

# GLOBAL STATUS AND OPPORTUNITIES OF MOBILE PHONE SERVICE PROVIDERS IN INDIA

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## ABSTRACT

Telecom industry services in India are a major contributor of national economy. A steadily growth industry has certain challenges and also opportunities. In that juncture, authors have revealed mobile phone (cellular) service providers challenges and opportunities in India. Using Meta analysis, the real challenges and opportunities persisted in the telecom industry has been identified. The challenges of mobile phone (cellular) service providers are competition, advertisement, sales, marketing, next generation of technology (5G), mobile phone manufacturers, net banking, and social media. The opportunities of mobile phone (cellular) service providers are next generation of technology (5G), technology updates, emerging new Social Medias depended with mobile phone that needs high speed data, mobile banking and green banking, corporate advertisement and marketing through mobile app, online educational services, and all type of payment related sales through mobile phone.

**Key words :** Mobile commerce, opportunities

## INTRODUCTION

Connecting people is a service for their needs through wireless transmission of data by the way of GSM, CDMA and VOLTE (Voice over Long Term Evolution) technology. The present moment in India service providers strategies have been entrusted to fetching large number of subscribers and also certain significant level of subscribers have been migrated to other service providers due to their desires of data speed, cost and coverage in respective localities. The impact of competition, advertisement strategies, sales target, marketing environment, next generation of mobile data transmission technology (5G), new inventions in mobile phone manufacturing, net banking facilities, and social media needs of the subscribers are urged the mobile phone (cellular) service providers in to challenging the business. They also expected their business to be extended their services as opportunities of mobile phone (cellular) service providers are next generation of technology (5G), technology updates, emerging new Social Medias depended with mobile phone that needs high speed data, mobile banking and green banking, corporate advertisement and marketing through mobile app, online educational services, and all type of payment related sales through mobile phone. The people are accustoming with smart mobile phone data usage have been grown up day-by-days. The authors have revealed the previous studies in respect of challenges and opportunities of mobile phone service providers in India for the benefit of stakeholders.

## GROWTH OF WIRELESS TELECOM SUBSCRIBERS

The number of telephone subscribers in India increased from 1,203.77 million at the end of Jan-19 to 1,205.40 million at the end of Feb-19, thereby showing a monthly growth rate of 0.14%. The urban

subscription increased from 672.91 million at the end of Jan-19 to 675.24 million at the end of Feb-19, however, the rural subscription declined from 530.86 million to 530.16 million during the same period. The monthly growth rates of urban and rural subscription were 0.35% and -0.13% respectively during the month of Feb-19. The overall Tele-density in India increased from 91.82 at the end of Jan-19 to 91.86 at the end of Feb-19. The Urban Teledensity increased from 161.34 at the end of Jan-19 to 161.65 at the end of Feb-19, however Rural Tele-density declined from 59.38 at the end of Jan-19 to 59.27 at the end of Feb-19. The share of urban and rural subscribers in total number of telephone subscribers at the end of Feb-19 was 56.02% and 43.98% respectively. 2 Out of the total wireless subscribers (1,183.68 million), 1,022.62 million wireless subscribers were active on the date of peak VLR in the month of Feb- 19. The proportion of active wireless subscribers was approximately 86.39% of the total wireless

subscriber base. The major market share of wireless telecom subscribers are held by Vodafone Idea Ltd as on 28<sup>th</sup> February 2019. It has 334.10 million wireless subscribers because of its data speed, services and coverage. It has the market share of 34.58 per cent. The Vodafone Idea Ltd is owned by Vodafone Group (45.1%), Aditya Birla Group (26%) and Axiata Group Berhad Providence Equity (28.9%). Vodafone Idea Ltd provides the technologies of GSM, LTE in various Megahertz from 2100 to 2500 and VoLTE.

## **GLOBAL STATUS OF MOBILE SERVICES**

The fixed-line telephony penetration has gone down, and the mobile services have expanded worldwide. In some countries, it has reached a saturation level (China, India now world's largest market, 2016). The amalgamation of High-speed broadband, smart handsets, and the following generations of mobile infrastructure technology has made many things possible (Kulshrestha & Jain, 2018). Mobile economy is an important part of economy because of its contribution to GDP (GSMA Intelligence, 2015). The technology advances have created a paradigm shift from fixed to mobile internet and from using a fixed desktop to using smart devices (Omigie, Zo & Rho, 2015). The range of mobile services has also swelled and includes many new usages from a mobile. Health, Commerce, Shopping, Leisure, Entertainment, Knowledge, Banking Transactions, and Learning can now all be managed from the smart mobile device (Suhail, 2019,; Sumits, 2016).

