



From the Editors

Assessing the Impact of Public Access to ICTs

During the past few months, your editors have been taking part in the launch of a 5-year study, supported by the International Development Research Centre (IDRC) (of Canada) and the Bill and Melinda Gates Foundation, investigating the social and economic impact of public access to information and communication technology (IPAI).¹ Many researchers are involved, at institutions ranging from the University of Washington and IIT Bangalore to Linne.net to our own universities. Current country research teams in Chile, Bangladesh, and Lithuania will soon be joined by others in several other countries. At this formative stage of the project, our discussions have focused on coming up with a systematic assessment approach.

Of course, much is already known about the more general impact of information and communication technology use in areas ranging from economic performance to health or education. While the existing literature is not without debate and controversy, this project takes it as a starting point and builds upon that foundation to study the particular impact of *public* use—venues such as telecenters, cybercafés, connected libraries, or community technology centers. Current scholarship reflects two implicit theories about the mechanisms through which public use leads to impact.

The first theory considers public use to be a *substitute* for private use. In this view, public access is inferior to private access: Users would prefer to use information and communication technologies from their home or office, but cannot afford it and must rely on public facilities. Public access may be a poor substitute because of the lack of privacy in public venues, restrictions imposed on computer use, limited opening hours, the affordances of the personal computer design itself, or the need to travel to the venue. Public use thus conceived is a transitory solution and public access facilities should become unnecessary as users gain private access.

The second theory regards public use as *different* from private use and in some situations superior to it. In this view, users have reasons to prefer public venues even when they could access information technologies from their homes or offices. That preference could be because the public venue offers more powerful computers, faster connections, or complementary services such as printing, training, or assistance. Public venues may be preferable for applications like multiplayer games that require other people to use them or because users learn from one another or benefit from other social interactions through public use. Or it can be that users want access when they are traveling. Public venues then have a long-lasting purpose and continue to have impact even after a population has obtained private access.

Obviously, these two conceptions are not mutually exclusive. The impact of public use is likely to re-

1. See <http://www.ipairesearch.org>

sult from a combination of more use and different use. However, these conceptualizations lead to specific research approaches. To the extent public use is a substitute for private use, it does make sense to measure how much more technology access is provided by public venues. We can then take a first-order guess at the resulting increased use and its impact, based on what we know about the impact of technology in general. We can also study the transition from public to private use and try to understand when that transition takes place and how best to promote it.

However, this approach is certainly too simplistic. In particular, public facilities aim often to provide access for marginal populations, those too poor to afford private access or excluded for some other reason. There are strong reasons to believe that the mechanisms that lead from use to impact will be different for users marginalized due to social, economic, educational, or political reasons. For example, Internet access has positive educational impact for literate users who get access to a wealth of reading materials, but we cannot assume that illiterate users will benefit in the same way. Likewise, we know that better access to information yields more efficient markets and positive economic impact, but this positive impact does not apply to those excluded from market participation in the first place. Thus, as we study the relative gains and losses of public versus private use, we need to always consider exactly *who* those users are, understanding that the impact of use will often differ among different populations.

In addition, to the extent public use differs from private use, we need to understand what the differences are and articulate the mechanisms through which they produce impact. For example, does staff assistance, or *info-mediaries*, in a public venue allow job seekers to be more successful in securing employment than if they searched alone? Do collective use practices emerge in public venues, with impact different from that of private individual use?

These are some of the thoughts guiding our approach to the IPAI project, and we continue to refine and reflect on these broad research frameworks. Your comments and critiques are welcome.

Given your editors' increased focus on public use of ICTs, we are particularly delighted to bring you this issue of *ITID*, which includes three insightful articles analyzing the impact of public telecenters. Sarah Parkinson and Allan Lauzon's work in Colombia sheds important light on the differences between telecenters and cybercafés; Chunbo Zhang explores the impact of institutional frameworks on telecenter projects in rural China; and Wallace Chigona and Paul Licker find that interpersonal communication plays a key role in the adoption of communal computing facilities among the urban poor in Cape Town.

The remainder of this issue explores a range of topics: Andy Dearden's report calls for community-centric, rather than user-centered, design; Mohsen Khalil and Charles Kenny investigate innovative business models coming out the Global South which have important lessons for the North; Mary Jane Parmentier and Sophia Huyer build on our previous special issue on women's empowerment (Volume 4, Issue 2), investigating the role of women as producers of ICTs; Derrick Cogburn and Nanette Levinson evaluate virtual team learning between six South African and U.S. universities; and Sujata Gamage and Rohan Samarajiva argue that Webometrics provide a more accurate picture of research capacity in developing countries. Altogether, an issue rich in insights. ■

François Bar

Michael L. Best