Indian Internet Context: The User Base and Speed - An Overview

P.K. Paul¹, A. Bhuimali² and K.S Shivraj³

¹FBAS, Indian Institute of Engineering Science and Technology (IIEST), Shibpur- An Institute of National Importance, Howrah, West Bengal, India ²Vice-Chancellor, Raiganj University, Raiganj, West Bengal, India ³, K.L. University, Andhra Pradesh, India Email: prancloud@outlook.com

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Abstract- India is one of the important name in today's world in terms of popularity, democracy, development, socialism and ancient history and heritage. Though India holds the record of ancient world, but it is also changes itself and the process is continuing the latest technologies and tools have widely utilizing in almost all the sectors and fields. The internet systems has grown with rapid manner in the last few decades. The services and user base have been changed rapidly with the help of several latest internet services. The internet users are increasing day by day due to many reasons. Urban and rural, both the sectors have improving the dispatching of internet and removing digital divide in many contexts. The paper has highlighted many aspects related to the internet in Indian context.

Keywords: India, Internet, Web Technology, Digital India, Digital Divide, Information Science, Developing Countries, ICTD, WWW, Internet Uses, Internet Services.

I. INTRODUCTION

The internet is most valuable in modern world. Without internet today it is difficult to deal almost all kind of work or services. Internet is the network of networks and rising rapidly. The internet users are rising, both in developing and developed countries. The rapid growth of the internet has been started since 1995 and in 1990's; when the commercialization of the internet has been started. The emerging services such as blogging, web feeds, internet forums, social networking sites, online shopping, entertainment etc and thus the internet users increased rapidly during the last few years. In the last few years internet has increased hundred times.

II.OBJECTIVES

The main aim in addition to objectives of this theoretical study and review summary is depicted as under

- 1. To know basic about the internet services in India.
- 2. To know about basic and emerging internet services in India compare to world.
- 3. To learn more about the internet population around the world with reference to Asian and specially India.
- 4. To learn a picture of past, present and future of internet services as far as India is concerned.
- 5. To know about the most useful and used internet material in India.

6. To know about the reason for increasing internet users in India.

III.INTERNET AND FOUNDATION

Internet mainly deals with the information sources and services and its stakeholders are common people, public establishment, private foundations fro, the wide range of areas and fields such as health and medical, educational sectors, research and academic wings, administrative finance and economical wings and so on. The growth of the internet raised during 1990's and when worldwide internet services had been started by the internet service providers. During the 1980's the concept of internet was emerged and developed and in 1995 the services reaches its highest numbers around the world. However in 1980s the internet service was common academic units in many countries. In the 1960's and 1970's the internet services was mainly practiced in the United States in defense and related foundations. ARPANET is the main foundation of the internet family. The ARPANET served as a main backbone for the interconnection of regional academic as well as military networks in the 1980's. Several other foundations and organizations have started and established during the last few decades and the organizations are Internet Corporation for Assigned Names and Numbers (ICANN), Regional Internet Registries, Internet Society, Internet Engineering Task Force. The National Telecommunication and Information Administration play a great role for modernizing and doing several activities as far as internet is concerned. The Internet Architecture Board, Internet Engineering Steering Group, Internet Research Task Force, Internet Research Steering Group, Internet Governance Forum-are also valuable for internet dealing worldwide.

Since 1995 the internet services offered around with basic service of uploading and downloading documents, viewing documents and resources, information sharing, email, telnet services. In 2000's the services and its characteristics has been changed and now are offered like instant messaging, www, relay chat, map and weather reports, discussion forum, blogs, social networking, online shopping. The speed and data transfer rate become increased over fiber optic network operating at 1-G bit/s, 10-G bit/s and more. Interestingly during the 1990's the public internet grew by

100% every year and with the annual growth in internet was another reason for rapid development of the internet in many cases. In 2014, according to the International Telecommunication Unions 40% of the total population in the world any how uses the internet dealing last one year.

Year	Internet Users	Penetration (% of Population)	Population Changes
2015	354,114,747	27.00	1.22%
2014	233,152,478	18.00	1.23 %
2013	193,204,330	15.1	1.26 %
2012	158,960,346	12.6	1.29 %
2011	125,617,813	10.1	1.34 %
2010	92,323,838	7.5	1.38 %
2009	62,166,128	5.1	1.43 %

TABLE 1 INDIAN INTERNET USERS FROM THE LAST FEW YEARS (INTERNET LIVE STATS USERS)

India: Internet Users, Speed and Emerging Services

According to the ILS, the total internet users in 2015 were 354,114,747 and 27% of total country population; where in 2014 the average user was 18% with total user base of 233,152,478. Most importantly in the 2016, according to the study it will touch 34.8% user base and share of the world total internet users 13.5%. If we see the total internet users in the world in 2005 and 2010; then it is noticed that the services have changed rapidly with numerous users. In 2005 total internet users was 16%, and among the users 8% from the developing world and 51% from the developed world.

