What Determines ICT Access in the Philippines?

When bad weather strikes, university students in parts of the Philippines check their cell phones for text messages telling them whether or not classes have been cancelled. In Naga City, residents looking for a building permit, a library card, or even a loan can download an application from the city's Web site. And special call centres that offer access to cell phones, traditional telephones, and video conferencing facilities helped 3500 Filipino families keep in touch with their relatives working in the Middle East during the 2003 war in Iraq.

These examples of innovative uses of information and communication technologies (ICTs) are cited in Bridging the Information Divide: A Philippine Guidebook on ICTs for Development, published in October 2003 by the University of the Philippines and the University of Manchester. The stories are intended to inspire readers — government officials, development workers, and members of community organizations — in their own efforts to bring the benefits of ICTs within reach of the average Filipino. The book also provides practical information, such as how to finance ICT projects, guidelines on setting up a telecentre, and a list of government information hotlines and text messaging services.

But the handbook goes beyond anecdote and advice to address the larger issue of the role of ICTs in development. In particular, the authors emphasize that people's use of ICTs is influenced by factors other than the conventional determinants of cost and location: "Access to ICTs should not begin and end with the physical provision of facilities, but rather should include the value people place on these instruments and their capabilities to use them."

This is an important lesson for policymakers. Despite advances in technologies, decreasing costs for services, and the proliferation of ICTs, there are still many barriers to their use. "Government policies on universal access should address the reasons that prevent people from using or accessing ICTs," says Erwin Alampay, one of the authors of Bridging the Information Divide. An assistant professor at the National College of Public Administration and Governance at the University of the Philippines, Alampay explored some of these reasons. A grant from Pan Asia Networking's ICT Research and Development Grants Program of Canada's International Development Research Centre (IDRC) helped to fund his research and the production of the handbook.
Moving into the new economy

*Bridging the Information Divide* comes at a time when the Philippine government is counting on ICTs to play a central role in the country's development. The liberalization of the telecommunications industry in 1989 paved the way for the greater integration of ICTs into the economy and society. The country's development plan for 2001 to 2004 states that the "Philippines shall use ICTs to leapfrog into the new economy." Accordingly, the government introduced several policies to broaden access to these technologies. As measured by statistics, these policies are a success. Landline telephone density has gone from less than one per 100 people in 1990, to 8.7% in 2002. Cell phone density is even higher at 19.4.

But these statistics provide only a partial picture. One policy, for example, required new telephone companies to install 300,000 to 400,000 telephone lines in underserved areas of the country. From 1995 to 1999, the number of available lines went from 1.4 to 6.8 million. But many of these lines were not put into service.

"Even if there is access, people are not using it," says Alampay. "You have to ask why."

ICTs as basic goods

Alampay set out to answer this question by applying a theory developed by Amartya Sen, a Nobel-prize winning economist renowned for his work on poverty in the developing world. Simply put, Sen posits that when people have access to the same basic goods, various factors account for differences in how these goods are valued and used. As Alampay explains it, a rich person would think nothing of washing his dog with water but a poor person would use the same resource very differently.

To look at the factors that influence how people use and value ICTs, Alampay conducted a series of household surveys and focus group discussions in two very different communities. Carmona, a rapidly industrializing urban area with closely spaced barangays or settlements, can be easily reached by car from Manila. In contrast, the island municipality of Puerto Princesa is a plane ride away from Manila. Its barangays, many of which are rural, are widely dispersed along the coast and in the mountains.

Despite the differences between the two communities, Alampay found that the same factors affected people's usage of ICTs: education, gender, location, age, and income. The level of education was the most significant factor. For example, 88% of those who had reached college used a phone, and 52% knew how to use a computer. Only 34% of those who had completed only primary school had used a phone. None knew how to use a computer.

Policy implications

This data highlights the importance of introducing ICTs to people at an early age, says Alampay. Otherwise, "a significant number of people may never gain the knowledge to capitalize on the use of these technologies. This is especially true of the poor who are more likely to drop out of school early, and are less capable of financing a college education." Indeed, the higher the household income, the more likely are people to benefit from access to ICTs.
In Puerto Princesa, however, a surprising number of poor households had used telephones — 70% had used a landline phone and 62% a cell phone. Alampay says that this runs counter to the arguments of telephone providers, who claim there is no market in poor areas for the technology. "If market is simply a function of profitability, this may be true," says Alampay. "However, there are people who need and use these services; hence there is a rationale for these services to be provided even among the poor communities."

By way of example, Alampay cites the case of Batanes, an island in northern Philippines with a population of less than 20,000. It is often hit by typhoons, which makes the use of conventional telecommunication technologies unreliable. Satellite phones were introduced in 2002: within four months, 200 handsets had been sold. "At roughly US$1000 a handset, that's a lot of money for a household on a relatively poor island."

The research also showed that women were more likely to use ICTs than men. Alampay speculates that this is due to women's traditional role as caregivers: cell phones offer a good way for keeping track of children's whereabouts. Because of this capacity to use ICTs, says Alampay, women could perhaps act as "intermediaries for spreading know-how found on the Internet."

**Information "go-betweens"**

According to *Bridging the Information Divide*, intermediaries — such as schools, nongovernmental organizations, family, and friends — can act as conduits of information and knowledge for people who do not have direct access to ICTs. Even traditional ICTs, such as radio and television, can play an important role. The Bureau of Agricultural Statistics, for example, broadcasts basic commodity prices daily to rural areas through local radio.

To capitalize on the potential of these information "go-betweens" and to lower the various barriers to ICT use, *Bridging the Information Divide* calls for an integrated approach to the development of access policies and strategies. This means that governments must work with both the private sector and community groups to introduce various models of access; that information and technology must be relevant to people's needs; and that training must be part of any initiative. The more valued and used ICTs become, the greater their potential to serve as tools for development.

*Jennifer Pepall is a senior writer in IDRC's Communications Division.*

---

**For more information:**

Erwin Gaspar A. Alampay, National College of Public Administration and Governance, University of the Philippines, Diliman, Quezon City, Philippines; Phone: 632-931-8980; Email: erwin_gaspar.alampay@up.edu.ph
*Bridging the Information Divide: A Philippine Guidebook on ICTs for Development* is written by Erwin Alampay, Richard Heeks, and Peter Paul A. Soliva. It was published in October 2003 by the National College of Public Administration and Governance at the University of the Philippines and the Institute for Development Policy and Management at the University of Manchester.

Alampay's research report for IDRC can be found on the Pan Asia Networking ICT Research and Development grant site: *Evaluating the Impact of Universal Access Models, Strategies, and Policies in ICTs on Poor communities in the Philippines*. [Link to come: paper is being moved from Singapore to Ottawa site.]