

IMPACT OF DIGITAL TECHNOLOGIES (THE INTERNET, MOBILE PHONES) ON DIGITAL DIVIDE

Yashwant Singh Sipre¹, Dr. Mamta Malik²

¹Research Scholar (Library and Information Science), Faculty of Social Science and Humanities, Pacific Academy of Higher Education and Research University, Udaipur

²Research Guide (Library and Information Science), Faculty of Social Science and Humanities, Pacific Academy of Higher Education and Research University, Udaipur

Abstract - 3G, processor of 2G services, is a family of standards for mobile telecommunications defined by the International Telecommunication Union [1]. 3G services include wide-area wireless voice telephone, video calls, and wireless data, all in a mobile environment. It allows simultaneous use of speech and data services and higher data rates. 3G is defined to facilitate growth, increased bandwidth and support more diverse applications. The focus of this study is to examine the factors affecting the adoption of 3G services among Indian people.

Key Words: Digital Technologies, Internet, Mobile Phones, 3G and Teledensity.

1. INTRODUCTION

Digital technologies—the internet, mobile phones, and all the other tools to collect, store, analyze, and share information digitally—have spread quickly. More households in developing countries own a mobile phone than have access to electricity or clean water, and nearly 70 percent of the bottom fifth of the population in developing countries own a mobile phone. The number of internet users has more than tripled in a decade—from 1 billion in 2005 to an estimated 3.2 billion at the end of 2015. This means that businesses, people, and governments are more connected than ever before. The digital revolution has brought immediate private benefits—easier communication and information, greater convenience, free digital products, and new forms of leisure. It has also created a profound sense of social connectedness and global community.

2. TELECOM SUBSCRIPTION DATA AS ON 30TH NOVEMBER, 2015

- In the month of November, 2015, 5.19 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 181.50 million at the end of October, 2015 to 186.69 million at the end of 30 November, 2015.
- Number of active wireless subscribers in November, 2015 was 907.07 million.

3. TOTAL TELEPHONE SUBSCRIBERS

The number of telephone subscribers in India increased from 1,029.34 million at the end of Oct-15 to 1,035.18 million at the end of Nov-15, thereby showing a monthly growth rate of 0.57%. The urban subscription declined from 599.25 million at the end of Oct-15 to 598.92 million at the end of Nov-15 whereas the rural subscription increased from 430.09 million to 436.26 million during the same period. The monthly growth rates of urban and rural subscription were -.05% and 1.43% respectively during the month of Nov-15.



Fig. 1

4. 3G SERVICES

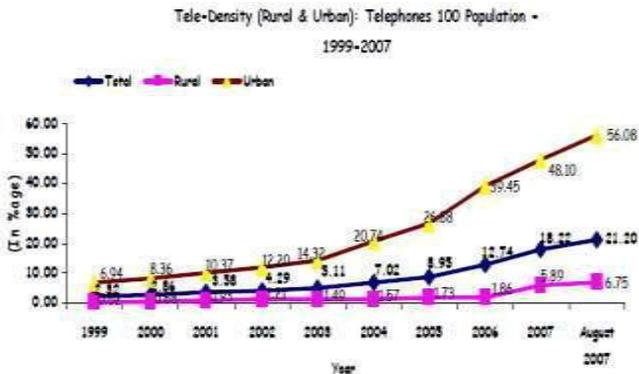
In India, there are two telecom operators who provide 3G service at present—MTNL and BSNL. MTNL is targeting four field jumps in its 3G mobile subscriber base to 6 lakhs by March 2010 in Mumbai and Delhi. Also, BSNL launched 3G service on Feb. 27 in 70 cities of India. Initially launch of 3G services in India was welcomed by every mobile phone enthusiast. But immediately security concerns were raised about 3G services. For example, data transfers and voice calls were encoded but it cannot be decoded on real time basis. Security agencies were serious about it and working on it. The adoption of 3G in all over India is growing slowly but steadily. We know that 3G services have already become popular in Japan, UK, Hong Kong, Australia, Sweden and Denmark etc.

5. TELEDENSITY DIVIDE

The overall Tele-density in India increased from 81.44 at the end of Oct-15 to 81.82 at the end of Nov-15. The Urban Tele-density slightly declined from 152.58 at the end of Oct-15 to 152.25 at the end of Nov-15. The Rural Tele-density increased from 49.37 at the end of Oct-15 to 50.04 at the end of Nov-15. The share of urban subscribers and rural subscribers at the end of Nov-15 was 57.86% and 42.14% respectively.

