Bridging the Digital Divide

Technology, Community, and Public Policy

Lisa J. Servon
Bridging the Digital Divide
There is a growing interest in the general audience, as well as in universities around the world, on the relationships between information technology and economic, social, geographic and political change. Indeed, these new relationships are transforming our social, economic, and cultural landscape. Social sciences are called upon to understand this emerging society. Yet, to be up to the task social sciences must renew themselves, in their analytical tools and in their research topics, while preserving their scholarly quality.

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Bridging the Digital Divide

Technology, Community, and Public Policy

Lisa J. Servon
I have been truly blessed by the love, support, affirmation, and witnessing I have received from the women in my life. I dedicate this book to them.
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Special Recognition

Although many people contributed directly and indirectly to this book, I am especially indebted to PolicyLink and particularly Angela Blackwell. Angela understood my intentions for this book at a very early stage and gave me the support I needed to focus on my writing for the critical final seven months of this project. Angela and others I worked with at PolicyLink – particularly Josh Kirschenbaum and Radhika Kunamneni, but also Judith Bell, Joe Brooks, and Victor Rubin – truly grasped what I was trying to do, gave me what I needed to do it, and encouraged me to keep moving forward whenever I came up for air. It has been a genuinely amazing experience to complete this piece of work surrounded by people who are committed to an agenda focused on economic and social justice. I consider myself fortunate to have had the gift of working in this tremendous intellectual home.

PolicyLink is a national nonprofit research, communications, capacity building and advocacy organization, dedicated to advancing policies to achieve economic and social equity based on the wisdom, voice and experience of local constituencies. For more information, visit www.policylink.org
What does it profit a man to be able to eat at an integrated lunch counter if he doesn’t have enough money to buy a hamburger?

Reverend Dr. Martin Luther King Jr.
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Acknowledgments

Many people and organizations share responsibility for bringing this book to fruition. Manuel Castells encouraged me to think about the intersection between the information society and the problem of persistent urban poverty. Conversations with him dating back to 1995 planted the seeds that ultimately grew into this work. Completing the book in Berkeley in the spring of 2001 enabled me to meet with him regularly and test out my ideas. Those long conversations in Manuel’s sunny office sharpened my own thinking tremendously. I am blessed to have such a generous mentor, colleague, and friend.

My research assistants at Rutgers and in California were truly exceptional. Marla Nelson has been much more of a genuine collaborator than a research assistant. Marla worked closely with me on two earlier studies that fed into this book, conducted fieldwork in Pittsburgh and Seattle, and helped to design and analyze the survey discussed in chapter 3. Our conversations as we drove around Seattle and wrote up our findings shaped my thinking on these issues to a great extent, and I look forward to her finishing her dissertation so that we can continue to work together as colleagues. Raysa Martinez worked closely with me in Harlem and in East Palo Alto conducting fieldwork during the summer of 2000. She transcribed countless interviews, translating many of them from Spanish. She repeatedly surprised me with her ability to pick up on important dynamics between people and within organizations. In addition, Abeni Crooms and Phil Ashton at Rutgers worked doggedly on the survey of CTCs. Lalitha Kamath organized an overwhelming amount of material and was especially helpful in gathering background information for chapter 5.

In California, Radhika Kunamneni provided tremendous assistance in the last seven months of writing – gathering and synthesizing
enormous amounts of data, checking facts, and acting as a very balanced sounding board. Her gentle but critical eye and thoughtfulness have undoubtedly made this a better book than it would have been without her. This book is informed by her own vast knowledge of and passion for the digital divide issue. Marisa McNee, an undergraduate at Cal, helped tie up countless loose ends.

Josh Kirschenbaum and Radhika Kunamneni co-authored chapter 7 and conducted the research for that part of the book. They are the first to have made the key connection between the community technology and community building movements, and their continued work is certain to make a powerful impact on the field. Working with Josh was a real treat – his enthusiasm for this issue is truly contagious. Josh was also instrumental in bringing me to PolicyLink – for that, and for his friendship and support, I am eternally grateful.

I received important support from several funders during the five years leading up to publication. A 1995 grant from the Motorola corporation funded my first study of the community technology movement in Austin, Texas where I was teaching at the time. An early paper resulting from that work, co-authored by John Horrigan, set me on this path. John has continued to educate me about telecommunications policy through the writing of this book and has shared data and thoughts resulting from his own fine work at the Pew Internet and American Life Project. The Aspen Institute Non-Profit Sector Research Fund supported a larger study of community technology in three cities: Austin, Pittsburgh, and Seattle. My work on community technology and youth was funded by the Open Society Institute’s Individual Project Fellowship Program and the Ford Foundation. OSI’s program also enabled me to meet an amazing group of other researchers, many of whom I have remained in contact with. The Milano Graduate School of Management and Urban Policy at New School University awarded me a post as a visiting scholar in Fall 2000, which allowed me to focus almost completely on writing. Special thanks go to Ed Blakely and Edwin Melendez, who made that happen, and to those who attended a talk I gave on this work in November 2000 and who gave me thoughtful comments.

