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Bridging the Digital Gap: A Model

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Abstract

The emergence of the information society is a turning point in human history. The efforts to ensure digital inclusion, currently observed at different rates around the world, these different rates has caused a gap between north and south, say “**digital gap**”! In this perspective, among the main challenges national and international institutions have to address is the bridging successfully the existing digital gap. We are offering a model to overcome this gap and supporting illiterate populations to have access to essential tools.

Keywords: Digital Gap; ICT, Education; Internet

1. Background

The contributions of ICT to sustainable development are manifold, and all sectors of the daily life will be affected. In about twenty years a computer device will have the computational ability approximately of human brain. Computers will be conducted through intelligent, simulated software-based. Even when these forecasts have a prophetic character, nobody doubts that ICT is at the edge of revolutionizing our society profoundly, therefore, frequently designated as a paradigm shift.

The “digital” gap is but one element of a broad gap that separates the rich from the poor. Development of appropriate ICT has the potential to narrow the gap. However, the broadening of participation in and responsible engagements with the information society must also focus on education and in a later phase on entrepreneurship. The efforts must also go far beyond simple provision of access to infrastructure, affordable terminals and services. Education and innovation are linked to creation of knowledge and its dissemination in communities.

Education for ICT. People need skills and knowledge in order to handle the information flows they will be confronted with. Education for ICT is necessary to promote the use of local knowledge with new technologies. To allow The emergence of “multiple modernities”, indigenous knowledge has to be fully

integrated into the new social reality. Cultural and linguistic diversity is to be fostered as an element of global cohesion.

ICT for Education. As education is necessary in order to develop information and knowledge societies, ICT has to be used to develop education systems. It empowers society to develop new learning methods, to promote distance learning, to create virtual libraries and universities, to assist with innovation and training. In the domain of social innovations in education and health-care, ICT allows greater peer support among pupils and teachers, at the local and community level. All world universities and higher schools have to be connected in the same sort of high-speed network for research, education and collaborative development.

Successful “Bridging the Digital gap” requires a simultaneous development of infra-structure of ICT networks mostly accompanied by decentralized electrical power to be installed, and training of future teachers. Governments insist too frequently on their efforts to shape an infrastructure and overlook the problem of teachers’ training and condition for acceptance. In the absence of a simultaneous implementation of the human, technical as well as financial investments., the risk is real that they will miss the objectives and expectations ICT can offer for further development.

In this regard we may say the Big Bang is the Network Effects.

- Network effects and the emergence of the information society is a turning point in human history. This evolution is causing deep transformations in which gathering knowledge has not only become the principal driving power of social changes but also holds the promise that many of the problems confronting societies could be properly addressed.
- In this perspective, among the main challenges national and international institutions have to address is the bridging successfully the existing digital divide.

What is the Digital Gap?

Those with and those without access to Computers and the Internet is termed as Digital Gap!

Means of access are different in the north and south, it is strongly correlated with other measures of social and economical inequalities.

2. How can the Digital Gap be repaired?

Yet simple binary description of a divide fails to do justice to the complex reality of various people’s differing access and usage of digital technology.

Indeed, couching the condition in black-and-white terminology can lead those attempting to deal with technological inequities down the wrong path.

Someone may say: the big problem with the “digital divide” framing is that it tends to “digital solutions”, that is, “computers and telecommunications”.

- The key issue is not unequal access to the computer itself but rather the unequal access to computer literacy.

Main tools to over come the digital divide:

Band Width + Education

An Integrated Attempt

We will consider attempts at the Science and Arts Foundation, an NGO aimed to popularize ICT which Founded 1999.

Main Projects at the Science and Arts Foundation:

- Schoolnet: Empowering the Youth in the Information Age
- IT Center: ICT Training toward Entrepreneurship
- R&D Projects: ICT in cultural development

A. SchoolNet Project

A Community of Iranian Schools Supported by the Science and Arts Foundation to empower youth.

- Computer sites, networking and Internet access for more than 150 schools nation-wide
- IT training packages for teachers and students
- Team work projects
- IT Fest and Contests
- National and International Conferences

B. IT Center Project

Goals

- Training toward entrepreneurship
- Discovery Center: to support youth toward problem solving and creativity
- IT Services for professionals

C. IT Center

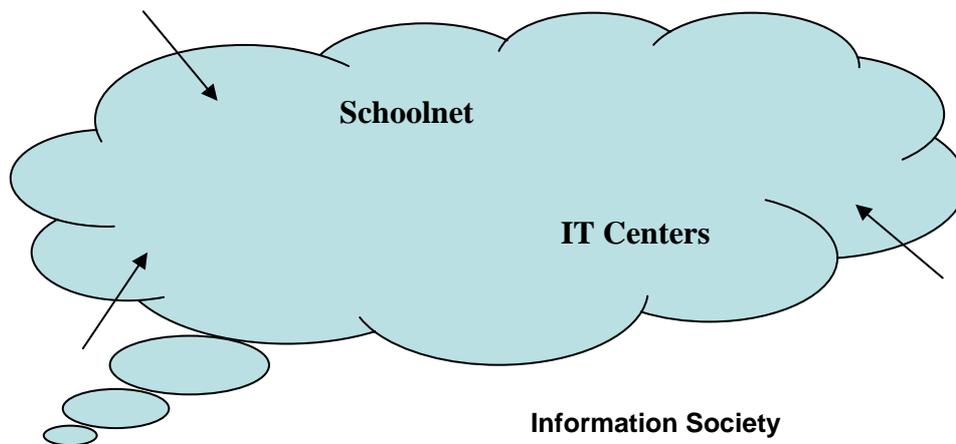
- Zahedan IT Center
- Bam IT Center

ICT in cultural development

- To support Standardization of Farsi under Unicode and developing a digital library to promote Persian literature on the Internet
- Network for Virtually Impaired People

D. A Model

- Who can popularize ICT toward an information society?
 - Governmental Organizations?
 - Private Sectors?
 - **NGOs!!** Could be the main player such as:
- Teachers associations, science clubs, community IT Centers, ...
- Methodology



To create opportunities and a competitive atmosphere for initiating, developing, maturing new ideas for collaborative projects.

Notes

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