Chapter 36

Digital Divide and Rural Communities:
Practical Solutions and Policies

John Garofalakis
Research Academic Computer Technology Institute, Greece

Andreas Koskeris
Research Academic Computer Technology Institute, Greece

ABSTRACT

During the last years, due to the wide spread of World Wide Web (WWW), the Internet has become one of the most valuable and effective communications media and the most inclusive source of information. However, in many cases the difficulties of establishing universal effective access could serve to reinforce current patterns of social exclusion and produce barriers to balanced development instead of supporting it. World widely there is a rising concern over the so-called "digital divide"–a term that refers to the gap existing in the opportunities to access advanced information and communication technologies between geographic areas or by individuals at different socioeconomic levels. The experience shows that specialized initiatives are needed for disadvantaged areas in order to anticipate expansion of current digital divide. This chapter is focusing on the specific instance of digital divide occurring in rural territories, and examines the ways to foster digital culture among citizens, utilizing a specific initiative (the so called "Telecentres").

INTRODUCTION

During the last years the wide spread of WWW has led to a new form of illiteracy, a "digital" one. Only those who can afford the PC and fast Internet connection are able to take advantage of it. By most counts, the number of PC and Internet users is very small compared to the numbers that would use it if they could. As more individuals are connected online, those who are not connected are increasingly in danger for becoming

more marginalized within society. World widely there is a rising concern over this "digital divide" (Brachos, Kostopoulos, Soderquist, 2003; Reddy, 2005; Schloman, 2004; OECD, 2001).

The fact nowadays is that "The network society is creating parallel communications systems: one for those with income, education and literacy connections, giving plentiful information at low cost and high speed; the other are those without connections, blocked by high barriers of time, cost and uncertainty and dependent upon outdated information" (Globalization with a Human Face, p 63, 1999).

The key factors leading to the digital divide are:

- Missing infrastructure or access
- Missing incentives to use ICTs
- Lack of the computer literacy or skills necessary to take part in the information society
- Poverty and social exclusion

Most countries that have been concerned about this problem have instituted policies aimed at reducing aspects of it. In reality there are several possible concrete cases of the digital divide gap occurrence (Bridging the "Digital Divide», 2001). One important subset of the digital divide issue concerns high-speed Internet access, also known as "broadband". Broadband refers to data transmission where multiple pieces of data are sent simultaneously to increase the effective rate of transmission, regardless of actual data rate. The "broadband divide" may be defined by those with rich, interactive audio and video services in the home and those with low-bandwidth, text-driven services. This divide will become increasingly important as the availability of advanced telecommunications become essential to the development of business, industry, shopping and trade, as well as distance learning, telemedicine, and telecommuting. The international digital divide also exists between different countries, with the ability of individuals to take advantage of the Internet vary-

ing significantly across the OECD area (OECD, 2008) and between OECD and other countries. There are concerns that unless access to the use of Information and Communication Technology is broadened, the majority of people, particularly in the developing countries, will not enjoy the benefits of the new knowledge-based economy.

The Urban/rural divide refers to those set of people without an enhanced data capability which will lead them to be unable accessing the expected benefits particularly in relation to health and education. This concern is seen to be greatest in relation to those living and working in rural and remote areas since the lower rates for data access for these consumers place them at a disadvantage in comparison to metropolitan consumers. For these citizens the problems of missing infrastructures, incentives and computer literacy (the factors leading to Digital divide) are bigger and more difficult to solve. The world widely experience shows the several specialized initiatives are needed for rural areas in order to anticipate expansion of current digital divide and at the same time to provide solutions to deal with the actual problem.

Most of the effective solutions (Closing the Digital Divide in Rural Communities, 2001; Courtright, Robbin, 2001; Xavier, 2001; Bridging the "Digital Divide", 2001; Fung, 2006; The Digital Divide in Austria, 2000), focused directly on ensuring access to technology; the majority of access-based successful initiatives also involved training.

This Chapter examines the ways in order to foster digital culture among rural citizens by demonstrating initiatives to bridge the digital divide through advanced broadband telecommunications and services providing remote areas with access to the Info- Society. Its specific objectives are:

- To present the situation concerning the digital divide problem in rural areas, with emphasis on situation around Europe Community.

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