And PolicyLink, in Oakland, California, asked me to be a Visiting Policy Scholar for seven months in early 2001. Being there helped me both to focus on my work and to see clearly how it connected to the larger mission of attaining social and economic justice.

Many people read an earlier draft of this book and provided me with comments, suggestions, and material that helped me to revise it
substantially and push it to a new level. In early July 2001, PolicyLink hosted a seminar for local experts, activists, scholars, practitioners, and funders to discuss the manuscript. The truly constructive and engaging conversation that took place between Judith Bell, Eugene Chan, Jerry Feldman, Blanca Gordo, David Gruber, Josh Kirschenbaum, Radhika Kunamneni, and myself, enabled me to make the book sharper and more useful to the target audiences I wanted to reach. Others who read and commented on an early draft include: Lon Berquist, Laura Breeden, Joe Brooks, Steve Cisler, Alec Gershberg, Rahsaan Harris, John Horrigan, David Keyes, Trish Millines Dziko, Grant Mydland, Lodis Rhodes, Steve Ronan, Victor Rubin, Doug Schuler, and Mildred Thompson. I thank them all for taking an interest in my work, for generously giving of their time, and for their own commitment to the community technology movement.

I owe a special debt of gratitude to the organizations discussed within the book that allowed me to study them. Many, many people took the time out to be interviewed and to teach me all they know about this field. The staff and directors of the organizations studied in depth opened their programs, offices, files, memories and, in some cases, their homes to me. They vouched for me to their participants and put me in touch with these participants so that I could interview them. It is difficult, intrusive, and time consuming to allow a researcher to study your program. Thank you all for letting me in. I would like to single out the following individuals here: Magda Escobar, Rahsaan Harris, Trish Millines Dziko, Mara Rose, and Ana Sisnett. Without them and countless others, my work would lack the depth and richness that their experience provides.

Last but not least, I owe a bottom-of-my-heart thank you to friends and family. Writing a book is never a completely pretty or predictable process, and I am grateful to all of the people who understood when I had to go AWOL for a period of days or weeks while I traveled to do fieldwork, buried myself in my writing, downloaded my brain at social events, or simply needed to gain some perspective on my work and on the world. The following people are among the many who supported me directly and indirectly during the time that I worked on this book: Leslie Coffaro, Elke Davidson, Susan Fainstein, Alec Gershberg, Norm Glickman, Robert Gray, Barbara Kaplan, Sarah Mabey, Tracy Meade, Karen Paget, Libby Roderick, Jody Servon, Anne Stuhldreher, Andrew Walker, Ann Williams. All of you continue to inspire me in so many ways.
Foreword

In August 1999, I sat with Manuel Castells at Strada Café in Berkeley talking about ideas for a book on the digital divide. My first book, on US microenterprise programs, was in production at that time – I had had just enough of a lag to have forgotten what a tremendous undertaking it can be to put together a book. I had been conducting research on urban poverty and the technology gap for three years, and it made sense for me to bring it all together into one volume. Little did I know what I was getting into. Writing this book has stretched me in ways I could not have foreseen.

Two challenges faced me as I wrote this book. First, technology (and the digital divide in particular) is a moving target. As I write this, I worry that during the six months between the moment I sit here at my computer and the day the book exists as a physical object everything will change. Keeping the threat of short shelf-life in the front of my mind, I have worked to create a book with messages that last beyond the immediate accuracy of specific statistics.

Second, the range of material that I needed to understand and include expanded endlessly. It sometimes seemed as though I was putting together a giant jigsaw puzzle, and that I never encountered those straight-sided pieces that border the whole. For my chapter on youth, for example, I had to gain a working knowledge of education policy. For the chapter on the information technology (IT) labor shortage, I needed to familiarize myself with the workforce development literature. The chapter on the history of the community technology movement required me to document and condense more than twenty years of amazing work by committed individuals and organizations. Many of these topics warrant much more attention, and I hope this book inspires other researchers to dig more deeply into them. In short,
while working on a rather specific topic, I have had to become some-
thing of a generalist, a position most academics would rather not put
themselves in. I hope that I have done these fields justice, given that
others are much more expert than I in these individual areas.

These two challenges – the changefulness of the field and the breadth
of topics touched by the digital divide – have made it impossible for me
to include all of the good work that is being done across the country
and around the world to deal with this pressing problem. I received
email every single day of this process highlighting innovative programs
and new studies. I believe that the programs and initiatives I discuss
throughout this book are representative of the terrific efforts taking
place. I apologize for not being able to discuss more of them.