The statistics of International Telecommunication Union stated that in the 2010 the total internet users raised from the 8% to 30% and the user base raised from the 8% to 21% as far as developing countries are concerned. The details of internet users from 2009-2015 has been listed in Table: 1.

Importantly we see the statistics of 2005 of the same region; then it is very easy to note that the highest growth was in the Europe with 46% and it has been raised to 67% in 2010. In 2005 the African share only 9%. This percentage of Asia touches 23% in 2010 and 32% in 2014. In Asia, India stands second as per the IWS data which depicted in Fig: 1.



Fig.1 Internet Users In Asian Countries; In Millions Of Users (Source: Internet World Stats [24-26]

To know more about the India, the following International Telecommunication Union data (Fig) will help a lot. Moreover the internet users in Asian Countries based on IWS data [26], November-2015 is depicted in Table: 1.

As reported by the Wikipedia, the India holds total uses of the internet in 2013 is about 426, 124,989 and stand second; while the popularity wise it was 34.8%. According to the satisfaction, India is the third largest online market in the world with more than 198 million of internet users. Moreover the statistics shows that 38% of the user base mainly uses it either at the office or at the home. Interestingly the user base was mainly aged between 25-34. Moreover the study reveals that 61% of the users are men while 39% are women. The following statistics will help to learn more on internet as far as India concerned.

- a. The most important and emerging players are online marketing company and longest in this category is Flipcart with \$2500 million business.
- b. Internet penetration is about 18% and the active mobile based internet users are around 303 million.
- c. The visitor of Facebook from India is 59,642k.
- d. The active mobile social media penetration in India is also 9%. The sources also inform that 71% are from male users.

- e. The internet also helps in economical growth of India. It is a fact that annual retail e-commerce sales in India are \$14Billion.
- f. The survey show that average daily online usage in the country is about 5.1 hours among the internet users.

According to the research from the AKAMAI Q4 statement and Ranking of Global Aggregate of Internet speed is 5.6 MBPS. The South Korea Ranked Number One with 26.7 MBPS while the average packet connection is about 18.7 MBPS. The Average speed is provided herewith in table: 2 [35].

Rank	Country	Average Internet Speed (Mb/s)
International (Global)		5.6
1	South Korea	26.7
2	Sweden	19.1
3	Norway	18.8
4	Japan	17.4
5	Netherlands	17.0
6	Hong Kong	16.8
7	Latvia	16.7
8	Switzerland	16.7
9	Finland	16.6
10	Denmark	16.1

TABLE 2 THE AVERAGE SPEED AMONG THE TOP TEN COUNTRIES (AKAMAI, 2015-Q4 DATA)

However, interestingly the global average internet speed is 5.6% is also better compare to earlier position with the growth of 23%. The Quarter-Over-Quarter speed is also noticeable of 8.6% higher. In India, internet has the lowest speed with 2.8 Mbps. The adoption of high speed bandwidth in India is ranked 1.8%. The international rank is 68. Even the Malaysia, Indonesia, Sri-lanka, China etc are also lagging behind India.

IV.FINDINGS

- 1. The mobile internet speed of the internet is 2.8 MBPS and it is better than the normal broadband speed.
- 2. Like the international trend, in India also the demand of seamless online videos and its demand have increased. In India the 4K increased but ranked at the 0.6%.
- 3. The Britain had the fastest average mobile internet connection of 26.8 mbps compare to the second position 14 mbps (of Spain).

V.CONCLUSION

There are many reasons for lower internet speed in India and if more speedup then it will help in rising of more development, no doubt. It is expected that India holds 462, 124, 989 internet user by 2016 and among the total population of 34.8%. During the last ten years India is witness of development of internet in many perspectives. In 2005 the total internet share was 2.4% while in 2015 it is about 27%. According to some experts, the Indian companies such as BSNL, MTNL etc not cope up the demand. Thus their active initiative is very much important and urgent. The integration from the Government side is also very high and thus it needs to re-look the poor infrastructure and the policy to exchange more users and services.

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