

Rethinking the “Digital Divide”

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Introduction

Despite the last decade’s achievements in ICT connectivity, it is not clear how much real progress has been or is being made towards “bridging the digital divide.” On the contrary, there is an increasing recognition that “many different forms of digital divides remain and new forms have emerged” and that “[t]he digital divide is a manifestation of existing social, economic and political inequalities and (that) technological change can exacerbate these divisions.”¹

In fact, as ICTs have become a pervasive element in the daily life of so many, the nature of the “divide” itself has changed, no longer being a static “divide” between those with and those without but rather a dynamic divide between those with some, those with little and those without — with these divisions evolving as new technologies emerge and as the necessity for having access and use to these technologies evolve as well in both developed and developing countries. The need for a constant upgrading in technologies, technology platforms, skills and the overall capacity to make use of these technologies has become a constant feature of modern society.

A Working Definition of “Digital Divides”

For the purposes of this paper, the following working definition will suffice:

*We use the term **digital divide** to refer to any pattern of social or socio-economic evolution where unequal progress in the introduction of digital information and communication technologies results in the further empowerment that is specific to (and largely limited to) privileged parts of a society or of humanity as a whole, while others are not able to share in the benefits or even suffer disempowerment as a side effect.*

This working definition is intentionally unspecific in regard to what aspects of life are affected by the concerned pattern of unequal and in effect discriminatory empowerment.

Lack of access to any particular technological innovation was never a social problem until that technology was invented. However, once it has been invented and it has become available to some people, not having access to it can become a socially and/or economically crippling disadvantage, and many if not all other aspects of human existence are then affected indirectly.

So the goal of efforts aimed at “bridging digital divides” should be set precisely at solving those problems of resulting socially and/or economically crippling disadvantages.

¹ This quotation is from an October 2015 Joint Civil Society Statement in the context of the UN's WSIS+10 Review (review ten years after the World Summit on the Information Society) process, see http://justnetcoalition.org/2015/joint-CS_to_WSIS+10_zero-draft.pdf.

This implies that such efforts need to address not only the aspects of access to whatever ICT devices and Internet bandwidth are needed for achieving that goal, but also aspects of personal and group empowerment to make good, effective use of those ICT devices and Internet bandwidth.

Political agency in shaping technical developments

Ultimately the primary driver of the variety of social inequalities and injustices which have come to be associated with the “Digital Divide” is *inequality of access to the means of designing or influencing ICT or technology development in relation to local uses and requirements.*

As long as ICT continues to be dominated by proprietary software, proprietary hardware designs and proprietary Internet platforms (as opposed to *free and open source* software and hardware) design considerations will always be driven by thoughts about the most promising markets and how the technology could be used there, rather than the human benefits that technology can realize among those who have little or no financial resources.

This implies that many of the people who suffer from social and economic disadvantages (and who are therefore already for those reasons vulnerable to the processes that create digital divides) are further challenged by the reality that their needs are largely not considered in the processes of technology development.

Consequently, even when the required financial means can somehow be obtained and spent on ICT devices and Internet access, the only currently available options are typically to either buy technology that has been developed in view of more lucrative markets (and which will therefore probably not fit their needs very well, and which is certainly not cost efficient in relation to those needs) or not to buy that technology (which results in deepening the digital divides).

Hence much more than on any particular aspect of technology, access to technology or the absence of a particular technology, success in bridging digital divides will depend on whether economically disadvantaged people and communities will somehow gain a degree of political agency that results in technology becoming available that is suitable to their needs and economic situation.

Community Based Approaches for Leverage

In the context of digital divide concerns, an obvious but naïve approach consists in thinking that “the more ICT etc. etc., the better” and trying to throw more and more ICT devices at the problem, heedless of actual needs. That is clearly a “low leverage” kind of strategy, in the sense that the cost will be great but actual benefits towards bridging digital divides will be low.²

A better approach will be based on the knowledge that disadvantaged communities have about the particular digital divides that affect them. The key strategy therefore consists in providing the means for end users in local communities to express and realize their needs within a technology context. It is only in this way that it is possible for efforts aimed at “bridging digital divides” to keep up with (and hopefully exceed) the speed of innovation for mass market ICT goods through which new digital divides, are continually created.

² For a more in-depth discussion of the concept of *leverage* we refer to the rich literature on “systems thinking” for addressing management challenges in business contexts, e.g. Peter M. Senge: *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York 1990 (Currency), p. 114.

Dynamic Concepts of Community Informatics

Constantly evolving digital divides in the global Information Society coupled with the lack of effective standards or measures in regard to how these digital divides are to be overcome make it impossible to achieve any understanding of possible progress within an ever-receding technology horizon. Statistics showing an ever increasing percentage of the world population having basic Internet access or e.g. access to particular hardware devices that can be used to interact with the Internet, may be reassuring but they tell us little about whether the actual divides between those benefiting from Internet use and those who are not is actually decreasing.

Further, a centralized planning approach to “the digital divide” which does not take into account the local realities at the community level, and which also does not involve active and effective participation of people with significant relevant experience at the grass-roots, community level is doomed to fail.

We urge the use instead of an approach such as that from *community informatics*³, which recognizes that the realm of communities is constantly evolving as with ICTs. Such an approach does not assume a single static digital divide in response to which one could design specific once and for all set of measures for “overcoming” this; instead the control of the direction and use of ICTs is structured so as to respond to real conditions and the needs of those who actually will be using them.

Conclusion

It is now time to reconceptualize the notion of “digital divides” in a way that is dynamic rather than static. We urgently recommend the use of community based approaches to address these issues.

³ Michael Gurstein: *What is Community informatics? (And Why Does It Matter)*, Milan 2007 (Polimetrica), http://eprints.rclis.org/10919/1/WHAT_IS_COMMUNITY_INFORMATICS_reading.pdf