

Research Note

Development and Technology: How does the right to information and the spread of ICT affect global society?

Keith Snodgrass

January 2017

Copyright © 2017, ASA Institute for Risk & Innovation

Keywords: Development; Millennium Development Goals; International Development

Abstract: This paper discusses how the framing of the United Nation's eight Millennium Development Goal, particularly within the context of information and communications technology. The author examines some potential shortcomings of some of these approaches, and how pursuit of these development goals fits within wider efforts to achieve economic development in the poorer parts of the world.

Introduction

After the United National Development Group established the Millennium Development Goals,¹ many individuals, governments, non-governmental organizations (NGOs), and businesses started projects that attempted to use information and communications technology (ICT) to further the eight identified goals.

“The widespread hope within the international development community that ICTs could be a powerful tool of development and poverty reduction, and of achieving the Millennium Development Goals, led to a proliferation of donor-funded ICT-for-development pilot projects in several sectors in a wide range of countries in the past decade. Yet, by the time the international community was preparing to convene in Geneva in November 2003 for the first phase of the World Summit on the Information Society (WSIS), there was a growing uneasiness about the lack of detailed information on the implementation of these projects, and rigorous evaluation of their impact.”²

Many ICT extension projects focus on providing technology and connectivity to underserved communities around the world, which are essential to reaching any of the goals their backers espouse. What these projects address less directly, or not at all, is providing access to the

information needed to make best use of these technologies. Moreover, in the developing information economy, we see that information and data are the currency on which economics, education, entertainment, conflict resolution, and more are all based. What are some ways of analyzing this issue?

Alistair S. Duff utilized the philosophies of John Rawls and R.H. Tawney to argue “once certain categories of information are accorded the status of ‘primary goods,’ their distribution must then comply with principles of justice as articulated by those major 20th century exponents of ethical social democracy.” Duff further argues that Rawls and Tawney’s theories inevitably lead, in the information society, to the following conclusion:

“The Rawls-Tawney theorem is also firm about the main referent of distributive justice in postindustrial society: it is *information*, not ICTs, nor new media, nor the information infrastructure. The latter are not unimportant, but they are *politically* significant only insofar as they impinge on the social distribution of information itself—
information *qua* facts, data, the basic building-blocks of knowledge and participation.”³

This approach also addresses several of the points articulated in the UNESCO Code of Ethics (more on that below).

This paper will not attempt to ascertain how well any of these goals were met but will rather discuss how goals are framed, what might be the shortcomings of some of these approaches, and how pursuit of these goals fits within wider efforts at economic development in the poorer parts of the globe.

History

For centuries, technology has been suggested as a remedy for societies that are perceived as, or perceive themselves as, less developed than other parts of the world. As early as the middle of the 19th century, dislocating encounters with European political, economic and military powers, led individuals in countries such as Turkey and India to debate whether it was possible to adapt the technologies of the conquering powers without also adopting the social mores. Many quickly adopted military technologies such as automatic weapons, heavy cannonry and the like, yet there was great caution around adopting other technologies such as telegraphy and rail travel. Military technology could be immediately useful in both opposing the European powers and in fending off internal and external threats to an existing political power in these countries. The apparently uncontrollable nature of wired communications and long distance travel by rail caused more concern in such societies than the progress of military prowess. Each of these new technologies made the control of subject populations appear to be more challenging.

Through the early 20th century, existing political powers in the developing world and the various political movements which sprung up to reform or resist these powers, began to adapt communications and travel technologies to their own uses. These were sometimes in support of, and sometimes in opposition to, the very idea of economic development as a public good. On one hand Japanese companies moved into manufacturing of items such as automobiles and

military technology, yet one of the main leaders of India's independence movement, Mohandas (Mahatma) Gandhi, advocated that all Indians reject not only British manufactured goods but also manufactured goods made in India, in favor of village industries, particularly homespun cloth. This was in reaction to the economic damage done to India by British colonization. This idea was so powerful and popular that the home-based spinning wheel (the *charkha*) was at the center of the flag representing India's independence movement.

After World War II and the establishment of the World Bank, technological progress was on offer to the developing world in the form of heavy machinery for farming and construction. This was particularly true in the form of dams, which were widely perceived by both people from more developed economies and leaders of less developed economies as an important marker and maker of development around the world. Dams demonstrated the ability of governments to complete major projects that could help to control natural forces that were heretofore considered uncontrollable. Dams brought development, in the form of irrigation and electrification, to rural areas previously largely untouched by state-lead development efforts.

