Chapter 4

Does IT Help or Not?
Computers for Development in the Andes

Antonio Díaz Andrade
Auckland University of Technology, New Zealand

ABSTRACT

The number of initiatives aiming at improving people's living conditions through the provision of information and communication technology (ICT) has been increasing around the globe during the last decade. However, the mere provision of ICT tools is not enough to achieve such goals as this chapter illustrates through the examination of the existent conditions in Huanico, a remote village in the northern Peruvian Andes. Using an interpretive case study design, the author analyzes and explains why under circumstances of severe scarcity and geographical isolation computers can do little in helping local people. The findings challenge the sometimes over-optimistic stances on ICT benefits adopted by international development agencies and governments. Conversely, it confirms the need to provide basic infrastructure and stresses the importance of establishing priorities correctly before launching any ICT for development initiative.

INTRODUCTION

This chapter echoes pretty much my reflections during the last ten years or so, which Walsham (2001) summarized in one immense question "Are we making a better world with information technology?" (2001: 251). The increased wave of hope and enthusiasm in the circles of international development agencies, national governments, non-governmental organizations and donors has prompted a debate in the academic community about the effective contribution computers can do to improving people's living conditions (see Walsham, Robey, & Sahay, 2007).

Going into a large research project, which is partially documented here, I had a strong belief that ICT can help in creating better conditions for undeserved communities and that belief has not been diminished. But we must admit that ICT is neither a one-size-fit-all artifact nor an end by

itself. As this chapter demonstrates, we should look first for the conditions where ICT tools are to be deployed.

This chapter's title paraphrases Carr's (2003) challenging question to remind us the importance of going back to the fundamentals when deciding ICT investments. Unlike Carr's (2003) reflection, which is in the for-profit sector and highlights the relevance of corporate strategy with reference to information technology spending, mine is well-positioned in the ICT for development debate and emphasizes the importance of essential physical infrastructure vis-à-vis the provision of techno-logical tools in a rural Peruvian community.

The Call of ICT for Development

The concept of development has evolved, from its original association with economic growth and modernization according to the Western standards, to an integrative view that entails health, educa-tion and quality of life (Mchombu, 2004) while recognizing local cultural differences (Walsham, 2001). The Nobel laureate Amartya Sen (1999) declares that development aims at bringing so-cial opportunities, that is "the arrangements that society makes for education, health care and so on, which influence the individual's substantive freedom to live better" (1999: 39). Access to information is one of these arrangements and it is widely accepted that ICT tools facilitate such access to information (Avgerou, 1998; Heeks, 2002; Kenny, 2003; Lewin, 2000).

If the idea of social opportunities brings to mind a positive connotation, it is reasonable to recog-nize that the lack of social opportunities leads to social exclusion. Social exclusion is a "process by which certain individuals and groups are systemi-cally barred from access to positions that would enable them to an autonomous livelihood within the social standards framed by institutions and values in a given context" (Castells, 2000a: 71). Those excluded from the social networks are also excluded from the information available within

the networks and get involved in a perverse circle that exacerbates their exclusion (Slater & Tacchi, 2004; Walsham, 2001).

It is against this background that a number of agencies called for granting access to the new ICT tools to those previously excluded. Some of them bestow to these tools a superlative role in the process of social inclusion.

Just to illustrate this point, I mention three statements that reflect how the potential benefits of ICT were – or are – perceived by these agen-cies. The first one comes from the World Bank's Development Report (1998), *Knowledge for De-velopment*, which advocates for the use of ICT as a means to spread knowledge and, consequently, improve living conditions of poor people in poor countries. I found the second one in the *Human Development Report 2001*, *Making New Technolo-gies Work for Human Development*, which praises the qualities of the ICT tools:

"Linking computing devices and allowing them to communicate with each other creates networked information systems based on a common protocol. Individuals, households and institutions are linked in processing and executing a huge number of instructions in imperceptible time spans. This radi-cally alters access to information and the structure of communication – extending the networked reach to all corners of the world". (UNDP, 2001: 30)

This report continues, claiming that new infor-mation technology enhances political participa-tion, achieves greater transparency, creates new sources of income and contributes to improved people's health. The third statement is even more forceful and comes from the exclusive club of the most powerful countries:

"Information and Communications Technology… is fast becoming a vital engine of growth for the world economy. It is also enabling many enter-prising individuals, firms and communities, in all parts of the globe, to address economic and social

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