Contemporary Concerns of Digital Divide in an Information Society

Yasmin Ibrahim

University of Brighton, UK

INTRODUCTION

The social issue of the "digital divide" has courted much political and scholarly attention in the last decade. There is, however, less consensus over the origin of the term, even though it is generally associated with the advancement and diffusion of information technology. According to Jan Steyaert and Nick Gould (2004), the concept of the digital divide is believed to have gained media and academic currency in the mid-1990s. In 1998, the United Nations labelled the digital divide as a new type of poverty that was dividing the world (cf. Hubregtse, 2005). A UNDP (United Nations Development Programme) report in 1999 (cf. Norris, 2000) stated that "the network society is creating parallel communications systems" that increase the divisions between rich and poor nations (p.3). The term, in effect, captures the social inequality of access to technology, particularly the Internet, as well as the long-term consequences of this inequality for nations and societies.

The significance of the term is embedded within the notion of an information society, where information is an important component of the global economy in terms of production, development, and social enrichment of societies and nations. The diffusion of technologies, such as the Internet, has meant the surfacing of various social issues including technology's impact on society, its relationship with older media forms, and its immediate impact on people's social and political lives (Robinson, 2003, p. i). New technologies, such as the Internet, are seen as transforming the globe into an information society with the ability to promote new forms of social identity and social networks while decentralizing power (Castells, 1996, p. 2001). Robin and Webster (1999, p.91), nevertheless, are of the view that the contextualization of the digital divide debates within the issue of information revolution is misleading, for it "politicises the process of technological development by framing it as a matter of shift in the availability of and access of information."

The term digital divide conveys the broader context of international social and economic relations and in particular, the centre-periphery power configuration marked by American dominance over the rest of the world (Chen & Wellman, 2004, p. 41). In fact, rhetoric and literature on technology and information have always emphasized this divide (see Galtung & Ruge, 1965), not to mention the debates that were sparked in the 1980s by UNESCO's proclamation of the New World Information Order (cf. Norris, 2000). The term has been analysed both at global and regional levels, and has involved the investigation of socioeconomic contexts, global governance, policy issues, as well as cultural elements. The analysis of the digital divide on a global level may entail comparisons of large regions, between developed and developing countries, and between rural and urban areas. In modern consciousness, the phrase captures the disadvantages and inequalities of those who lack access or refrain from using ICTs in their everyday lives (Cullen, 2003).

BACKGROUND

The imbalances between North and South in the field of communications and information were published in the Macbride Report in 1980, under the auspices of the United Nations Educational, Scientific, and Cultural Organization (UNESCO). The report concluded that there were stark discrepancies between industrialised and developing countries with regard to information flows and capacticites for active participation in the communication process (Modoux, 2002, p.2). The report was instrumental in the formation of a New World Information and Communication Order (NWICO), led by the United Nations and UNESCO to address the imbalances. With the appropriation of the NWICO as a "Cold War" agenda and the illumination of information and communication as a key tool of control and propaganda, the debates about the information and communication imbalances became subsumed under this climate of political hostility. In the 1970s and 1980s, the fear that development in the communication field might predominantly benefit the authoritarian regimes in the South (Modoux, 2002, p. 7) mediated much of the rhetoric and, as such, the global political context was important in situating debates on communication and information disparities.

The digital divide, as an issue, dominated the G8 summit in Okinawa in 2000, and has also dominated similar discussions at the first World Social Forum in Porto Alegre in Brazil and the Davos World Economic Forum (Menou, 2001, p. 112). In the same vein, the "World Bank has, from the early 1990s, published a number of reports on information technology and the Internet, stressing it as a major area

of concern for the world. Other global initiatives naturally include the World Summit on Information Society (WSIS) meetings in Geneva in 2003 and Tunis in 2005" (Luyt, 2006, p. 276). In July 2001 at the Genoa Summit, the G8, comprising the most highly industrialized countries, adopted a plan to clarify the role of information and development strategies and their contribution to the fight against poverty. In its agenda, the "Genoa Plan of Action" embraced intiatives aimed at "creating conditions such that everyone, in the years ahead, should be able to participate in the 'information society' and share its benefits." The agenda, as Luyt notes (2004, 2006), to position the digital divide as a global issue, has been shaped by powerful corporations, governments, and civil society organisations. International agencies such as the World Bank, UNDP, and ITU (International Telecommunications Union) have reiterated the need for central government, local government, nonprofit organizations, and the private sector to bridge the global divide.

According to the ITU report (2005), the digital divide, in the last 10 years, has been shrinking in terms of the number of fixed phone lines, mobile subscribers, and Internet users throughout the world. However, there remain significant disparities from nation to nation in terms of access to such technology. According to ITU estimates, some 8,000,000 villages-representing one billion people worldwide-presently lack connection to any kind of ICTs. Statistics also revealed that in 2004 fewer than 3 out of every 100 Africans used the Internet, compared with an average of 1 out of every 2 inhabitants of the G8 countries (Canada, France, Germany, Italy, Japan, Russia, the UK, and the US). In addition, in 2004 there were approximately the same total number of Internet users in the G8 countries as in the rest of the world combined. This translates into 429m Internet users in G8 countries and 444m users in non-G8 countries.