Many national governments, after gaining independence from European powers in the 1940's to the 1970's instituted large educational efforts to increase the pool of technical experts available in their countries, with an eye toward further economic development based on rapid improvement in agricultural production, engineering and manufacturing, communications and travel technology. One of the earliest of these efforts was the establishment of the Indian Institutes of Technology (IIT). The idea of such an institute was mooted even before India became independent, and the first IIT was established in Karagpur in 1950, only three years after India achieved independence.⁴

These IIT's produced many highly qualified graduates, who went on to lead major development efforts, government programs, and private businesses, in India and in other countries. Many of these people have played key roles in not only leading specific efforts at development, but also in formulating larger ideas which guide many development efforts around the world.

Many of the ideas promoted by such technologically trained individuals offered technology as a neutral power which could provide a means to develop an economy without causing disruption to existing social and political relationships. This might be considered a feature of such development efforts – they could also be presented as non-threatening to existing governments and power structures. Even so, those offering these types of models knew that part of the point of development efforts is to change the power dynamics of at least part of a society. For instance, building dams often means that some people must be displaced from their homes to make way for the reservoir that fills behind the dam, while others benefit from the electricity and irrigation provided by such projects.

Current Policy Issues

With this idea in mind, let us examine possible avenues for addressing some of these issues. One is the *Code of Ethics for the Information Society Proposed by the Intergovernmental Council of the*

Information for All Programme (IFAP), from UNESCO, published in 2011. It proposes 18 rules by which governments and other organizations should operate in order to ensure safety and equity for all in the use of ICT's.⁵

While this document contains many useful instructions, such as that everyone has a right to access the Internet, it leaves as many questions unanswered as it addresses. For instance, in regards to the issues of privacy, it states:

12. Everyone has a right to the protection of personal data and private life on the Internet and other ICTs. Users should be protected against the unlawful storage, abuse or unauthorized disclosure of personal data, and against the intrusion of their privacy.

*13. All stakeholders shall work together to prevent against abusive uses of ICTs, protection of private data and privacy and violation of human rights on the Internet and other ICTs by combination of legislative measures, user education, including use of media and information literacy skills, self-regulation and co-regulation measures and technical solutions without disrupting the free flow of information.*⁶

Particularly in relation to point 12, alluding to laws evades the question of which laws and who gets to make them. Repressive and democratic governments have enacted laws that restrict access to the Internet, yet these acts are still in conformity with the suggested guidelines in this UNESCO document, since they conform to local laws.

Then there is the issue of private companies attempting to expand the general customer base (and hence their own customer base) by starting projects such as Facebook's Free Basics program in India. Facebook's executives thought they had identified the major problem with expanding Internet access in countries such as India, which was that access to data was too expensive. Hence, they attempted to build a "walled garden" wherein users would get unlimited access to a limited number of curated sites. Yet this created two problems: internet users in India (and all over the world) expect to be able to access any public site, exactly as people do in the developed world: and Facebook ignored the fact that India has hundreds of different languages, thus making the task of curating all these sites extremely unlikely to be successful.

A further challenge is that India's cell phone system has many providers, and at the same time, more limited bandwidth than many countries with many fewer providers. For this reason, India's many telecom providers have access to only a small sliver of spectrum, which makes providing reliable service to customers a challenge. Wider use of unlicensed use spectrum, as is done in the U.S. and many other countries, is essential to providing service to rural areas. There is also great demand on the Indian phone networks, because broadband is not available in huge swathes of the country. It is not likely to become available either, since running cable the last mile is the most expensive portion, and almost all of the "last miles" in India are in very far-flung villages with low (relative to urban areas) population densities, making it uneconomical for telecom companies to run cable there. Hence, most of these people will be using phone systems for Internet access for the foreseeable future.⁷

These access issues are among those I contend will seriously hamper the effectiveness of technological efforts to bring development and alleviate poverty in significant portions of the world.

Privacy is a major issue when expanding ICT into new areas and populations. Many apps and programs are based around collecting information from individuals. This information may include where they have traveled, with whom they have met, what web sites and electronic books they have read, with whom they have communicated, financial and health records, and more. As we have seen in the developed world, it is easy to imagine that app developers use this information for purposes the user does not even suspect when agreeing to whatever terms (if any) associated with using the app, and unknowingly allow this information to be harvested. Will these be safe for use in societies with underdeveloped democratic and privacy rights? ⁸

Aside from such information gathering, there is the issue of surveillance, whether by private or public agencies. The success of financial apps such as M-Pesa demonstrates that, so far at least, it is possible to have such interactivity without compromising security. When these types of activities are expanded to include more personal interactions and the utility of apps is based more on their ability to collect and use personal information, more problems may arise.

