Bridging the Digital Divide in India: Issue and Challenges

Raja Sarkar[1], Dr. Bhagyashree Padhi[2]

[1]*(Basic Science & Humanities,,* Gandhi Engineering College,Bhubaneswar*)*
[2]*(Basic Science & Humanities,,* Gandhi Engineering College, Bhubaneswar*)*

Abstract

This paper focuses on Bridging the Digital Divide In a developing country like India. In ICT have brought a lot of opportunities and whole lot of challenges as well. One of the main challenges is frightening gap between the information have-s and information have-nots, what we call the digital divide. Purpose of this study to highlights the concept of digital divide in general and special reference to Indian prospect. It identifies some major efforts to bridging the digital divide. It concludes by providing the some possible solutions in bridging the digital divide.

Key Words: Digital Divide, ICT, India, Developing Countries, Libraries.

I. INTRODUCTION

We live in information age people who don't have access to the internet and World Wide Web through the application of information and communication technologies are increasingly disadvantage in their access to information. Many factors have contributed to the digital divide such as poor education system. Developing countries like Indian has mostly affected to digital divide. Indian government policies are being established to ensure that all people have access to ICT and are able to use it. Technology is developing very fast mode as a result leaving many people at the back. This is condition in developing country where by many people are still lacking of advanced technology.

II. DEFINITION AND DIFFERENT FORMS OF DIGITAL DIVIDE

There are several definitions of the term digital divide as provide in the literature. Purpose of this paper the following definition will be used.

According to **Deschamps "** Digital divide as the growing gap between those parts of the world which have easy access to knowledge, information ideas and works of information through technology and those who do not.

Salinas" Digital divide refers to that disparity between individuals and/or communities who can use electronic information and communication tools, such as the internet, to better the quality of their lives and those who cannot. The term digital divide has aloes been applied to the gap that exists in most countries between those with ready access to the tools of information and communication technologies and the knowledge that they provide access to and those without such access or skills .

Based on the above definitions digital divide can be defined in simplest words "the gap they exist between those who have and those who do not have access to technology.(telephone ,computer, Internet access) and related services. This definition was further revised by adding the user must have posses the ability to use to available resources properly, if you have all latest technology and information and you don't know how to use and where to use leads you to the digital divide. Access to internet is not only the single aspect but also connected with more aspects i.e. physical access, information literacy, usage etc. There are different forms of digital divide.

III.   FACTORS THAT CONTRIBUTE TO THE DIGITAL DIVIDE

There are several factors that contribute to the digital divide. There following are some of the factors which created the digital divide

Gender: In India, females have less access to the internet than males. According to Multual study It was found that fewer males (38%) had limited access to the internet the females (41%) This disparity is partly attributed to perception that IT is a Technical subject for men with many females consequently shying away from it. Physical disability: Visually impaired and blind people are fully able to use computer due to advances in technology. However, the internet is inaccessible to the blind and visually impaired user because the screens reader is unable to read the web pages.

3.1. INFRASTRUCTURAL FACTOR   Libraries and information centers, with their commitment to freedom of access to information and promotion of life–long learning in India, are yet to have a robust infrastructure. Public libraries which can provide access to the Internet do not have computers and Internet access. Although cyber–cafes have been increasing, poor people cannot afford to have access due to high cost.

3.2. LITERACY AND SKILL FACTOR

Education in information literacy will play an important role in keeping the society from fragmenting into a population of information haves and have–nots. The lack of skill in using computer and communication technology also prevents people from accessing digital information

3.3. ECONOMIC FACTOR

Poor access to computer and communication technology also causes a digital divide. In India the ability to purchase or rent the tool for access to digital information is less among the masses. The lower income group does not have discretionary money to spend on cyber–cafes or to get Internet connectivity on their own to access digital information.

3.4. RELEVANT CONTENT FACTOR

The Internet allows ideas and information to be shared freely from citizen to citizen globally. In many ways the strength of the Internet is a function of the number of people and organizations creating quality content. Since no entity controls the Internet, anyone with Internet access has the potential to contribute information.

3.5. LANGUAGE FACTOR

India is a country having a multicultural and multilingual population. Today a large percentage of information content on the Internet is in English, which is a barrier for the people whose primary language is not English

IV. Some of the efforts made towards bridging the gap are discussed as follows:

Infrastructure development in bridging the digital divide

The basic requirement for reducing the digital divide for countries is to give priority to the development of their telecommunication and IT infrastructure in order to provide universal and affordable access to information to people in all geographical areas of the country.