3G and the advent of 4G in 2011 caused unprecedented growth and created a clear shift from basic services to mobile telephony (Sharma, 2013).4G technology incorporated the limitations of 3G, increased the bandwidth, provided high broadband speed up to 100 Mbps, and reduced the cost of resources. It made many multimedia and video streaming effortless and more effective (Yadav & Singh, 2018). The 4G mobile services started in 2010 (Curwen and Whalley, 2011) and started growing at one of the highest rate for any Information and Communications Technology (ICT), showing 20% growth by 2014. By the end of 2014, mobile broadband subscription had exceeded fixed broadband connections (Broadband Commission for Digital Development, 2014). By 2015, it covered 44% of the world population (GSMA Intelligence, 2016). At the end of 2018 the world mobile subscription was 5.1 billion (GSMA Intelligence, 2019). From 2007 till 2018, the compound annual growth rate (CAGR) of active mobile broadband subscription has been 19.5 percent. The global penetration is 69.3 at the end of 2018. In developed countries there are more mobile subscriptions now than there are people on earth. The developing countries have shown a faster growth than the developed nation and current penetration is at 61 per 100. The least developed countries (LDC) have even faster growth, from zero in 2007 to 28.4 per 100 in 2018. The growth in mobile is being led by Asia and Pacific (ITU, 2018. India, China, Pakistan, Indonesia and Bangladesh, along with some Sub-Saharan African and Latin American countries are going to be the new contributors to the growth. Between 2007 and 2025

India will add 330 million new subscriptions (GSMA Intelligence, 2018).

4G has become the leading technology for providing mobile services (GSMA Intelligence, 2019). Due to 4G, in the midst of the decade of 2010, the world was already moving from age of digital transformation to the age of automation and connected life (GSMA Intelligence, 2016). It will become the dominant technology, surpassing half of global connections in 2019 and will be reaching 60% in 2023 (GSMA Intelligence, 2019). There are five countries in the world where the consumers are able to access 4G/LTE access 90% of the times. On the speed front, the threshold of 50Mbps has not been touched. The fastest are still on an average speed of 45Mbps.

## **CURRENT CHALLENGES OF GLOBAL MOBILE INDUSTRY**

The speed of growth has slowed down (GSMA Intelligence, 2019). While overall there has been growth, the rate of growth had slowed down compared to the rates of 2005-2015. Developed countries have reached a saturation rate (ITU, 2018). The cooling down in growth will continue as China, India and other fast-growing countries such as Nigeria will reach saturation in their urban populations (GSMA Intelligence, 2020). The year 2014 is also important because the 4G mobile services started facing some significant challenges in market in the form of saturating of market, declining revenue, lower pricing for data usage, intense competition and user sophistication (Broadband Commission, 2014; Clarke, 2014; GSMA Intelligence, 2016). Globally, the revenue fell down by 4% between 2014 and 2015 and developed countries showed a negative growth of -0.8% (ITU, 2018). There is a divide on mobile adoption between the developed and developing nations, though it is expected to come down by 2025 (GSMA INTELLIGENCE, 2018). Over 3 billion people access mobile internet but the Global Mobile Engagement Index (GMEI) varies greatly between countries, particularly between developed and developing countries. South Korea, Scandinavian countries such as Finland and US have an index of 5 or more on a scale of 1-10. India, Tanzania and Pakistan have the lowest index around 1. Most highly engaged smart phone users who consume digital content are mostly from North America and the least engaged are in developing nations (GSMA INTELLIGENCE, 2018). Digital skills have a correlation with low usage of internet on mobile (ITU, 2018). Computer users in developed nation possess more digital skills than the people in developing countries. As activities get more complex, less people undertake these activities (ITU, 2018). ICT use also reflects the inequalities of education, wealth and gender (ITU, 2018). High density does not mean that everyone is connected but it may be due to a subscriber owning more than one connection. An ICT survey estimated that 76.4 % of world's population owned a mobile phone (ITU, 2018). The smartphone annual unit sales have been declining since 2017, but many parts of the developing world are yet to get a smart phone. It is expected that by 2025 India, Indonesia, Pakistan, Mexico and Africa will lead an almost 80% worldwide smart phone penetration (GSMA INTELLIGENCE, 2020). Cross sector competition is intensifying across the telecom, media and technology spectrum. Internet based subscription has increased for films and music and new technologies and devices such as home speakers are entering the market (GSMA INTELLIGENCE, 2018).