My sincere hope is that I have better defined the digital divide
problem, lifted up creative strategies with which to confront it, and
that I have raised important new questions that must be addressed as
we set an agenda for the next phase of the community technology
movement. More importantly, I hope that others will be curious about
these questions, will deem them significant, and will be moved to
begin the critical work of answering them.

I wrote much of this book in Berkeley, California, from January
through July of 2001. My writing room looked out over the bay, and
my long afternoon walks in Tilden Park with Hoover helped me to
settle my thoughts and coax the better ideas to the surface. Berkeley
became, for the second time in my life, a part of me and a part of my
work, providing the ideal setting for the kind of focus I needed to pull
this book together.

As I complete the final revisions to the manuscript, I sit in a very
different place – Manhattan – in a very different world. We have all
experienced a tremendous jolt in how we think about our world and
our places within it. Since September 11, I have asked myself tough
questions about the value and meaning of my own work. Is it as
important as I thought it was, this fight to relieve persistent poverty?
As a society, we have stated that we are not willing to normalize terror.
And yet poverty, inequality, and discrimination remain commonplace,
a fact of life. As we continue to deal with the consequences of the
unthinkable acts that took place on September 11, we must not forget
about the injustices that we have structured into our society. We must
not normalize a divided world.

Lisa J. Servon
New York City
November 2001
The Internet is quickly becoming a fundamental medium of communication and information processing, permeating every domain of economy and society. Because our societies are unequal, so is the diffusion of the Internet. Thus, the notion of the digital divide as a critical dimension of inequality and social injustice in our world. Indeed, most social debates on the Internet, in every corner of the world, start with the denunciation of its potentially evil effects on social exclusion as a consequence of differential access to the global network for countries, social groups, genders, and ethnic minorities. The intensity of the debate often obscures the fundamental issues at stake. Therefore, to understand the interest, and the importance, of the book you have in your hands, it could be useful to define better what is the digital divide.

First of all, there is the simple fact of differential access to the Internet: to be or not to be in the network. This is a fundamental cleavage when we consider the Internet in a global perspective. In 2002, there are only about 7 percent of people on the planet connected to the Internet, in contrast to an average 40 percent in the European Union, above 50 percent in North America, and above 60 percent in Scandinavia. However, within developed countries the differences in access that existed in the early stages of the Internet are rapidly fading away with the widespread diffusion of the medium. Thus, more women than men are online nowadays in North America, and the gender gap is rapidly narrowing in the rest of the OECD countries. To be sure, education and income are correlated with Internet access, and the younger groups of the population are more connected, but the differences are decreasing, as is the difference between rural and urban areas, so that at a higher level of diffusion they may lose significance.
The racial divide is still there, but when it is controlled by education, it shrinks substantially. So, in terms of access, the digital divide is a function of the level of development, which underlines how important it is as a development policy in the new information age, but it also means that it could lose relevance as a source of inequality for developed countries.

However, there are new, and more important forms of digital divide emerging in our societies. One of them is technological, that is the quality of the connection. Broadband is essential to really use the possibilities of the Internet as a communication medium and as an information system. And broadband’s distribution is extremely unequal, not only among people from different social status, but among countries. For instance, in South Korea, in 2002, over 50 percent of Internet users have broadband access, in contrast to less than 20 percent in the US. The difference is related to regulatory policies that focus on consumers or on business as a priority. In the US, an excessive deregulation may well lead to a retardation of the US broadband Internet access vis à vis Europe and developed Asia, following the same logic that put the US way behind Europe in the diffusion and uses of cellular telephony. Thus, to a large extent, the new digital divide refers to the quality of Internet access.

Furthermore, the more the Internet becomes the key medium for business, for education, for social services, for personal development, and for social interaction, the more the capacity to use it becomes dependent on people’s educational and cultural level. In other words, the real inequality starts when we are all dependent on the Internet. Because the cultural ability to determine the information we need, to know where to look for, what to do with it, and to focus it on the performance of the tasks we want to accomplish, becomes the source of social differentiation. Thus, if educational level, cultural level, and capacity for personal autonomy were always key factors in shaping social inequality, their differential effect becomes magnified in the age of the Internet. The more we move into an Internet society, the more education, in the broadest sense, becomes the foundation for equal opportunity, indeed the foundation for a sustainable society.

It is only by identifying the diversity and complexity of the digital divide that policies can be designed to overcome it. And it is only by observing these policies in their real operation that we can assess them, and address the old problems of social inequality and human injustice in our new technological context. Lisa Servon’s book deals, rigorously, with both issues. It defines, and conceptualizes, what is the