Role of government programmes for e–governance some major project Central governments in the country have been actively involved with several IT–oriented projects in an effort to bridge the digital divide

4.1. CARD Project

4.2 Sourkaryan and E–Seva

4.3 The Bhoomi Project

4.4 The Gyandoot Project

4.5 FRIENDS Project

4.6 Lokamitra/Smart Project

4.7E–Chaupals Project

V. ROLE OF LIBRARIES AND INFORMATION CENTERS

Libraries with their commitment to freedom of access to information and promotion of life–long learning are central to bridging the digital divide where all services are provided to all in any case of age, race or language. Libraries in India, like those in other developed world countries, have been changing their role from traditional storehouses of information to providing access to information from any part of the world. Today the professional librarians are being better recognised as information disseminators or communicators rather than custodians of information. Some major project done by library and information centers with the help of government to bridging the digital divide.

5.1 National Science Digital Library (NSDL)

5.2 Vidya Vahini Project

5.3 Digital Mobile Library

5.4 Public Libraries

5.5 Library Networks

VI.   ROLE OF ACADEMIC AND RESEARCH INSTITUTIONS

Academic institutes, particularly the Indian Institutes of Technology (IIT), have been making encouraging efforts to help rural and technologically disadvantaged people to access the Internet. IIT Kanpur done very help full projects to bridge the digital divide and other institution working other projects.

6.1. EFFORTS MADE BY PRIVATE BUSINESS HOUSES

Some of the private businesses, like the Tata Council of Community Initiatives, are playing an important role in promoting adult education in the country. The council has extended several innovative computer–based literacy programs to improve India's adult education by preparing multimedia presentations.

6.2 ROLE OF DOT–COM COMPANIES

Dot–com companies have played an important role in bridging the digital divide in the country. They have become the largest buzzword in the IT industry. Portals like Rediff.com and Siffy.com are in a battle royal for the title of number one e–mail provider.

VII.   POSSIBLE SOLUTIONS TO BRIDGING THE DIGITAL DIVIDE

It is not easy to quick solution to the problem of the digital divide in Indian However if we are to bridge this digital divide something has to be done The following are some of the possible solution:

Indian government should create legislation to provided funds to subsidize computer purchases and internet access for necessary households and at the same time private companies should also provide a more services to areas currently lacking access to provide it to all individuals.

There should be more government public internet booth available in public places, where the general public can use these terminals on a fee-per-use basis.

People should be trained on how to properly use these Information communication and technologies tools. There must also be training of the trainers so they can teach others about these new technologies. Training should not only be done at formal places but can also be done at mall, shopping centers etc. Encourage the use of computers at school level. In order to make the younger generation equipped with necessary internet tools, computer and information technology. Training must also be incorporated into the school curriculum, so the learners can be made comfortable with new technology.

VIII.   CONCLUSION

People should be trained on how to properly use these Information communication and technologies tools. There must also be training of the trainers so they can teach others about these new technologies. Training should not only be done at formal

places but can also be done at mall, shopping centers etc. India like other countries is affected by the digital divide. This is due to factor as discussed in this paper. However number of proposal to bridge this divide is ongoing. It is necessary to accept in mind that this effort of bridging the digital divide might take decade. Because Indian is alive with possibilities, this divide will some day be bridged. The government needs to triple its effort in providing support and resources in order to bridge the digital divide. Libraries can make a huge impact on bridging the digital divide because they are institution of knowledge. They must provide access to information and communication technologies. By providing these services they will be opening the door to global knowledge hence bridging the digital divide.

REFERENCES

[1] Aina, L.O (2003) Strenthening Information Provisoin in Nigerian University Libraries: The Digital Option In compendium of paper Presentations at 2003 NLA Annual conference and AGM Makurdi, 7th-12th September, 2003 P.1.

[2] Aguolu, C.C and Aguolu, I.E (2002) Libraries and Information Management in Nigeria. Maiduguri, ED-Information Service.

[3] Banerjee, Sharmila. (2001) "Now the blind can surf Internet." *Hindustan Times* (26 July).

[4] Dutta, Subrat. (2003) "Impact of Information Communication Technology on Society." *Yojna*. 47, no. 7: 24.

[5] Gosh, Shyamal. (2004) "Indian Telecom Scenario." *Yojna*. 48, no. 1: 20.

[6] Kanpur–Lucknow Lab. Kanpur Media Lab Asia," at http://www.iitk.ac.in/MLAsia/infothela.htm, last visited 5 February 2003.

[7] Satyanarayana, M.N. and Sathyamurthy. (2005) "Telemedicine: Specialty Health Care for All." *Employment News*. 30, no. 4: 1–2.

[8] Mahajan, Subrat. (2003) "Impact of Digital Divide on Developing Countries with Special Reference to India." *SERALS Journal of Information Management*. 40, no. 4: 328–329.