireline segment faces a decline.

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The rural wireless segment grew at a five-year CAGR of 50. 9% during FY08–FY12 whereas the rural wireline segment de-grew at five-year CAGR of 10. 3% during the same period. This implies that demand for mobile services in rural areas is strong due to cheaper call rates and various government schemes. The rural wireline subscriber base is declining at a faster rate than the urban wireline subscription, leading to lower share of rural subscription in

total wireline subscription. Thus, the share of rural subscribers in total wireline decreased from 29. 5% in Mar 2008 to around 23. 5% in Mar 2012.

Tele-density is an important indicator of telecom penetration in the country. With the evolution of wireless technologies, there has been phenomenal growth in tele-density in the country. Tele-density in India increased from 26. 22% at end-March 2008 to 78. 66% at end-March 2012, of which rural tele-density reached 39. 22% and urban tele-density reached 169. 55%.

Tele-density of Rural and urban areas

Source: DoT

Of the total rural tele-density of 39. 22%, wireline tele-density was 0. 89% and wireless tele-density was 38. 33% as on Mar 31, 2012. During FY12, rural tele-density increased at a faster pace at 15. 9% compared with urban tele-density at 8% y-o-y growth. This is mainly because of availability of cheap wireless phones in the rural market.

As on Mar 31 2012, about 583, 718 villages were covered by Village Public Telephones (VPTs), which account for around 98. 3% of the total inhabited villages in the country. The Infrastructure sharing scheme was launched by USOF to provide subsidy support for setting up and managing 7, 353 towers spread over 500 districts of 27 states of the country. About 7, 296 towers were set up as on Dec 31, 2011 under this scheme. Internet and Broadband Subscription

Internet services were opened to private participation in 1998 to encourage growth and increase penetration. Broadband is high speed connectivity that

integrates Internet, telephony, and video in a new way. Internet subscribers increased from 19. 67 mn as at end-Mar 2011 to 22. 86 mn as at end-Mar 2012, registering 16. 2% y-o-y growth. Broadband subscribers, which form around 60. 4% of the total Internet subscribers, increased from 11. 89 mn to 13. 81 mn as at end-March 2012. Of the total broadband subscribers, 85% comprised Digital Subscriber Line based.

Over the past five years, share of broadband subscribers in the total Internet subscribers increased from 35% in FY08 to 60% in FY12. Broadband subscribers grew at a five-year CAGR of 37. 4% during FY08-FY12 outpacing growth in total Internet subscribers, which grew at five-year CAGR of 19. 8% during the same period. Narrowband subscriber base, which forms 39. 6% of the total Internet subscriber base, grew 16. 2% in FY12 and stood at 9. 05 mn as at end-March 2012.

Trend in internet subscription

Source: TRAI

Broadcasting and Cable services

As at end-Mar 2012, a total of 831 channels were registered with the Ministry of Information and Broadcasting (I&B) which includes 168 pay TV channels being broadcasted / distributed by 26 broadcasters or their authorized agents. As at end-FY12, there were 905, 343 set top boxes (STBs) installed in the CAS notified areas of Delhi, Mumbai, Kolkata and Chennai. Of the total, Mumbai leads with 330, 345 installed STBs followed by Delhi with 237, 668 STBs.

Apart from All India Radio Prasar Bharti – a public broadcaster, there were 245 FM radio stations and 130 community radio stations in operation as at end-Mar 2012. Moreover, besides free DTH service of the Doordarshan- a public broadcaster, there are six private DTH licensees offering services to DTH subscribers. As on Mar 31, 2012, the DTH subscriber base stood at 46. 25 million. Snapshot of broadcasting and cable services

Telecom Equipment

The exponential growth witnessed by the telecom sector along with the advent of newer technologies and rolling out of 3G and broadband wireless access services has led to the rapid increase in the demand for telecom equipment. In the early stages, manufacturing of telecom equipment was only to meet domestic demand of the industry. But gradually, the telecom equipment industry from being an import-centric industry is moving towards becoming a global telecom equipment manufacturing hub. During FY12, the Indian telecom industry produced equipment worth Rs 520 bn compared with Rs 412. 7 bn in FY08 registering a five-year CAGR of 5. 9% during FY08-FY12. Exports of telecom equipment grew at a five-year CAGR of 19. 4% during FY08-FY12 and stood at Rs 165 bn in FY12. Over the past five years, share of exports in total production has increased significantly from 19. 7% in FY08 to 31. 7% in FY12.