The digital divide is often measured by the degree of access to ICTs and the Internet. With the rapid proliferation of information and communication technologies, there is growing concern over the disproportionate number of users concentrated in developed countries. In 2001 for example, 169m Americans were online, accounting for 60% of the US population and 29% of the world's Internet population (Chen & Wellman, 2004, p. 40). According to a 2005 ITU report, the present digital divide not only refers to inequalities of access to telephones and the Internet, but also to mobile phones, RFID (radio-frequency identification), and sensors. The report stressed that far from there being a single digital divide, there is instead a terrain of varying levels of access to ICTs that may widen the gulf between developed and developing countries if the latter do not actively invest in these fields. Martin and Robinson (2004, p. 2) point out that researchers and policy makers agree that there are presently profound differences in Internet use across incomes, educational levels, races, and ages both in the US and other nations, and often the disagreement is over how long these differences will persist or what these trends will be.

THE MAIN ISSUES

Beyond the contemporary currency of digital divide, the unequal development between rich and poor nations in technology and science had been termed by Hans Singer as "international technological dualism" more than three decades ago (cf. Gudmunsdottir, 2005). The digital divide captures the relationship between the Internet and social inequality, and as the Internet becomes more important in society, those who remain off-line (Martin & Robinson 2007, p. 1). The term situates two meta-issues: on the one hand it focuses on the issue of access and connectivity, and on the other it ventures beyond access issues into media literacy and associated skills and on to issues of social cohesion, civic engagement, and participation (Sciadas, 2002, p. 4). The problem of global information imbalance is often seen beyond the technology paradigm, and is often equated with cultural hegemony (Kema, 2005).

The digital divide refers mainly to the division between the information rich and the information poor, whether they be individuals or societies. It is also common to deploy the term to divide the globe geographically, as in the "North-South" dichotomy or the "West and the rest" (Gudmunsdottir, 2005, p. 3). At a global level, the digital divide results from the fact there is a huge and growing gap between the more advanced countries and the rest regarding the size and intensity of their ICT applications (Menou, 2001, p. 112). According to Rowena Cullen (2001, p, 311), "the digital divide has been applied to the gap that exists in most countries between those with ready access to the tools of ICTs, and the knowledge that they provide access to, and those without such access or skills. This may then be attributed to socioeconomic factors, geographical factors, educational, attitudinal and generational factors." Van Dijk (1999) lists four barriers of access that can impact on digitial divide, and this can include mental access (i.e., the lack of interest), material access (i.e., the lack of infrastructure), skills access (i.e., lack of literacy), and usage acess, which refers to the ability to embrace opportunities to access technology. Others, such as Warschauer (2004), have categorised these impediments as human resources, social resources, digital resources, and physical resources. Similar to Van Dijk's categories, these refer to the lack of infrastructure, language barriers, media literacies and skills, and additionally they focus on the social resources such as the agencies offered through the context of the community, as well as institutions that can mediate policy and deployment of technology.

From a social constructionist perspective, Luyt argues (2006, p. 279; Sciadas, 2002) that the global digital divide is not a social or policy problem but one technological condition among many in a world with divisions of many kinds. According to Luyt, what makes the lack of access to ICTs a policy problem is the work of claim makers who have generated much publicity about the condition and the

4 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: <u>www.igi-</u> global.com/chapter/contemporary-concerns-digital-divide-information/13655

Related Content

The Role of Edge/Fog Computing Security in IoT and Industry 4.0 Infrastructures: Edge/Fog-Based Security in Internet of Things

Meltem Mutluturk, Burcu Korand Bilgin Metin (2021). Handbook of Research on Information and Records Management in the Fourth Industrial Revolution (pp. 211-222).

www.irma-international.org/chapter/the-role-of-edgefog-computing-security-in-iot-and-industry-40-infrastructures/284727

Extracting Non-Situational Information from Twitter During Disaster Events

Poonam Sardaand Ranu Lal Chouhan (2017). *Journal of Cases on Information Technology (pp. 15-23).* www.irma-international.org/article/extracting-non-situational-information-from-twitter-during-disaster-events/178468

E-Learning Experiences in La Ribera Health Department

Juan Vicente Izquierdo Soriano, Felix Buendia Garcia, Jose Luis Ortega Monzoand Eduardo Tabernero (2014). *Journal of Information Technology Research (pp. 7-23).*

www.irma-international.org/article/e-learning-experiences-in-la-ribera-health-department/111294

A Maturity Based Qualitative Information Systems Effectiveness Evaluation of a Public Organization in Turkey

Sevgi Ozkan, Murat Cakirand Semih Bilgen (2008). *Journal of Cases on Information Technology (pp. 58-71).* www.irma-international.org/article/maturity-based-qualitative-information-systems/3229

Real Time Interface for Fluidized Bed Reactor Simulator

Luis Alfredo Harriss Maranesiand Katia Tannous (2009). Encyclopedia of Information Science and Technology, Second Edition (pp. 3205-3212).

www.irma-international.org/chapter/real-time-interface-fluidized-bed/14050