

# Information Society, Digital Divide, and E-Governance in Developing Countries

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## INTRODUCTION

The dynamic transformation process of the industrial society into the information society promises a fundamental change in all aspects of our lives, including knowledge dissemination, social interaction, business practices, political engagement, media, education, health, and entertainment (Buenafe, Seishi, & Robert, 2007). Many Significant differences exist in the capacity of countries to adapt to changes in technology and knowledge. Consequently, the move towards the information society constitutes a real challenge to developing countries, particularly in view of the expanding digital divide with developed countries, thereby making them increasingly vulnerable to reduction in productivity and economic capacity. This leads, in turn, to unemployment, poverty, and further marginalization. The pace of global technological and economic transformation demands urgent action to turn the present digital divide into digital opportunities for all.

A developing country or nation or other related phrases such as an emerging country refers to a country where access to high-quality research information has historically ranged from being extremely limited to altogether non-existent. Some countries may be considered underdeveloped in terms of the overall quality and quantity of information available to its citizens and researchers through academic institutions, hospitals, and other research centers. It is important to note that a country's lack of information resources is not necessarily in direct proportion to its economic wealth or lack thereof and that, there is no universal, agreed-upon criteria for what makes a country developing versus developed and which countries fit these two categories. The concept of the digital divide can be explained from two perspectives namely: the gap

that exists between the countries that have full access to electronic research information and those that do not; and the difference in Internet literacy and aptitude between the citizens of developed versus underdeveloped countries (Brooks, Donovan, & Rumble, 2005). This divide is categorized (Norris, 2001) into its three constituent elements: the global divide between advanced industrialized countries and developing countries, the social divide between information rich and information poor within advanced industrialized countries, and the democratic divide between those within the online community who does and do not use digital resources to engage, mobilize and participate in public life. Relevant indicators were adapted and others were created to be used as benchmarking tools for assessing the progress achieved to bridge this divide at the national and regional levels. The importance of finding appropriate solutions to the problem of the digital divide, as defined herein, cannot be overstated. Most of the countries and regions that comprise the developing world are falling far behind the more developed nations in many areas, with education ranking among the most notable (WEF, 2013).

Since the world-wide development global initiative referred to as the Information Society initiative, adopted in the World Summit in 2005, and in tandem with the Millennium Development Goals (MDGs) worldwide development programs, many developing countries have moved a long way towards "bridging the Digital Divide" (UN, 2009). The changing state of affairs globally, mostly economic and social, implied tremendous changes on the way national strategic plans of countries are developed. Most of these changes integrated the new technologies. The prerequisite for applying such technologies is open and hence developing countries could benefit from this. This article examines the digital

DOI: 10.4018/978-1-4666-5888-2.ch672

divide as a global issue with a focus on developing countries. It discusses its relation to globalization and the role of e-governance in leapfrogging it. This article also sheds the light on the measurement dimension of the digital divide by discussing the important metrics of the information society.

## **GLOBALIZATION AND THE DIGITAL DIVIDE**

Globalization has been referred to as the process by which the world is being made in to a single place within systemic properties (Robertson & Lechner, 1985). Economically, globalization is supposed to enhance the convergence of income levels and consumption patterns between developed and developing countries and enable increasing interdependence between these countries. However, it has been argued that globalization benefits only the developed countries, at the expense of developing ones (IMF, 2008). Many of us are aware that we live in a rapidly changing world; nevertheless, we are not fully conscious of the speed of technological change and other changes that are affecting our daily lives and that will have a profound effect on our future.

Information and Communication Technology (ICT) has been regarded as the tools for the information society, and the foundations for a knowledge economy, due to their ability to facilitate the transfer and acquisition of knowledge. These views seem to be shared globally, irrespective of geographical location and difference in income level and wealth of the country. ICT may not be the only cause of changes we are witnessing in today's business and educational environment, but the rapid developments in ICT have given momentum to the current wave of globalization. In all these aspects, developing countries could benefit in many ways. ICT could facilitate the acquisition and absorption of knowledge and offer developing countries unprecedented opportunities to change educational systems, improve policy formulation and execution, and widen the range of opportunities for business and for the poor. However, in many parts of the developing countries ICT is available only on a very limited scale, and this raises doubts about developing countries' ability to participate in the current ICT induced global knowledge economy. The main challenges facing developing countries on effec-

tive utilization of ICT include the issues of awareness, advocacy and policy formulation, connectivity capacity and institution building. Developing countries are at the risk of being further marginalized if they fail to embrace these technologies to transform their economies. ICT is not a luxury but rather a tool for economic and social development, and the countries that have already fallen behind in economic development could fall much further behind by being cut off from the new opportunities provided by the transformation into the information society and knowledge-based economy. With rapidly increasing trends of globalization, the uneven spread of ICTs around the world came to be seen as a digital divide at a global scale.

Speaking about the global scale digital divide, researchers report a wide variety of factors which favor the increasing gap. These include low income and other financial limitations, lower-quality or high-priced connections, low level of education, lack of digital literacy, poor technical assistance, and limited access to quality ICT content. The cost and affordability of ICT is a big issue in many countries, but a bigger one is the lack of knowledge and understanding of the technology within the information society we are living in.

## **The Information Society**

The concept of the Information Society dates back to the mid nineties. The first wave of Information Society policies focused on liberalizing telecommunications and the ICTs. The second phase was more concerned with the wider social aspects including issues of social cohesion and the digital divide. The latter has continued to attract the attention of researchers, policy makers and governments.

In a general sense, the Information Society is a term for a society in which the creation, distribution, and manipulation of information has become the most significant economic and cultural activity (Rouse, 2005). However, there is no universal definition of the information society. Definitions that exist in the literature are often partial, and take into account only selected problems. Despite the absence of a universal definition, there are elements that can be considered as forming the basis of the information society, namely: Information and knowledge; Proliferation of ICT; and access to and use of ICTs.

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