5.1. URBAN & RURAL TELEDENSITY (PER 100 INHABITANTS 1997-2008)

More perilous, however, is the inequality between rural and urban India (Graph 3). Despite several policy initiatives to promote rural penetration, growth in teledensity continues to be skewed in favour of urban India. In fact, the rural population is much worse than it was, a few years ago compared to its urban counterpart.



Source: ICRA Fig. 2.

Table 1 : India's ICTs Adoption Capacity (Ranking)

Countries	Internet Users*	Broadband Subscribers**	Computers In Use*	Communication Technology	IT Skills	Computers Per Capita
India	55	51	12	31	10	55

Note:*Rank for 2007; **2006; Internet Users and Broadband Subscribers per 1000 inhabitants) Source: Voice and Data; IMD World Competitiveness Yearbook, Various Issues

6. WORLD BANK POINTS TO INDIA'S DIGITAL DIVIDE

The World Bank has praised India as a global IT powerhouse, but has warned a huge majority of the nation's population remains locked out of the benefits of the digital economy. Internet access was crucial, it said. A new World Bank report launched in India said the aggregate impact of highly advanced digital technologies in the Asian nation was still unevenly distributed. It called on the government to make greater efforts to connect more people to the Internet and create an environment that would unleash the benefits of the digital era for everyone.

The report noted that at least 8 in 10 Indians owned a mobile phone, with digital technologies spreading rapidly in the emerging economy. But nearly a billion people were still not connected to the Internet, the document added.

The World Bank praised India for its early success in digital technology when it became a global powerhouse for information services, mentioning that India was currently the largest exporter of information and communications technology (ICT) services and skilled manpower in the developing world. But the lender's report also highlighted a striking imbalance in the country itself, with the adoption of digital technologies being very advanced in government institutions and relatively low in businesses, especially among small and medium-sized enterprises.

By the end of 2014, fewer than two out of every five Indian businesses had an online presence, compared with almost two-thirds of firms in China. The World Bank said residential broadband service in India was six to 10 times more expensive than in the Middle Kingdom. The report argued India needed to strengthen the "analog foundations" of its digital economy - training workers in new skills and beefing up regulations to ensure fair competition. "Skills and access, that's the key," the World Bank's country director for India, Onno Ruhl, said in a statement. "India has all the other elements, but that is what will really make it an inclusive revolution."

(AFP, World Bank)

7. CONCLUSION

Unfortunately, in India all people have access to the Internet and ICT, and an amazingly large number of people especially from the rural areas does not have abilities to use the ICTs in a proper way and, therefore can not draw the advantages from its usage. The issues of "digital divide is posing a herculean task before the Government of India to provide the maximum benefits to the stake holders. However, some IT experts believe that digital divide is vanishing myth from India. But, the present paper clearly highlights the problems of digital divide in rural India.

REFERENCES

- [1] International Telecommunications Union (ITU), *World Telecommunication Development Report. Access Indicators for the Information Society*, (2003) Bridging the Digital Divide in India: Challenges and Opportunities Copy Right © INDIACOM-2011 ISSN 0973-7529 ISBN 978-93-80544-00-7
- [2] Cullen, The Digital divide: a global and national call to action. *The Electronic Library*, 21(3): 247-257, 2003.
- [3] Norris, The Digital Divide: Civic Engagement, Information Poverty & the Internet Worldwide; Cambridge Uni Press: Cambridge, 2001
- [4] Pluss, Martin "Digital Divide and the Role of Education", 2004, accessed on http://plw.wikispaces.com/file/view/dd_education_04.pdf
- [5] Telecom Regulatory Authority of India, New Delhi, 27th January, 2016 (www.trai.gov.in)
- [6] Rao, S.S, Bridging digital divide: Efforts in India, *Telematics and Informatics*, 22(4), 361-375, 2005
- [7] Wong, P.K. ICT production and diffusion in Asia: Digital dividends or digital divide? *Information Economics and Policy*, 14(2), 167-187, 2002.
- [8] World Bank, *World Development Report 1998/99: Knowledge for development*. The International Bank for Reconstruction and Development/ The World Bank. Oxford University Press, 1998.