# Chapter 16 Bridging the Digital Divide: A Review of Critical Factors in Developing Countries

Leila Nemati Anaraki Islamic Azad University, Iran

Azadeh Heidari Islamic Azad University, Iran

## ABSTRACT

Recent developments in Information and Communication Technologies (ICT), while making our life easier, created a social divide that is known as the digital divide. The global information gap is likely to widen the North – South divide and this global digital divide raises many issues for discussion that will be explored and reviewed further in this research. This chapter provides a brief overview of digital divide and the effects of some critical factors on it. Unequal investment of Information and Communication Technologies (ICTs), the potential of the Internet, the important role of education, literacy, education, e-governance, librarians, libraries and also digital libraries etc. are some discussed factors in this chapter. It concludes that paying attention to all so called critical factors can bridge and decrease this global digital divide.

### INTRODUCTION

Although in recent years the information environment has greatly improved in many developed and developing countries, there is no indication that the digital divide is decreasing. Access to information and communication technologies is the crucial issue to a sustainable agenda of socio-economic development. Access to new technologies will furnish vital knowledge inputs into the productive measures of developing countries, especially those who are rural and poor.

For the last ten years the term 'digital divide' has become a familiar way of expressing the wide variations in access to information and communication technologies (ICTs) across the world. While there may be some disagreement over what the expression actually means, and what indicators should be used to map it, there is no doubt that developing countries, lag far behind industrialized countries in their take-up of new digital technologies, especially the Internet. The emphasis in early accounts of the

DOI: 10.4018/978-1-61520-767-1.ch016

digital divide was on inequalities in infrastructural provision and access to technology. Many countries have devised information strategies, taking for granted the relationship between ICT diffusion and economic development, in an attempt to close the gap. These have generally focused on infrastructural improvements: policies in education, for example, have concentrated on hardware provision with much less attention paid to the issues of how new technologies are used.

There is no doubt about the fact that there are many benefits associated with ICTs, but still significant barriers to its effective use exists in both developed and developing countries. Some of these barriers may be endemic(e.g. the generation gap, learning processes and gaining in ICTs, poor telecoms infrastructure, poor computer and general literacy, and so on). Information and communication technologies (ICTs) can be considered as an important weapon in the war against world challenges. When used effectively, it offers huge potential to empower people in developing countries and disadvantaged communities to overcome obstacles, address the most important social problems they face, strengthen communities, democratic institutions, a free press, and local economies and maybe above all, facilitate information flow with which real information society can come true. But, a digital divide separates those who can access and use ICT to gain these benefits, and those who either do not have access to such technology or who are unable to use it for one reason or another. The digital divide has become a common metaphor originating from now nearly obsolete phrases such as "information haves and have not's" and "information rich and information poor".

There are numerous approaches that libraries can and have taken in diminishing this divide. Libraries can play a vital role in bridging the digital divide by providing access to computer and the internet to those who do not have such facilities, but it is not a job that can be done singlehandedly. It is a challenge that must be dealt with in partnership among the various public and private sectors of society, such as the telecommunications industry, educational systems, policy makers, and community organizations.

As a result, the present article focuses on some of several dimensions of the digital divide and discusses about some key factors which have an impressive role in digital divide.

## **Definition of Digital Divide**

Digital divide is a familiar and dynamic concept which has evolve over time. There is not a single divide, but multiple divides: for instance, within countries, between men and women, between the young and the elderly, different regions etc. (World Information Society Report, 2007)

The Internet has profoundly changed many things in our world. The "have" versus "have not" distinction traditionally refers to "the great divide" in our world, between people who have health, wealth and opportunity versus those who have not. The same distinction can be made about people who have access to the new information and communication technologies (ICTs) versus those who have not, and this is referred to as "the digital divide" and globally, there is a gaping digital divide between the "information rich" and "information poor". (The digital divide, n.d.)

The digital divide has been frequently defined. Here, some definitions relevant to our discussion are considered as follows:

The lack of access to information and communication technologies to segments of the community. The digital divide is a generic term used to describe this lack of access due to linguistic, economic, educational, social and geographic reasons (Scrutiny of Acts and Regulations Committee, 2005). The gap between those people and communities who can access and make effective use of information technology and those who can not

23 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/bridging-digital-divide/42749

## **Related Content**

#### Digital Libraries in Africa: Evolution, Status, and Challenges

Stella E. Igun (2012). *International Journal of Digital Library Systems (pp. 13-17)*. www.irma-international.org/article/digital-libraries-africa/73645

## Establishing Tacit Knowledge Transfer Practices for Competitive Advantage at a Public Sector Organization

Peterson Dewahand Silibaziso Natasha Ngwenya (2020). Cooperation and Collaboration Initiatives for Libraries and Related Institutions (pp. 130-149).

www.irma-international.org/chapter/establishing-tacit-knowledge-transfer-practices-for-competitive-advantage-at-a-public-sector-organization/235927

#### Software Process Asset Libraries Using Knowledge Repositories

Leonardo Bermón-Angarita, Antonio Amescua-Seco, Maria Isabel Sánchez-Seguraand Javier García-Guzmán (2009). *Handbook of Research on Digital Libraries: Design, Development, and Impact (pp. 465-475).* 

www.irma-international.org/chapter/software-process-asset-libraries-using/19911

#### Understanding Digital Documents Using Gestalt Properties of Isothetic Components

Shyamosree Pal, Partha Bhowmick, Arindam Biswasand Bhargab B. Bhattacharya (2012). *Multimedia Storage and Retrieval Innovations for Digital Library Systems (pp. 183-207).* www.irma-international.org/chapter/understanding-digital-documents-using-gestalt/64468

#### Sports Information Retrieval for Video Annotation

Hua-Tsung Chen, Wen-Jiin Tsaiand Suh-Yin Lee (2010). *International Journal of Digital Library Systems* (pp. 62-88).

www.irma-international.org/article/sports-information-retrieval-video-annotation/39037