

Ph.D. Lecture

Under the Collaboration Agreement on Ph.D. Studies within Information Systems between the University of Agder and Aalborg University, and in partial fulfilment of the terms for obtaining the Ph.D. degree,

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will lecture on

Bridging the Digital Divide: Sustainable Supply and Demand of Internet Access in Developing Countries

and afterwards discuss the dissertation with the committee

Friday 12 June 2009, at 1300
Auditorium B2-003 (building B)
University of Agder
Gimlemoen, Kristiansand, Norway.

Abstract

The topic area of this thesis is information technology (IT) and development, discussing how IT can contribute to development in developing countries by giving people sustainable access to information and knowledge, and to communication with other people, through the Internet.

While the role of IT in the development of poor countries is widely accepted, the majority of the population in these countries do not have access to IT in general and to the Internet in particular. This phenomenon, termed the digital divide, is one of the main barriers to the developmental impact of IT. One of the main ways through which Information technology can contribute to development in underdeveloped countries is to bridge the digital divide by giving people sustainable access to information technology and to the Internet. Most people in these countries cannot afford to buy their own computer equipment and internet connections and have to rely on public access points such as Internet cafés, telecentres, libraries, etc. The thesis therefore raises the following research question:

What affects the sustainability of public Internet access in developing countries, from the supply and the demand sides respectively?

To address this question, I adopted an inductive mode of research and have used a strategy called analytic research, which has not been used widely in the Information Systems literature. I have applied this strategy in an innovative way, by using ten of my own published research articles as domain (data source) for developing the theory. The thesis as a whole thus consists of two steps. The first step is the ten articles which are based on primary data and with individual contributions, mainly on the spread and use of information technology and the Internet in developing countries. The second step, which is called the Summary, is built on these results. The outcome of this summary is the new theory uncovering the underlying factors of sustainability of public Internet access in developing countries, i.e. elements that contribute to sustainability from both the supply side and the

demand side, with a specific focus on the demand side, which has not been very well addressed in the existing literature. I have called these two sets of elements supply sustainability and demand sustainability.

The supply sustainability is grouped into two main sets of elements, each of them consisting of two subgroups:

- Management issues
- Context and policy issues

while the demand sustainability has four main groups:

- Economic capacity
- Benefits
- Knowledge and awareness
- Context

and a number of subgroups. The four groups of demand sustainability are, to some degree, related to the two groups of supply sustainability.

The contribution to knowledge is thus twofold: development of new theory on sustainability of public Internet access in developing countries, and the innovative use of the analytic research methodology.

Based on research reported in this thesis, I suggest some initiatives that aim to increase public Internet access sustainability. The main recommendations I make have to do with public and private partnership, i.e. collaboration between local entrepreneurs running Internet access points and the public sector.

An obvious issue for further research will be to test and verify the new theory through deductive approaches. A particularly interesting direction will be to test the theory in different contexts, for example by looking at the role of new and emerging mobile technologies in the context of IT for development, and in specific application areas, like e-government and e-participation.