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Production and Exports of Telecom Equipment from fy08 to fy12

Note: * Projected

Source: DoT

Other Telephone Services

• Very Small Aperture Terminal (VSAT)

VSAT is a communication system in which radio signals are received and transmitted through a satellite. A VSAT has a less than 3 meter tall dish antenna that relays data to the satellites in the geosynchronous orbit, which then relays data from terminals on earth to other terminals and hubs located in various parts of the world. It is an economical and viable option to connect different geographical locations. It provides connectivity to points where regular systems or wired lines fail to reach and last mile connectivity is difficult to achieve.

VSATs are mostly used for various types of communications and to transfer broadband data such as VoIP, satellite Internet, and video or narrowband data such as polling, SCADA (Supervisory Control and Data Acquisition), credit cards transactions and RFID (Radio Frequency Identification). In FY12, there were 11 VSAT providers in the Indian telecom market. The subscriber base for VSAT stands at 163, 452 as at end-Mar 2012 registering a y-o-y growth of 16. 3%. As on Dec 31 2011, about 130, 000 VSATs and 37 captive CUG VSAT licensees with about 6, 000 VSATs were operational in the country and 14 licensees for Commercial CUG VSAT were issued.

• Public Mobile Radio Trunked Services (PMRTS)

PMRTS is an easy-to-use, two-way radio communication, mainly used for command and control and group talking while on the move. PMRTS is used mostly in hotels, tour agencies, airports, and hospitals among other places. PMRTS was announced in 2001. As on Mar 31, 2012 the subscriber base of PMRTS stood at 34, 753 compared with 34, 169 in Mar 2011. Presently, nine

companies own 28 licenses in four metros and 9 circles for providing PMRTS. FDI up to 74% is permitted for PMRTS, which includes FDI up to 49% under the automatic route and beyond 49% by FIBP.

value Added Services

Value Added Services (VAS) are expected to augment growth rates of the Indian telecom industry. Over the years, decreasing ARPU and intensifying competition increased focus on Value Added Services and adoption of newer technologies.

Noteworthy, VAS that has been rolled out includes:

1. 3G and BwA:

3G is a wireless technology providing wireless access to data and information including services such as wide area wireless voice telephone, video calls, mobile Internet access, and mobile TV. The 3G technology is the natural evolution of 2G services. It will not only facilitate better and efficient utilisation of spectrum but also provide higher speed and data throughputs. 3G technology will provide faster internet surfing and will enable telecom service providers to provide a host of video-related services and enriched value added services such video telephony, high speed mobile broadband, mobile TV, video streaming, video on demand, on line gaming, M-commerce, and data services to their subscribers.

3G and BWA spectrum auctions were successfully concluded in FY11 with seven companies winning the 3G auction in various telecom circles and six companies winning the BWA auction in various telecom circles. These auctions are expected to act as catalysts in enabling internet access to even

the remote areas of the country. 3G has marked the next step towards technological progress. Key long-term impacts on the Indian industry will be rise in contribution of data revenue to total service revenue, improved quality of services by alleviating spectrum crunch, competitive edge to telecom operators, lowering of handset subsidies due to increase in sales volumes. The advent of 3G in the country will also facilitate entry of new foreign players in the market, bringing in new technology, innovation, and FDI.

2. Mobile Number Portability (MNP)

MNP allows any subscriber to retain the existing telephone number even if they change from one service provider to another, irrespective of the technology. With the introduction of MNP in the Indian telecom market, competition among companies is likely to become fiercer. The existing mobile telecom service providers will be forced to improve quality of their service to avoid loss of subscribers. MNP was launched in Nov 2010 in Haryana and in Jan 2011 in the entire country. For the purpose of grant of licences for MNP service in India, the whole country is divided into 2 MNP zones consisting of 11 service areas each and one licence for MNP service in each MNP zone has been awarded in April 2009 based on tendering process. At the end of Apr 2012, 45. 9 mn subscribers have submitted their request to different service providers for porting their mobile number. Out of these, the maximum number of requests has been received in Karnataka with 5. 1 mn subscribers followed by Andhra Pradesh and Gujarat with 4. 4 mn subscribers and 4. 2 mn subscribers respectively.

Outlook

The Indian telecom market still has immense untapped potential. With a large population yet to have access to telecommunication and tele-density still being 78. 66% and rural tele-density at 39. 22%, there is significant growth opportunity for the sector, especially in rural areas. The rural market is expected to drive the next round of growth for voice-based services while data services will create the much needed churn with-in urban markets. The focus of telecom service providers is now shifting to these untapped rural areas for voice-based services and urban areas for data-based services, which will become the engine for the second phase of the growth in Indian Telecom. Further, newer access technologies such as BWA and 3G can significantly transform the character of the Internet and broadband scenario in India.