Now, the slowing unique subscriber growth, regulatory intervention and intense competition are putting pressure on service providers' traditional revenue (GSMA INTELLIGENCE, 2019). The industry is facing difficulty in financing new infrastructure and spectrum licenses and also pays high regulatory fees and sector specific taxes (GSMA INTELLIGENCE, 2019).

Future growth is expected from developing countries and LDC (ITU, 2018). Operators are looking for revenue streams other than connectivity to turn around the saturation and the competitive pricing pressure

(GSMA INTELLIGENCE, 2020). It is predicted that the start of 5G around 2020 will bring a major evolutionary change in mobile services and its use. 5G will make available very high speed and create smarter home, cities, Internet of Things, Machine to Machine Communication and fostering a socio economic change (Sumits, 2016; Kshetri, 2018; GSMA Intelligence, 2015; Forge & Blackman, 2017). Because of its capabilities, 5G will create innovative business model and generate source of revenue different from broadband and thus provide justification to invest in the new technology (Frias & Martinez, 2017). Future competition will move from smartphone apps economy to Artificial Intelligence (AI) development (GSMA INTELLIGENCE, 2020). Operators in developing countries are investing in upgrading to 5G but the developing nations are still investing in capacity of their 3G or 4G network (GSMA INTELLIGENCE, 2018).

## **INDIAN MOBILE SERVICE-2020 AND BEYOND**

The telecom industry is one of the rapidly expanding industries of the world and India is no exception to it (Bhatia & Chanda, 2016). The Indian mobile market reached 1.18 billion, starting from 376 million in 2009 (Narayanan & Sharma, 2019). India is ranked second largest user of mobile services in the world telecom market (As cited in Jasrotia et al., 2019). But it seems to be in midst of a crisis at present (Gupta et al., 2018). The industry is reporting a declining ARPU in spite of the increasing numbers over the years as a result of the hyper competition (Mishra et al., 2015). Total mobile revenue has dropped by 20% since 2016 but in 2018, the rate of revenue declined significantly (GSMA INTELLIGENCE, 2019). The ARPU has significantly reduced over the years and may prove unsustainable. India's ARPU is at present the second lowest in the world, falling behind only Ethiopia (GSMA INTELLIGENCE, 2019). The low ARPU can negatively affect the financial stability of the industry and make it difficult to invest in network and new services (GSMA INTELLIGENCE, 2019). India was already a fragmented market with a large number of service providers. The entry of Reliance Jio with an aggressive pricing only increased the pressure on the industry (GSMA INTELLIGENCE, 2019; Gupta et al., 2018). Although the operators are getting 52% of revenue from voice but the relevancy of voice is going down and now the war between the operators is on data. The financial health has also been adversely affected due to disproportionate cost of spectrum, high right of way charges, regulatory levies/taxes and the spectrum usage charges (GSMA INTELLIGENCE, 2019).

In 2017, there was a reduction of 0.32% in the subscriber base indicating that it is becoming difficult to find additional subscribers (Gupta et al., 2018). There was a 1.82 % overall decline in subscriber base from 2018 to 2019 . There were 1183.41 million subscribers in March 2018 and which decreased to only 1161.81 million in March 2019 (TRAI, 2019). There is a wide disparity between the urban and rural mobile density (Gupta & Jain, 2014). The urban teledensity is at 155.49 and rural is at 57.13 (TRAI, 2019). The urban market is therefore getting saturated (Jain, 2017). This could suggest that urban subscribers are using multiple connections and on the other hand the rural subscribers are slow to getting connected and not being explored fully (Mishra et al., 2015; Pritish & Saxena, 2015; Gupta & Jain, 2014). The disparity is visible in internet access too. The internet penetration rate is 33.22. The urban penetration rate is 73.65 and the rural rate is just 14.62. The urban probably overestimates as richer households would have multiple source of access (Gupta et al., 2018). In the beginning the emphasis was on acquiring new customers but now it has shifted to retaining the customers as acquiring is more expensive. With the introduction of MNP switching has become a normal practice and has become a critical issue for the service providers (Sahi et al., 2016). It can affect the market share of the operators (Sahi et al., 2016; Sharma, Joseph & Poulouse, 2018). The mobile service market in India is overcrowded and the customers have many choices in deciding for service provider

