

## **Development or Stasis: the Dilemma of ICT4D**

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Development is teleological, that is, the concept of development suggests some purpose/goal toward which this change drives. Many international development projects, including ICT4D, frequently assume that this goal is and should be economic development. While we will not argue that economic development should *not* be the purpose of ICT4D, we will suggest that the conflicting (or even antagonistic) worldviews of the various peoples affected by such programs need to be carefully considered before successful ICT4D can be effected.

We are currently carrying out ethnographic studies of geographic communities in the midst of programs bringing ICTs for the purpose of development. Most of our work thus far has been in Peñalolén, Chile; Huangbaiyu, China; Theni, India; Rabat, Morocco, and North Lawndale, USA with more communities providing additional or confirmatory material. In many cases, we are not so much evaluating as collaborating with the communities and development agencies. By working closely with these two groups we can help the agencies to deliver the services intended to improve the community's quality of life.

The primary aim of our research is to understand the ways in which communities make decisions to adopt – or not adopt - new technologies that others believe will have the power to change their lives. This research has involved working with various constituencies, and we have observed and interacted with both the “objects” of the development programs and the “subjects”: the communities to receive the ICTs and the organizations delivering them, respectively. We have visited with community members in their homes and places of work to discuss their lives and how they live them. We have talked about friendships, work, leisure, and goals for the future. Only secondarily did we talk about the technology plans; community members were, in many cases, not even aware of the ICT4D project. Among the people who have known about the plans, we have met with community activists and leaders and with the development organizations in their offices and in public meetings to discuss the “how and whys” of their plans. Our work is conceptualized as action research, and although our goal is to understand community change, we have also attempted to assist the development agencies in crafting more appropriate technologies and services.

Our research is showing very clearly that it is not enough to have connectivity, nor is it enough to have affordable technology. In order for ICTs to take root in a community, the technology and all its related parts must also be sustainable and thus self-perpetuating in order for social and economic benefits to be felt and embedded among community members. Such embedding is more easily attained when those who design the project see the focal community for the assets it already has, not only for what it lacks.

Unfortunately, members of the local community frequently don't see their lives reflected in the planned structures. We often hear that the technology “is not for me”. This is likely because the services that have evolved on the internet have evolved for

those in the economic elite, who are more likely to participate in the global economy. The goal of bringing people into the local and international economy may not provide the driving force to motivate a community to change its economic behavior. The global economy offers potential, yes, but there is both benefit and risk. Depending upon how this interaction is structured, the risks may far outweigh the benefits. In particular, ICT4D needs to take into account the existing activities – particularly economic activities and the related human capital (or sometimes called social capital) – of these communities. That is, along with these economic endeavors, there are also social relationships that comprise *human capital* that is often as vital to their wellbeing as is money-making.

What would technology look like that best supported these communities? Technologies must be commensurate with community life and should not be assumed to be the “change agents”. Technologies must take into account what people are already doing, and this will vary somewhat across cultures. Where we are interested in improving the local economy, then, we must look to current activities in the local economy. People already have ways to “get by” or “make ends meet”. Many of the people in these communities can be described as portfolio entrepreneurs, that is, people taking part in varied economic and social endeavors to make ends meet. They have portfolios of practices and relationships that comprise a hedging strategy – if one thing doesn’t bring in money right now then the next thing will. These portfolios have been developed in the context of the community and provide some security. This is not to say that making more money (such as envisioned by many ICT4D projects) is not important. Getting more money is of paramount importance. The issue is whether people need to surrender the security that they have for the promise of more money. If, for example, one needs to spend time traveling to a kiosk to engage in an activity that might make money, then that time cannot be spent on a surer thing. No one makes much money in these communities. Will we first ensure that people have sufficient resources that they can take a risk?

“Seeing the hole, not the doughnut” is a way of describing what many development projects do – they see the things that a community does not have, and they often miss what the community already has, things like informal economies, the social structures, traditional healers, and the wealth of local knowledge, from boat building to cooking tamales. Oftentimes, the project only sees, for example, that there is not enough money and no internet connection, but not how people do succeed in their community. We propose that by understanding these everyday practices, new technologies can better fit the people they are to serve, thus becoming integral parts of their lives, and so will support sustainable development.

Thus, the conclusions concerning the achievement of acceptable cultural change can be reasonably summarized: find out what the people want; start from where they are; consult local leaders but be sure you reach the right ones; get the participation of the people themselves; carry on with good will and avoid what has been aptly labeled elsewhere as “preconceived” behavior, (Provinse, John H. 1953).

Finally, we will present some classes of ICT4D services/applications that could be used to address the issues discussed above.