Take the example offered by Jeffrey Rosen in “The Deciders: Facebook, Google and the Future of Privacy and Free Speech.”⁹ While Rosen’s article focuses on the U.S., these issues are extremely relevant around the world, and particularly so in developing countries with a less robustly developed online experiences for its citizens. The types of information sharing Rosen posits, such as Open Planet [a Facebook app which shows live video of users at any time] might find great favor not only with citizens and with consumers in developing countries, but also with businesses and governments in those countries as well. Such an open repository of information about private citizens could be an irresistible attraction for an unethical business of reporting on citizen actions or monitoring for the government. In addition, and more dangerously, given the extensive details people are willing to share on social platforms, individuals are apparently quite willing and eager to share information. Once these types of systems are established, it would be difficult to shut them down.

The issues with each of these problems extend into the opening gambit about free and equal access to information being a key feature of any successful effort to bridge the digital divide. They also highlight the challenges inherent in such an approach. Access to information is often now provided as a quid pro quo for surrendering information. “We’ll show you stock quotes if you tell us where you like to shop,” or “provide weather forecasts if you tell us what crops you grow”, or “read our celebrity gossip if you tell us what movies you like.” It all seems fine and innocent, until it becomes clear that this information, once surrendered to the app developer, cannot be recalled, and can be shared in any way the developer pleases. While we may hope that in the U.S. we can be protected from such a fate by legal systems and possibly by provisions in an End User License Agreement (EULA), it is less clear how universal these protections may be in other countries. Even in the U.S., we’ve seen that EULAs are used much more to protect the app developer from

the user than for the reverse. There is no reason this will not be the case when similar situations arise in developing economies. This risk may be particularly acute in areas where there are extreme divisions of wealth and poverty, thus making not only access to information but also access to legal redress another factor exacerbating such divisions.

These issues will require negotiation among governments, NGOs, and private companies to establish policies and laws which will allow for the extremely important activity of extending the digital economy into areas previously not served or extremely underserved by digital technology. Just as important as extending the technology, such as devices and apps, is extending the knowledge and capability of accessing and using that information to populations which will be newly integrated into the digital world that is still in its early stages.

If policies to ensure rights and abilities to access information are not strong and equitable, the extension of ICT into previously underdeveloped parts of the world economy will only exacerbate the already sharp divisions between the haves and the have-nots. This growing divide may lead to severe social unrest and conflicts, the consequences of which are difficult to predict, but ultimately are likely to be unpleasant.

¹ "What They Are." Millennium Project, United Nations Development Program. N.D. Accessed Mar. 2016 <www.unmillenniumproject.org>.

² "ICT for Development: Contributing to the Millennium Development Goals." infoDev, World Bank Group. Nov. 2003. Accessed Mar. 2016. <www.infodev.org>.

³ Duff, Alistair S. "The Rawls-Tawney Theorem and The Digital Divide In Postindustrial Society." *Journal of the Association for Information Science and Technology*. 13 Dec. 2010.

⁴ "History of the Institute - IIT Delhi." Indian Institute of Technology - Delhi. N.D. Accessed Mar. 2016. <www.iitd.ac.in>.

⁵ *Code of Ethics For The Information Society Proposed By The Intergovernmental Council of The Information For All Programme (IFAP)*. United Nations Educational, Scientific and Cultural Organization. 10 Oct. 2011. Accessed Mar. 2016 <www.unesdoc.unesco.org>.

⁶ *Ibid.*

⁷ Sumit Roy, UW Professor of Electrical Engineering. Personal Communication. Mar. 2016.

⁸ Allyson W. Haynes. "Online Privacy Policies: Contracting Away Control Over Personal Information?" *Penn State Law Review*. Mar. 2007. Accessed Mar. 2016 <www.works.bepress.com>.

⁹ Jeffrey Rosen. "The Deciders: The Future Of Privacy And Free Speech In The Age Of Facebook And Google." *Fordham Law Review*. Feb. 2011. Accessed Mar. 2016 <www.ir.lawnet.fordham.edu>.