(Rajan & Karthikeyan, 2016). Quality of service is a concern where there is inconsistency in data coverage in the rural areas (Prasad & Aithal, 2016). Despite new technologies, a mass adoption had not been observed due to problems of compatibility and a lack of an overwhelming application (Chatterjee, Chaudhari & Dutta, 2019). Digital literacy is important in mobile adoption (ITU, 2018). Every fourth person in India is illiterate and nearly seventy percent of the population is rural. The share of women in internet user is only 29%. A digital divide exists in India (Khokhar, 2016,; Sharma & Ray, 2019). Low digital and technical skills have been found as barriers to adoption (Bhadani, Shankar & Rao, 2016). One of the major reason behind the future growth of 4G is slow speed when compared to a country like the US ( Prasad & Aithal, 2016). The services in the Indian telecom market have become too much commoditized where it is difficult for the operators to create any differentiation in their services. Therefore, Reliance Jio adopted a low cost predatory pricing strategy in order to compete (Kittilaksanawong & Kandaswamy, 2018; Sakshi, Bansal & Bathara, 2018). Lowering the tariffs might not result in winning the hyper competition due to high spectrum fees and continuous capital expenditure, but it can create constant pressure on profitability. As a result, it can drive the industry to consolidate through merger and acquisition (Kittilaksanawong & Kandaswamy, 2018).

There is financial pressure on the industry due to lower profit margin and increased competition. Jio had covered 26.40 % of the market since its launch in 2016 and a subscriber base of 306.72 million (TRAI, 2019). The competition has sparked off merger & acquisition. Vodafone merged with Idea in 2018. Airtel acquired Telenor and Sistema was taken over by now defunct Reliance Communication/Telecom. Tata Teleservices, Loop, Videocon, Quadrant, Aircel, Reliance Communication are now no longer operating (TRAI, 2019, Gupta et al., 2018). Vodafone is now the market leader with 33% of market share (TRAI, 2019). The industry now consists of four players. Vodafone, Airtel, and Reliance Jio control most of the market and BSNL has a small presence (GSMA INTELLIGENCE, 2019). But the consolidation is yet to result in improved financial performance. The high cost of deals, high network investment and major spectrum fees have given the industry high level of debts (GSMA INTELLIGENCE, 2019).

But the government looks committed to the industry and has earmarked Rs. 10,000 crores for developing telecom infrastructure (Jasrotia et al., 2018). It is trying to reduce the cash flow pressure on the companies by extending the repayment terms of deferred spectrum fees to 10-16 years (GSMA INTELLIGENCE, 2019). The Indian government has set up a high level forum to support 5G. The forum has made recommendation on spectrum and India specific 5G applications (GSMA INTELLIGENCE, 2019). A commitment of Rs. 500 crores to be invested in the research and development has been made by the different ministries of Communication, Electronics and IT and Science & Technology (Gupta et al., 2018).The Digital India campaign by the Indian government is placing considerable emphasis on the growth of internet and broadband (DOT, 2019, p.13). In order to facilitate technological advancement like 5G, Internet of Things (IoT), Machine to Machine (M2M) interface a customer centric and application driven National Digital Communication Policy was developed (DOT, 2019). Net Neutrality policy has been formed which disallows any form of discrimination, any control or interference of content or granting of any special speed or treatment to any content (DOT, 2019). There is also a plan to make Indian cities smarter and 100 cities will be developed as smart cities (Vijai & Sivakumar, 2016).

## CONCLUSION

Authors have revealed the previous studies and reports pertaining to the challenges and opportunities of mobile phone service providers in India. From these reviews authors have been understood that there is existence of challenges and opportunities in the mobile phone service providers in India. They are finding the

solutions to eradicate and wiped-out the challenges in the future for the betterment of the future generation. The major challenges of the mobile phone service providers in India is advertisement, sales, marketing, next generation of technology (5G), mobile phone manufacturers, net banking, social media, installation of telecomm towers, towers maintenance cost and lack of infrastructure, enabling people to acquire the knowledge essential, addressing the rural challenge, digital markets, harming competition, slowing innovation, and ultimately depriving consumers of the benefits of technological progress.

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